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

Volume No.: 14

Subpart A: Definitions, Incorporation by Reference, and Other Subpart A Comments

September 2009

Subpart A: Definitions, Incorporation by Reference, and Other Subpart A Comments

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 on the definitions and incorporation by reference sections of subpart A. Also included in this volume are other miscellaneous comments on subpart A.

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 definitions and incorporation by reference sections of subpart A 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 definitions and incorporation by reference sections of subpart A.

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

Carole Cook (202) 343-9263

U.S. Environmental Protection Agency
Office of Atmospheric Programs
Climate Change Division
Mail Code 6207-J
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

ghgreportingrule@epa.gov

TABLE OF CONTENTS

SUBPART A — GENERAL PROVISIONS

1. DEFINITIONS

Commenter Name: Steven J. Rowlan
Commenter Affiliation: Nucor Corporation (Nucor)
Document Control Number: EPA-HQ-OAR-2008-0508-0605.1
Comment Excerpt Number: 40

Comment: In 98.6, the definition of municipal solid waste should be revised to exclude source-separated recyclables used as feedstocks in industrial recycling processes (e.g., aluminum cans returned to an aluminum smelter; scrap steel returned for steel recycling).

Response: EPA determined it is not necessary to provide an exclusion in the definition of municipal solid waste for recyclables used as feedstocks in industrial processes. The stationary fuel combustion source reporting criteria of 98.3(a)(3) apply to fuel input only, and not the process feedstock. For these recycling operations, it is clear that the metal materials separated from the MSW stream is not a fuel, but is a process feedstock used to produce aluminum or steel product. Therefore, this metal feed stream should not be regarded as a fuel to the furnaces used in the recycling operation.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 82

Comment: Subpart L - EPA should revise the perfluorocarbon (PFC) definition to indicate PFCs are compounds of carbon and fluorine and that all carbon bonds are fully saturated (only single bonds) where IPCC has identified a GWP; and the hydrofluorocarbon (HFC) definition to include only those liquid or gaseous (not including fluoropolymers) compounds containing between one and six hydrogen, fluorine, and carbon compounds identified by IPCC with a GWP.

Response: See the preamble discussion on suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Craig Head
Commenter Affiliation: Nebraska Farm Bureau Federation (NFBF)
Document Control Number: EPA-HQ-OAR-2008-0508-0578.1
Comment Excerpt Number: 4

Comment: We believe it is important that EPA maintain the definition of “facility” as is currently proposed which would include only those areas adjacent or contiguous, or only separated by a road or right of way. We would encourage EPA to avoid any effort to wrap all livestock operations under common ownership that may be separated by great distance into a single “facility” which would draw all of the smaller livestock facilities under one entity that would make such facilities subject to mandatory reporting.

Response: EPA thanks the commenter for their input. Please see section III. JJ of the preamble and the manure management response to comments document for more information about the reporting required from livestock facilities.

Commenter Name: Chris Greissing
Commenter Affiliation: Industrial Minerals Association - North America (IMA-NA)
Document Control Number: EPA-HQ-OAR-2008-0508-0705.1
Comment Excerpt Number: 4

Comment: The definition in this section for Trona contains an incorrect formula. IMA-NA proposes that the section be revised as follows: Trona means the raw material (mineral) used to manufacture soda ash; hydrated sodium bicarbonate carbonate ($Na_2CO_3.NaHCO_3.2H_2O$).

Response: EPA agrees with the commenter and has changed the chemical formula in the final rule.

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

Comment: (1) Consistent with discussion provided around the definition of a fluorinated greenhouse gas, the definition of a “heat transfer fluid” should also include hydrofluoropolyethers. The primary application for hydrofluoropolyethers is use as a heat transfer fluid. (2) Table I-1 of Subpart I has a general description for perfluoropolyethers but not for hydrofluoropolyethers. The following generic description for hydrofluoropolyethers should be added to the table: HF2C(OC2F4)p(OCF2)qOCF2H. (3) There should also be separate definitions created for "perfluoropolyethers" and "hydrofluoropolyethers" in the definition section under proposed Section 98.6.

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

Commenter Name: Sean M, O'Keefe
Commenter Affiliation: Hawaiian Commercial and Sugar Company (HC&S)
Document Control Number: EPA-HQ-OAR-2008-0508-1138.1
Comment Excerpt Number: 3

Comment: For clarity and consistency with existing EPA regulations defining “portable equipment”, the definition of “Portable” in the proposed 40 CFR Section 98.6 should include clarification that “a location is any single site at a building, structure, facility, or installation”. This clarification will help to minimize the potential for confusion when determining whether or not equipment is portable and therefore subject to the exclusion.

Response: EPA determined that the definition for portable equipment is sufficiently clear and describes the conditions under which equipment can and cannot be considered portable. Please see section 98.6 of the Part 98 for the definition.

Commenter Name: Linda D. Sullivan
Commenter Affiliation: National Grid
Document Control Number: EPA-HQ-OAR-2008-0508-0608.1
Comment Excerpt Number: 2

Comment: The definition of "Facility" states that the property must be "under common ownership or common control." As a holding company, National Grid owns several companies that are completely different businesses (e.g. gas production and storage versus electricity generation) but are on adjacent properties and for which it would not be logical to report as a single "Facility". National Grid requests that the definition of "Facility" be revised to state that: "Facility means any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties, in actual physical contact or separated solely by a public right roadway or under common ownership or common control, but not if those are "facilities" are physically distinct, produce different kinds of products, and are owned by separate companies."

Response: The definition of facility makes it clear that separate companies with no common ownership or control are considered different facilities under the rule. "Physically distinct" is a vague term and is counter to the specification of being located on contiguous or adjacent properties. “Producing different products” also is a vague specification and counter to the concept that a facility that is commonly owned or controlled should be treated as a single facility. If the businesses above are under common ownership or control than for the purposes of this reporting rule, they would be considered one facility. For more information about the flexibility EPA has provided reporters in dealing with complex ownership and control situations please see the response to EPA-HQ-OAR-2008-0508-0318, excerpt 1.

Commenter Name: Sean M, O'Keefe
Commenter Affiliation: Hawaiian Commercial and Sugar Company (HC&S)
Document Control Number: EPA-HQ-OAR-2008-0508-1138.1
Comment Excerpt Number: 1

Comment: In the proposed rule, the term “facility” is defined as “any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas”. A provision is included in the definition that allows operators of military installations to classify such installations as more than a single facility “based on distinct and independent functional groupings” within contiguous properties, but no such provision is provided for non-military facilities. The proposed definition of “facility” will capture certain small emitters, who will be required to report their greenhouse gas emissions however insignificant they may be, solely by virtue of their location and common ownership with respect to an affected facility. For example, where an agricultural products processing plant that meets a proposed reporting threshold is located adjacent to a commonly owned farm, the farm and the processing plant would be considered a single facility under the proposed definition. As a result,

the farm would be required to report its greenhouse gas emissions (e.g., from irrigation pumps and other stationary combustion sources) with those reported by the processing plant. This is inconsistent with stated goals of the rule to exclude small emitters and to exclude, with the exception of large livestock operations, emission sources from the agriculture sector. The term "facility" should instead be defined so that both military and non-military facilities could be disaggregated based on "distinct and independent functional groupings". This could be accomplished by adopting a definition for "facility" that is similar to the "major source" definition contained in EPA regulations implementing the Clean Air Act Title V permitting program (40 CFR Parts 70 and 71). A "facility" should be defined as "any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way, under common ownership or common control, and belonging to a single major industrial grouping (i.e., NAICS major group), that emits or may emit any greenhouse gas". By adopting this definition, the inadvertent combining of a farming facility (NAICS Code 11) with a food manufacturing facility (NAICS Code 31) into a single facility for reporting purposes would be avoided. A&B strongly urges that EPA adopt such a definition.

Response: The definition of facility in the final rule has not been changed. The intention of the rule is to require reporting from facilities that emit the most significant amounts of greenhouse gas emissions while minimizing the number of reporters. EPA has determined that the title V definition of facility is not appropriate for this GHG reporting rule. The GHG rule serves a different purpose than Title V programs and therefore defines a facility in a way that is more inclusive of all large emitters. The use of four-digit NAICs numbers or SIC codes may inappropriately split processes at certain facilities and exclude large emitters from reporting requirements. In the final rule, an owner or operator must report emissions from all sources at a facility for which they have ownership and operational control. If an agricultural operation is large enough to trigger applicability due to combustion emissions, then it is reasonable to report emissions from all combustion units at the facility. However, because one goal of the rule is to avoid reporting by small sources, the final rule has exempted agricultural irrigation pumps from subpart C (General Stationary Combustion Sources). As a result, these pumps would not be considered in determining applicability to the emissions threshold and would not be reported in situations when an agricultural facility is subject to the rule for other reasons.

Commenter Name: David Newsad
Commenter Affiliation: Hoefler Consulting Group
Document Control Number: EPA-HQ-OAR-2008-0508-0318
Comment Excerpt Number: 1

Comment: The interpretation of "Facility' is fundamental to consistent GHG reporting requirement applicability determinations and consistency of actual GHG reporting. In the proposed definition of facility and in the preamble, further clarification is needed for both entities evaluating applicability of the reporting requirements and those entities actually subject to reporting to ensure a consistent reporting procedure. Defining facility in the GHG reporting rule also sets a precedent for future GHG rulemaking EPA is likely to adopt. The proposed definition appears to be distinctly unique when compared to various other facility or "source" definitions previously adopted by EPA under various programs of the Clean Air Act (CAA). Therefore it is assumed the intent is this definition could require a different set of criteria for applicability and/or reporting for GHG gases relative to other reporting requirements previously established under the CAA. Moreover, the brief general intent discussion on page 16469 and

more detailed discussion on page 16531, regarding the oil and gas industry, support this conclusion and also suggest the intent of the term facility is still subject to significant evolution (depending on comments received) under GHG reporting regulations. Given entities may have a relatively short period of time (i.e. a few months) from final rule adoption to implementing monitoring and data collection procedures it is critical the final rule is transparent in the definition of facility and EPA' intent. If this is not done, it is probable there will be inadequate time for facilities to obtain timely interpretive guidance from EPA prior to data collection being initiated. This will also likely result in broad inconsistency in reporting applicability analyses conclusions and actual reporting that could take literally years to identify and resolve. More importantly, if this deficiency is continued into a final rule this could lead to erroneous decision by policymakers in utilizing the data collected from the reporting. Of particular note needing further clarification is the EPA's intent regarding "..contiguous.." and the language "…adjacent properties and in actual physical contact…". These are especially important relative to the discussion on page 16531 regarding the oil and gas industry. On a broader note there are several other similar interpretations established historically by EPA for various program requirements under the CAA. These include:

1. Primary industrial facilities and one or more dedicated support facilities collocated on a common property but under different ownership (minority or majority relative to the primary facility or none) and management, also support facilities collocated and supporting a majority or minority of the products and services to the collocated facility ;

2. Facilities under common ownership and/ or management control located on contiguous ("nearby" but not adjacent) properties and connected by some type of physical activity (conveyors, dedicated rail line and/or a pipeline). Recommend addressing the intent of "nearby" in this situation also.

3. Support facilities on contiguous property under some form of shared ownership (Majority minority, joint venture, etc) and independent management. As an example to the point, it has taken in excess of 30 years for numerous guidance and interpretations to be issued by EPA to clarify the intent of the above scenarios for CAA New Source Review Applicability. Even today, there are still some situations arise where NSR applicability is not consistently applied simply because regulated entities (and in some cases state and local agency staff with delegated NSR implementation authority) are unaware of EPA interpretations/guidance and intent does applicability of the final NSR rule.

Clearly addressing the definition of facility in the final GHG rule will minimize these same inconsistencies in GHG reporting rule and establish precedent for additional GHG rules in the future. I urge EPA to take the time now to address these fundamental issues as part of the rule making rather than defer these issues for future evaluation and/or a repeat of what has evolved with New Source Review rule applicability. Given the timeframe between final adoption and implementation of the rule triggering monitoring, it is critical EPA clarify the intent of the reporting rule's applicability for these types of facility configurations in the final rule.

Response: The definition of facility is for the purpose of the GHG reporting rule only. The definition established for this rule does not set a precedent for any future GHG programs. If EPA establishes emission standards for sources of GHG or adopts a cap and trade or other program as a result of future legislation, the definition of the regulated entity will be developed appropriate to the intended purposed of program. With regard to the definition of facility, see the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

EPA will make any necessary interpretative determinations regarding the GHG reporting rule in the context of the statutory purposes of the rule. To the extent that the definition of facility in the GHG reporting rule is similar to that of other programs, EPA may draw on general principles established under those programs. But EPA will not be bound by precedents of other rules in implementing the GHG reporting rule.

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

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

Commenter Name: Kim Dang
Commenter Affiliation: Kinder Morgan Energy Partners, L.P.
Document Control Number: EPA-HQ-OAR-2008-0508-0370.1
Comment Excerpt Number: 34

Comment: Continuous Natural gas driven pneumatic valve bleed devices fugitive emissions means the continuous or intermittent release of natural gas from automatic process control loops including the natural gas pressure signal flowing from a process measurement instrument (e.g. liquid level, pressure, temperature) to a process control instrument which activates a process control valve actuator. Kinder Morgan installs non-continuous natural gas driven pneumatic bleed devices where appropriate to minimize gas loss. Emissions from non-continuous devices are minimal because they only bleed during certain operational changes which typically occur rarely. Additionally, it is difficult to determine the amount of time a non-continuous bleed device operates. Kinder Morgan recommends that the Final Rule include the following change in Section 98.233(d)(3)(i)(B): "Maintain a log of the number of times the pneumatic device was actuated throughout the reporting period or estimate the number of times the device was actuated." The definition in Section 98.6 of "Storage tank" should be changed as follows: Storage tank means other vessel that is designed to contain an accumulation of crude oil, organic hydrocarbon condensate, intermediate hydrocarbon liquids, or produced water and that is constructed entirely of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide structural support. Vessels containing lube oil for onsite usage are excluded from the definition of storage tanks. The term "Direct measurement device" should be added as follows: Direct measurement device means any accepted candidate methods with the capability to capture and measure fugitive emissions. Accepted candidate methods include but are not limited to acoustic devices, high flow sampler, calibrated bags, hot wire anemometers, pitot tubes, anubars, turbine meters, orifice plates, etc.

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

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 150

Comment: Another issue of concern for Subpart II is the definition of oil/water separator in §98.6 for which emissions must be calculated in §98.353(b). EPA defines the oil/water separator very broadly as [3]equipment used to routinely handle oily-water streams, including gravity separators or ponds and air flotation systems´. To define the oil/water separator as any equipment used to routinely handle oily-water streams would suggest that fugitive emissions from the dozens or more pieces of equipment separating oil and water upstream of the API separator would need to be included. This language could also be interpreted to cover stormwater ponds because they may contain a small concentration of hydrocarbons, though clearly far less than process ponds. We believe that EPA needs to narrow the definition of oil/water separator to limit it to the API separator and downstream equipment. We suggest using the definition in 40 CFR 63 Subpart G, Section 63.111: "Oil-water separator or organic-water separator means a waste management unit, generally a tank used to separate oil or organics from water. An oil-water or organic-water separator consists of not only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to additional treatment units such as an air flotation unit, clarifier, or biological treatment unit. Examples of an oil-water or organic-water separator include, but are not limited to, an American Petroleum Institute separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment." If EPA chooses not to adopt its definition from 40 CFR §63.111, EPA should at least modify the definition to specifically exclude stormwater ponds from 40 CFR §98.6: "Oil/water separator means equipment used to routinely handle oily-water streams, including gravity separators or ponds and air flotation systems. This definition specifically excludes stormwater ponds and other devices that are not intended to handle process wastewater.

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

Commenter Name: See Table 6
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0709.1
Comment Excerpt Number: 6

Comment: The term supplier is defined in Section 98.6 as a producer, importer, or exporter of a fossil fuel or an industrial greenhouse gas. However, in Section 98.400, Subpart NN, the term is redefined to refer to the source category that includes natural gas processing plants and natural gas distribution companies. For clarity, it would be helpful to expand on the definition in Section 98.6.

Response: The term supplier is generally defined in section 98.6. Each subpart expands the definition to prescribe precisely the scope of coverage and any exemptions. Therefore, EPA determined that it is not necessary or appropriate to expand on the definition of supplier in the general provisions of the rule.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 38

Comment: The definition of "supplier" appears to exclude the business entities from which most of the emission sources affected by these rules purchase their fossil fuels.

Response: The definition of supplier in the final rule is intended to capture business entities that initially place fuel or industrial gases into commerce, not subsequent distributors throughout the supply chain.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 37

Comment: The definition of rotameter appears to exclude the measurement of liquid flow. Thus, for the purposes of Part 98, rotameters that measure liquid flow are not ³rotameters´. While §98.6 provides definitions for meter, rotameter and turbine meter, there are numerous other meters mentioned in the proposed rule text that are not defined. Examples include Coriolis meters, orifice meters, ultrasonic flowmeters and vortex flowmeters among other metering devices. ACC suggests that EPA delete the three meter-related definitions in the draft of §98.6 and replace them with a definition of flowmeter (a term that appears often, but not exclusively, in the proposed rule) and then use that term consistently throughout Part 98.

Response: EPA concurs with the commenter. A definition for flowmeter has been added in the final rule and the definitions for meter, rotameter, and turbine meter have been deleted.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 36

Comment: EPA should revise the perfluorocarbon (PFC) definition to indicate PFCs are compounds of carbon and fluorine and that all carbon bonds are fully saturated (only single bonds) where IPCC has identified a GWP; and the hydrofluorocarbon (HFC) definition to include only those liquid or gaseous (not including fluoropolymers) compounds containing between one and six hydrogen, fluorine, and carbon compounds identified by IPCC with a GWP.

Response: See the preamble discussion on suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 35

Comment: The definitions of 'natural gas', 'natural gas liquids' and 'natural gas processing facilities' have an underlying assumption that the primary products of such field operations are natural gas, natural gas liquids and other petroleum based products. We request that these definitions be clarified by including this underlying assumption as part of the language of the definition. We propose revising the definitions by adding the phrase "from field operations whose primary intent is to extract hydrocarbons" at the end of these definitions.

Response: EPA intends to have natural gas processors report NGLs they fractionate, even if those NGLs come from a CO_2 well. The same holds true for natural gas local distribution companies. Please see section III. NN of the preamble and subpart NN of Part 98 for more information about definition of the source category for Suppliers of Natural Gas and Natural Gas Liquids.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 34

Comment: There is no definition of industrial landfill. However, Subpart HH identifies industrial landfills as sources to be included in the inventory. EPA should add a definition of 'industrial landfill' to §98.6.

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

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 33

Comment: The definition of 'gasification' stipulates that all gasification is limited to conversion of a solid material into a gas. Gasification can also be used to convert liquids into gas, and the definition should be expanded.

Response: See response to comment EPA-HQ-OAR-2008-0508-0513.1, excerpt 20.

Commenter Name: Michael Garvin
Commenter Affiliation: Pharmaceutical Research and Manufacturers of America (PhRMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0959.1
Comment Excerpt Number: 15

Comment: PhRMA believes that the current definition of "uncovered anaerobic lagoons" is ambiguous ("type of liquid storage system designed and operated to combine waste stabilization and storage"). As currently defined, any wastewater equalization tank could classify as an uncovered anaerobic lagoon. In order for the lagoon to be anaerobic, there needs to be: (a) the absence of oxygen and (b) a reducing environment (otherwise, it would be simply anoxic). PhRMA requests that these two components be incorporated into the definition of "uncovered anaerobic lagoons" so that the definition reads: "type of liquid storage system designed and operated to combine waste stabilization and storage in which there is (a) the absence of oxygen and (b) a reducing environment."

Response: EPA has removed "uncovered" from the defined term because it is unnecessary. EPA has also revised the definition of anaerobic lagoon to include the phrase "anaerobic microbial processes". The lack of oxygen and a reducing environment are implicit in the phrase "anaerobic microbial processes".

Commenter Name: Sarah B. King
Commenter Affiliation: DuPont Company
Document Control Number: EPA-HQ-OAR-2008-0508-0604.1
Comment Excerpt Number: 22

Comment: In § 98.6, the definitions of "Fluorinated greenhouse gas," "Hydrofluorocarbons or HFCs" and "Perfluorocarbons or PFCs" should be confined to the list of compounds specified in Table A-1 on page 16629. As defined in the draft even compounds that are solids and would have no impact on climate change would be included. Furthermore, the broad definition would include compounds for which GWPs have never been determined and could be produced only in very small quantities with no significant impact on climate. Without a specified GWP there would be no value for the calculation required in Equation A-1 on p. 16613.

Response: See the preamble discussion of suppliers of industrial GHGs for the response on fluorinated GHGs to report. Equation A-1 has been revised to require computation of CO_2e only for those GHG for which a global warming potential is provided in table A-1 of the subpart A. However, mass emissions of all fluorinated GHG must be included in any required reports.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 32

Comment: El Paso suggested deleting the last sentence of the definition of "fugitive emissions," which states that "Fugitive emissions also mean CO_2 emissions resulting from combustion of natural gas in flares." El Paso recommends treating emissions from flares, including combusted (CO_2) and un-combusted portion of the flared gas (CH_4) as combustion emissions. EPA classifies flares as combustion devices in § 98.6 and this is logical since a significant portion of emissions from a flare are as a result of combustion. The definition of fugitive emissions in the same section includes "unintentional equipment emissions of methane and/or carbon dioxide

containing natural gas" which is consistent with definitions established by existing voluntary registries such as TCR and CCAR. However, EPA added a paragraph to its proposed definition of "fugitive emissions" to include the combustion emissions of CO_2 from flares. Flares do not fit the commonly understood definition of a fugitive emission source. Categorizing flares as a fugitive emission source, inconsistent with the common understanding, is likely to cause confusion in the rule implementation and inconsistent reporting of emissions from flares. In addition, flares are not equipment specific to a single industry sector and to ensure coverage, and to address them as fugitive sources, the rule will have to address them in each industry-specific subpart, where they may be employed. In addition, by classifying flares as fugitive emissions, EPA would forego reporting of N_2O emissions from flares located at natural gas and oil facilities. N_2O emissions created during the combustion process are not required to be reported as the fugitive emission definition cited above does not include this GHG.

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

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 31

Comment: EPA should modify the definition for Equipment on page 16620 as follows: "Equipment means but is not limited to each pump, compressor, pipe, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, tank, vessel, and instrumentation system in natural gas or liquid service at a facility; and any control devices or systems referenced by this subpart."

Response: EPA determined that this definition change, to add "at a facility" is unnecessary because the rule applies only to facilities that meet the applicability requirements of the rule.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 256

Comment: The definitions of "importer" and "exporter" should only encompass entities that own or hold title to imported and exported products. EPA should confirm in the final rule that entities that merely transport petroleum products, without holding title or paying customs duties, do not have a reporting obligation. In addition, the proposed definition of an "importer" closely parallels the definition provided in U.S. Customs and Border Protection (CBP) regulations. In order to avoid confusion as to who must report under the exporter/importer provisions of the proposed rule, EPA should clarify the rule by more explicitly linking its definition to entities that are already considered importers of record or exporters of record (Principal Parties in Interest) in CBP regulations. Suggested change regarding importer/exporter and blender. 40 CFR § 98.6. Importer shall have the same meaning provided in 19 C.F.R. § 101.1, and means the person primarily liable for the payment of any duties on the merchandise, or an authorized agent acting on his behalf. The importer may be: (1) The consignee, or (2) The importer of record, or (3) The

actual owner of the merchandise, if an actual owner's declaration and superseding bond has been filed in accordance with § 141.20 of this chapter, or (4) The transferee of the merchandise, if the right to withdraw merchandise in a bonded warehouse has been transferred in accordance with subpart C of part 144 of 19 CFR. 40 CFR § 98.6. Exporter shall have the same meaning provided in 15 C.F.R. § 30.4(a)(1), and means the person in the United States that receives the primary benefit, monetary or otherwise, of the transaction. Generally that person is the U.S. seller, manufacturer, order party, or foreign entity. 40 CFR § 98.390. This source category consists of petroleum refineries and importers and exporters of petroleum products. ... (c) Importer has the same meaning given in § 98.6. A blender or refiner of refined or semi-refined petroleum products shall be considered an importer or exporter if it otherwise satisfies the aforementioned definition. (d) Exporter has the same meaning given in § 98.6. A blender or refiner of refined or semi-refined petroleum products shall be considered an importer or exporter if it otherwise satisfies the aforementioned definition. In general, the requirements for NGL reporting would be easier to comprehend if they were gathered together under one subpart, rather than divided among Subparts MM and NN. Doing so would minimize the risk of confusion and inadvertent regulatory violations. Suggested clarification regarding NGLs in Subparts MM and NN: Subpart MM – delete all references to reporting of NGLs, except for NGLs used as a feedstock by domestic petroleum refiners. 40 CFR § 98.400 This supplier category consists of natural gas processing plants, and local natural gas distribution companies, and importers and exporters of natural gas liquids (NGLs).... [insert after paragraph (b)] (c) Importers and exporters are defined at 40 CFR § 98.6. A blender shall be considered an importer or exporter if it otherwise satisfies the aforementioned definition.

Response: EPA concurs that the rule is intended to have the owner or operator of an entity be responsible for reporting, not the middleman or business entity who provides a service of importing. EPA compared the CBP definition of "importer" with the definition in the reporting rule. We determined that they are similar in substance and do not result in differing coverage. EPA cannot copy the CBP definition entirely or cite it because we cover "person, company, or organization" whereas CBP covers "person" only. Also, the CBP definition refers to other parts of a customs regulation, which EPA does not want to include in mandatory reporting rule definition.

EPA compared the CBP definition of "exporter" with the definition in the reporting rule. We identified one substantial difference that could lead to a conflict in the definitions. Therefore, we have added one sentence to our definition to clarify it. EPA cannot copy the Customs definition entirely or refer to it/cite it because we cover "person, company, or organization" whereas CBP covers "person" only. Also, the CBP definition refers to other parts of a customs regulation, which EPA does not want to include in mandatory reporting rule definition.

Refer to Suppliers of Petroleum Products response document for responses on an importer having the same meaning given in section 98.6, an exporter having the same meaning given in 98.6, and the rationale for reporting NGL under subparts MM and NN.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 29

Comment: EPA should modify the definition for Blowdown on page 16617 as follows to clarify it pertains to facility level emission sources only: “Blowdown means manual or automatic opening of station valves to relieve pressure and or release natural gas from but not limited to process vessels, compressors, storage vessels, or station piping by venting natural gas to the atmosphere or a flare. This practice is often implemented prior to shutdown or maintenance.”

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

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 27

Comment: EPA should provide the following definitions: i. Compressor Unit Blow Down Valve (Unit Blow Down Valve) as identified in the proposal (page 16617) ii. Centrifugal Compressor Dry Seal (page 16617) iii. Centrifugal Compressor Wet Seal (page 16617) iv. Unit Pressure Relief Valve (page 16625) v. Natural Gas Driven Pneumatic Valve Bleed Device (page16623) vi. Pump Seal Fugitive Emission (page 16625) vii. Blow Down Vent Stack (page 16617)

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

Commenter Name: Geoffrey Cullen
Commenter Affiliation: Can Manufacturers Institute (CMI)
Document Control Number: EPA-HQ-OAR-2008-0508-0703.1
Comment Excerpt Number: 4

Comment: EPA is proposing that reporting be done at the facility level and states that “facility means any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas.” CMI requests that EPA clarify that sources that have separate air permits be considered separate sources even if they are physically co-located on property owned by the same entity.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 25

Comment: EPA should add the following definitions: i. Add definition for “Compressor Unit Block Valve” as to mean valves that are used to isolate the compressor from the process gas

suction and discharge pressure. ii. Add definition for “Reciprocating Pneumatic Starter Emissions” as to mean natural gas that escapes around the valve that is operated to introduce gas to the starter. iii. Add definition for “Engine Starter Gas Stack Fugitive Emissions” as to mean natural gas released due to the use of natural gas expanded against a turbine expansion starter. iv. Add definition for “Black Oil” to mean heavy, low-volatility oil approximated by a gas to oil ration (GOR) of less than 1,750 cubic feet per barrel and an API gravity less than 40.

Response: The terms compressor unit block valve, reciprocating pneumatic starter emissions, engine starter gas stack fugitive emissions, and black oil are not used in the final rule and therefore do not require definitions because at this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: See Table 4
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0435.1
Comment Excerpt Number: 5

Comment: A perfect example of the distinction between EPA’s understanding of agriculture and that of the USDA is in the difficulty the livestock community has had in understanding precisely what types of operations EPA is seeking to regulate. While EPA’s proposed rule generally applies to “facilities” that emit greenhouse gases, the definition the Agency has adopted for Manure Management Systems is inconsistent with the rule’s definition of a facility. Specifically, EPA has generally defined a facility as: “Facility means any physical property, plant, building, structure, source or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse has.” Conversely, for Manure Management Systems, EPA defines the source category as: “(b) A manure management system that is as a system that stabilizes or stores livestock manure in one or more of the following system components: uncovered anaerobic lagoons, liquid/slurry systems, storage pits, digesters, dry lots, solid manure storage, feedlots and other dry lots, high rise houses for poultry production (poultry without litter), poultry production with litter, deep bedding systems for cattle and swine, and manure composting. This definition of manure management system encompasses the treatment of wastewater from manure. (c)This source category does not include components at a livestock operation unrelated to the stabilization or storage of manure such as daily spread or pasture/range/paddock systems. For agricultural producers, the concern is that the definition of facility clearly covers all contiguous land under a producer’s control, regardless of whether that land is in fact related to a single farm’s physical manure management system. This disconnect creates great uncertainty for numerous producers who – as they attempt to interpret the definition of manure management system by itself – might not be captured under the reporting requirement, but because of the Agency’s expansive definition of facility, unrelated manure management systems separated by vast distances can be combined and the emissions of all manure management systems owned by the producer “bubbled” together for purposes of ascertaining whether reporting is required. This is a real concern not only for the nation’s largest producers but also for smaller farmers who may farm thousands of acres with swine barns and manure management systems wholly unrelated to each other and located great distances from each other nevertheless combined and treated as a single source under the rule.

In at least one extreme example, the distance between barns was over six miles, yet because of the disconnect in the definitions, the manure management systems on either side of that six-mile divide (which happens to be split by a public road) will be treated under the rule as one source. This disconnect requires further clarification because it could require inappropriate or illogical aggregation of sources and is inconsistent with EPA's intention to require facility-based reporting. When read on its face by a swine producer, EPA seems to be describing as a single manure management system, for example, a lagoon, all the barns that discharge manure into the lagoon, the under barn storage and the pipes connecting the system. However, conversations with EPA staff – and the discrepancy that arises in the definition of facility addressed above – seem to indicate that by Manure Management System the Agency might actually intend to aggregate the emissions from multiple unconnected systems. NPPC contends this is a bad policy because it not only runs contrary to the basic understanding within the agricultural community of what encompasses a manure management system, but it also seems contrary to what EPA intended the definition of a Manure Management System to mean. Rather, the pork industry believes the Agency should clearly provide a narrower definition of manure management system to ensure that unconnected systems remain so and are not bubbled into the emissions characterization of the entire agricultural operation. A simple solution the Agency could adopt would be to expand the existing exemption for military operations to also include agricultural operations and manure management systems such that producers may classify a manure management system as "a single facility based on distinct and independent functional groupings within contiguous properties." In other words, if two manure management systems are operated separately from each other (independent functionally), they would not be aggregated under the reporting rule regardless of common ownership/control or the distance between them.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1 and EPA-HQ-OAR-2008-0508-0318, excerpt 1. Furthermore, a facility is required to report only those emissions from processes for which calculation methods are provided in the rule. The final rule exempts reporting of emissions from irrigation pumps and other combustion equipment at farms subject to subpart JJ.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 13

Comment: EPA should also modify the definition of a HFC at § 98.6 to clarify what materials are fluorinated GHGs. The proposed definition indicates that any material containing carbon, hydrogen, and fluorine molecules could be included in the proposal. This proposed definition does not recognize the variety of fluoropolymers that several manufacturers create from fluorocarbons or mixtures of solid fluoropolymers and carrier non-fluoropolymer liquids that exist in the fluorochemical industry. EPA should utilize the one-year definition of a long-lived GHG described in the Endangerment Finding proposal (See Footnote 18 at 74 Fed. Reg. 18895, where EPA describes atmospheric lifetimes less than one year as not meeting the long-lived definition), and should only include those chemicals having atmospheric lifetimes for at least one year in the GHG definition. EPA should also add vapor pressure criteria that would exclude polymers from the GHG definition.

Response: See the preamble discussion on suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Laurie A. Lehmberg
Commenter Affiliation: Texas Instruments Incorporated (TI)
Document Control Number: EPA-HQ-OAR-2008-0508-0682.1
Comment Excerpt Number: 12

Comment: Facility means any physical property. plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contract or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties. (16456 1St col footnote) The definition of facility in the proposed rule is consistent with the definitions of stationary source and related definitions in the Title V and PSD regulations and should be applied in a consistent manner.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: Jay Hawkins
Commenter Affiliation: Micron Technology, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0437.1
Comment Excerpt Number: 11

Comment: The definition of fluorinated greenhouse gas (F-GHG) is very broad and potentially includes a very large number of fluorinated compounds that have not previously been quantified.

Response: See the preamble discussion on suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 11

Comment: 2. Add a § 98.6 ODS definition: “Ozone Depleting Substances or ODS includes any controlled substance listed in Appendix A or B of Subpart A of 40 CFR 82.” Adopt the definition of “article” into § 98.6 modeled after the 40 CFR 372.3 definition: “Article means a manufactured item: (1) Which is formed to a specific shape or design during manufacture, (2) which has end use functions dependent in whole or in part upon its shape or design during end use, and (3) contains a greenhouse gas chemical necessary for performance of its function.” Provide a notation that, for Part 98, article and product are equivalent.

Response: The terms ozone depleting substances or ODS and article are not used in the rule and therefore definitions are unnecessary. For more information of the source categories and GHG

included in this reporting rule, please see section II of the preamble and volumes 1 and 2 of the response to comments documents.

Commenter Name: Laurie A. Lehmberg
Commenter Affiliation: Texas Instruments Incorporated (TI)
Document Control Number: EPA-HQ-OAR-2008-0508-0682.1
Comment Excerpt Number: 9

Comment: The definition of GHGs is much broader than the Kyoto basket of gases. The definition of fluorinated GHGs in particular is very broad and potentially includes many materials that have not previously been quantified. It is unclear whether accurate measurement methods (or GWP values) even exist for these compounds. Initially the rule should focus on the Kyoto basket of gases plus NF_3.

Response: See the preamble discussion on suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Donald R. Schregardus
Commenter Affiliation: Department of the Navy, Department of Defense (DoD)
Document Control Number: EPA-HQ-OAR-2008-0508-0381.1
Comment Excerpt Number: 8

Comment: The definitions of “Export,” “Exporter,” “Import” and “Importer” are internally inconsistent with regard to military functions. Both the definition of “Export” and “Exporter” `exclude “United States military bases and ships” but might not cover transfers or transporting products to overseas military assets that are not on United States military bases or ships. The definition of importer does not have any similar exclusion applicable to the military. The United States military assets can operate overseas from locations that are not owned by the United States and therefore products transferred to and from these military assets would be inadvertently covered by the current proposed definitions of “Export” and “Exporter.” The definition of “Import” and “Importer” has no provision for these military activities. Recommend that the following amendments be made to the proposed definitions in § 98.6. The definitions should read as follows: "Export means to transport a product from inside the United States to persons outside the United States, excluding any such transport on behalf of the United States military including foreign military sales under the Arms Export Control Act, 22 U.S. C. ’’ 2751 et. seq. Exporter means any person, company, or organization of record that contracts to transfer a product from the United States to another country or that transfers products to an affiliate in another country, excluding any such transfers on behalf of the United States military or military purposes including foreign military sales under the Arms Export Control Act, 22 U.S. C. ’’ 2751 et. seq." "Import means, with respect to fluorinated GHGs and nitrous oxide, to land on, bring into, or introduce into, any place subject to the jurisdiction of the United States whether or not such landing, bringing, or introduction constitutes an importation within the meaning of the customs laws of the United States, with the following exemptions: (1) Off-loading used or excess fluorinated GHGs or nitrous oxide of U.S. origin from a ship during servicing, (2) Bringing fluorinated GHGs or nitrous oxide into the U.S. from Mexico where the fluorinated GHGs or nitrous oxide had been admitted into Mexico in bond and were of U.S. origin, and (3) Bringing fluorinated GHGs or nitrous oxide into the U.S. when transported in a consignment of personal or household effects or in a similar non-commercial situation normally exempted from U.S.

Customs attention. (4) Landing on, bringing, or introduction into U.S. jurisdiction exclusively for United States military purposes. Importer means any person, company, or organization of record that for any reason brings a product into the United States from a foreign country, excluding introduction into U.S. jurisdiction exclusively for United States military purposes. An importer includes the person, company, or organization primarily liable for the payment of any duties on the merchandise or an authorized agent acting on their behalf. The term also includes, as appropriate: (1) The consignee. (2) The importer of record. (3) The actual owner. (4) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred."

Response: EPA agrees with the commenter. The suggested changes have been made in 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: 9

Comment: The terms “precision” and “accuracy” are defined in the proposed rule as stated below: “Precision of a measurement at a speci1ied level (e.g., one percent of full scale) means that 95 percent of repeat measurements made by a device or technique fall within the range bounded by the mean of the measurements plus or minus the speci1ied level.” “Accuracy of a measurement at a speci1ied level (e.g., one percent of full scale) means that the mean of repeat measurements made by a device or technique has a 95 percent chance offalling within the range bounded by the true value plus or minus the speci1ied level.” First, it should be noted that the basis of these two definitions is different. The word “chance” in the definition of accuracy implies that a probability-based determination of accuracy is required. This is not the case for the definition of precision. In this case, a source could take two measurements, average them, and if both fall within the specified bounds, the source meets the precision requirement. We do not believe this is what EPA intended. On the other hand, the definition of “accuracy” implies that a probabilistic approach must be taken. The definition states that repeat measurements must have a 95% chance of falling within a specified range of the “true value”. The only way to meet this requirement is to develop a multi-point calibration curve over the entire expected range for each measurement system and then calculate a 95% confidence interval on that curve. Putting aside for a moment the difficulty of constructing such a calibration curve for many types of equipment, a confidence interval constructed in this way often varies in width as shown in Figure 1 [see DCN:EPA-HQ-OAR-2008-0508-0696.1 Figure 1, p. 8]. Is it the intention of the rule to require that all measurements throughout the expected range meet the specification? If so, you may run into circumstances where the interval must be squeezed so much on the upper end to meet the specification, that there may be difficulty in meeting the specification at the lower end. Another issue is that most of the accuracy specifications in the proposed language are expressed as “percent of full scale”. It is important to note that specifying accuracy (or precision for that matter) in this way leads to varying accuracy across the range of the instrument. For example, assume a flow meter accuracy is specified to be ±0.5% of full scale. Let us further assume that the full scale is 50 feet per second (fps) and that the user is measuring a Flow of 6 fps. The specified accuracy is 0.005 x 50 fps = ±0.25 fps. This level of accuracy at 6 fps yields an actual accuracy of ±0.25 fps/6 fps = 4.17%! In the case of a poorly specified Flow monitoring system where the user is routinely operating in, say, the lower 5% of the range, the accuracy may meet the proposed specification language of the rule and yet the data may be virtually useless due to very high actual error. A specification stated as a percent of full scale may be an acceptable way

of characterizing the overall performance of a measurement system, but it is misleading when applied to an individual measurement. In a system that may eventually be used as the basis for a trading program, it is important that we know the precision and accuracy of the data, not just the capability of the measurement system. One possible solution is to look to the accuracy specification tables in the proposed Performance Specification 17 for Continuous Parameter Monitoring Systems. We hesitate to mention this because we strongly feel the overall prescriptive approach taken in PS17 is the wrong approach. However, the accuracy specifications in the tables are apparently based on vendor research and so are representative of equipment actually in the marketplace. Furthermore, they are stated as percent of measurement rather than percent of full scale. A combination of the accuracy tables from PS17 and the plan approach to QA/ QC taken by EPA in the proposed rule, may strike the right balance.

Response: EPA agrees in principle with this comment and has modified the definitions of precision and accuracy in the final rule. In some cases accuracy and precision may need to be defined at full scale (e.g., large masses measured by scales) and in other cases measurements they may need to be defined at the value measured (e.g., analysis of specific gas concentrations) The term “chance” has been removed from the definition of accuracy because the monitoring requirements in the subparts specify the limits for how well (i.e., the error bounds) the measurements must compare to the true value. EPA has modified the definitions of precision and accuracy in the final rule.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 26

Comment: EPA should move the definition of Designated Representative in §98.4 to the “Definitions” section in §98.6.

Response: EPA retained the definition of designated representative in section 98.4 of the rule. EPA concluded that this information is better presented in section 98.4.

Commenter Name: See Table 1
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0440.1
Comment Excerpt Number: 3

Comment: EPA would require reporting by the meat industry at the facility level and defines "facility" for purposes of this rule to mean any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas (74 Fed. Reg. 16456, fn 7). This definition requires further clarification because it could require inappropriate or illogical aggregation of sources and because it is inconsistent with EPA’s intention to require facility-based reporting. To remedy this inadequacy, the agency should add language indicating that properties, plants, buildings, structures, sources or stationary equipment must be considered part of the same operation in order to be considered part of the same facility.

Therefore, facilities that are under common ownership and located on adjacent properties, but are operated separately, will be reported separately.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 31

Comment: Electricity generating unit or EGU definition- [3]…means any unit that combusts solid, liquid, or gaseous fuel and is physically connected to a generator to produce electricity.´ That definition is too inclusive in that it includes all non-utility generating units and associated combustion units. ACC recommends that the definition should be the one used in the Acid Rain Title IV of the Clean Air Act: "ELECTRIC UTILITY STEAM GENERATING UNIT.—The term electric utility steam generating unit' means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale shall be considered an electric utility steam generating unit."

Response: EPA has reconstructed Subpart D to require facilities to report emissions from electricity generating units (EGUs) only if they are subject to the Acid Rain Program or monitor and report annual CO_2 mass emissions data to EPA according to part 75. Therefore, the source category is well defined and a definition of an electricity generating unit (EGU) is unnecessary. The definition of EGU has been deleted from section 98.6.

Commenter Name: Stephen E. Woock
Commenter Affiliation: Weyerhaeuser Company
Document Control Number: EPA-HQ-OAR-2008-0508-0451.1
Comment Excerpt Number: 14

Comment: EPA has defined biomass at proposed rule §98.6 in a way that appropriately and broadly captures materials of biological origin so that they will qualify to be reported as biogenic CO_2 upon their combustion. Weyerhaeuser interprets the definition, as proposed, to include among other things, the organic byproducts of the wood pulping process that are combusted for energy recovery in recovery furnaces, as well as the organic products (e.g. cellulosic ethanol) and byproducts of biofuels production. We believe for clarity it would be useful for EPA to include the organic products and byproducts of biofuels production in its definition of biomass or discuss their applicability to the biomass definition in the final rule preamble.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0380.1, except 17.

Commenter Name: See Table 2
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0367.1
Comment Excerpt Number: 12

Comment: EPA requested comment on the definition of fugitive emissions used in Subpart W, and acknowledged that there are a variety of definitions for fugitives. AXPC does not support EPA's proposed definition, and recommends that the universe of fugitive emissions as defined in the proposal be subdivided into two categories: (1) traditional fugitive emissions, as described by the definition: "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening", and (2) emissions that pass through a vent or stack. For example, leaks from natural gas driven pneumatic controllers and valves, compressor fugitives, pump seals and non-pneumatic pumps, and connectors would all be considered traditional fugitives. Pipeline or equipment blowdowns, completion or workover emissions, tank vents, glycol dehydrator vents, wet gas seals on centrifugal compressors, and flares would fall in the category of direct vented sources.

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

Commenter Name: Steven M. Maruszewski
Commenter Affiliation: Pennsylvania State University (Penn State)
Document Control Number: EPA-HQ-OAR-2008-0508-0409.1
Comment Excerpt Number: 10

Comment: Penn State requests clarification on the definition of a facility. Penn State agrees with the approach to report at the facility level and that reporting at the facility level eliminates most of the questions in determining the scope of reporting based on equity or operational control. There may still be some units at a facility where it is unclear if they should be included in the reporting. Specifications on how to handle buildings/units within the parameters of the defined facility that are jointly owned by more than one entity or buildings owned by the reporting entity but are operated/occupied by another entity is requested. Of the 7,000 acres at the Penn State University Park Campus, 5,800 acres would be part of the facility based on the definition provided in the reporting rule. A map displaying the extent of the University Park facility as defined in the reporting rule is attached. There are additional properties in the area that are not contiguous. The majority of the emissions on campus are generated from the steam plants which are located on core campus. Without a de-minimis provision, many small units at residences, agricultural and research facilities outside of the core campus area get caught up in reporting only due to the nature of Penn State's land holdings. Penn State may not currently collect fuel use data for all these small buildings/units. Also within the University Park facility boundary, there are buildings owned by the University but occupied by a private or other public entity and buildings that are jointly owned. This creates another level of complexity. Penn State understands the challenge in establishing complex reporting rules based on equity or operational control and that every complex owner/operator situation cannot be predicted and detailed in the rule. Penn State appreciates EPA's approach that allows flexibility for firms to determine whether the owner or operator of the facility would report. Our request is on clarification concerning excluding units that are within the boundaries of the facility but are outside the operational control of the University.

Response: EPA determined that changing the definition of facility would not effectively resolve the situations of complex ownership and control. For more information about the flexibility EPA has provided facilities in determining ownership and control please see the response to EPA-

HQ-OAR-2008-0508-0318, excerpt 1. Applicability issues will be addressed by EPA on a case-by-case basis according to the circumstances of each situation. We anticipate that, as needed, implementation guidance can be provided after the publication of the final rule. EPA will make any necessary interpretative determinations regarding the GHG reporting rule in the context of the statutory purposes of the rule. To the extent that the definition of facility in the GHG reporting rule is similar to that of other programs, EPA may draw on general principles established under those programs. But EPA will not be bound by precedents of other rules in implementing the GHG reporting rule. Additional clarifying text in the preamble is unnecessary. Emissions from any source outside of University control would be considered a separate facility.

Commenter Name: Maureen Beatty
Commenter Affiliation: National Refrigerants, Inc. (NRI)
Document Control Number: EPA-HQ-OAR-2008-0508-0434.1
Comment Excerpt Number: 8

Comment: Ultimately, the Reporting Rule should cover every HFC and other fluorinated gas that has a GWP assigned to it by the SAR or other credible scientific report. Only in this way may EPA get a full and fair perspective of the total amount and diversity of production, importation and overall consumption of refrigerants with GWPs. As the Reporting Rule notes, "any fluorocarbon with an atmospheric lifetime greater than one year is likely to have a significant GWP due to the radiative properties of the carbon-fluoride bond." 74 Fed. Reg. at 16,579. To maximize clarity, fairness, consistency, and transparency, EPA should list in the Reporting Rule each fluorinated gas that will be subject to the rule's requirements and its associated GWP, with the ability to amend the list in the future as new substances are developed. EPA uses this "positive" listing procedure in its ODS rules (40 C.F.R. pt. 82, subpt. A., app. F) as well as its regulations implementing the TRI, 42 U.S.C. § 11023.

Response: See the preamble discussion on suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Maureen Beatty
Commenter Affiliation: National Refrigerants, Inc. (NRI)
Document Control Number: EPA-HQ-OAR-2008-0508-0434.1
Comment Excerpt Number: 6

Comment: The precise coverage of HFCs and fluorinated GHGs by the Reporting Rule is vague since the definitions are fairly general, i.e., HFCs "means a class of GHGs primarily used as refrigerants, consisting of hydrogen, fluorine, and carbon," while fluorinated GHGs mean, inter alia, any HFC. 74 Fed. Reg. at 16,621-622. Moreover, Table A-1 of Subpart A only provides the GWPs for 19 specific HFCs, id. at 16,629-630, suggesting that they are the only HFCs regulated under the Reporting Rule. By contrast, H.R. 2454 lists these same 19 HFCs as regulated substances but also includes hydrofluoroolefin-1234yf (HFO-1234yf) and hydrofluoroolefin-1234ze (HF0-1234ze), and provides for the future listing of additional HFCs by EPA. H.R. 2454, § 619(a).

Response: See the preamble discussion of suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Traylor Champion
Commenter Affiliation: Georgia-Pacific, LLC (GP)
Document Control Number: EPA-HQ-OAR-2008-0508-0380.1
Comment Excerpt Number: 16

Comment: The definition of process gas provided in the rule is overly broad. As given in the rule: Process gas means any gas generated by an industrial process such as petroleum refining. For the pulp and paper sector, non-condensable gases (NCGs) and stripper off gases (SOGs) from Kraft and Semi-Chemical pulping and recovery operations should be excluded from the definition of process gas. These gases, of biogenic origin, generated during the pulping and chemical recovery processes, are combusted in general stationary combustion devices in the pulp and paper industry. They should be specifically excluded from the process gas definition.

Response: The rule has been revised such that a definition for the term is unnecessary and the definition has been removed from section 98.6.

Commenter Name: Lloyd Stone
Commenter Affiliation: Westlake Chemical Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0442.1
Comment Excerpt Number: 4

Comment: The definitions section needs additional definitions, clarifications to those terms proposed, or references to other 40 CFR part 60, 61 and 63 rules to help provide a better understanding of EPA's applicability statements. For instance, Subpart X refers to an "Ethylene Facility" and to an "EDC Facility" but the terms are not defined in § 98.6. The same is true with the term "Process Vent". (Does it include relief valve discharges or emissions from a storage tank vent? Does it have to be continuous? Does it have to originate as a gas phase from a reactor/distillation operation?) Subpart X in § 98.240(a) uses the phrase "intended product" but does not define it in § 98.6 nor is it clear in Subpart X as to its meaning. Westlake's petrochemical plants are complex operations that involve various process units producing petrochemicals, some of which are listed in Subpart X and others that are not. Finally, Subpart X in § 98.240(b) uses the phrase "integrated process". However, the definition in § 98.6 does not provide clarity to the applicability statement in § 98.240(b) making the rule difficult to correctly implement.

Response: We have made a number of changes in the final rule to clarify terminology. The term "process vent" is used in several subparts. Therefore, we have inserted a definition for this term in §98.6 of subpart A.

The purpose of the term "intended product" was to distinguish processes that produce petrochemicals for sale or as intermediates in subsequent processes from processes that produce a petrochemical as a byproduct. For example, other commenters noted that certain polyester manufacturing operations will produce by-product methanol during the manufacture of polyester resin. We did not intend to include such processes in the petrochemical source category because the process does not produce GHG as a reaction byproduct. To clarify this point, §98.240 in the final rule specifies that all processes that produce a petrochemical are subject, except as otherwise noted. One of the exceptions is any process that produces a petrochemical as a byproduct.

In the proposed rule, an "integrated process" was defined as "a process that produces a petrochemical as well as one or more other chemicals that are part of other source categories" subject to reporting under part 98. For example, a facility that makes methanol from synthesis gas may also recover hydrogen for sale or use some of the hydrogen to produce ammonia. Both hydrogen production and ammonia production are source categories that are subject to reporting under subpart 98. Because the methanol, hydrogen, and ammonia in this case are not produced in distinctly separate processes, we determined that the rule needed to specify how to determine the source category in which the overall process should be classified and the subpart under which GHG emissions should be monitored and reported. Our intent was that an "integrated process" would be defined based on its "primary product", which was defined as the "product of a process that is produced in greater mass quantity than any other product of the process". Thus, if the annual mass production of methanol exceeds both the annual mass production of hydrogen for sale and the annual mass production of ammonia, then the "integrated process" would be assigned to the petrochemical source category, and it would be subject to the requirements in subpart X. Alternatively, if the primary product were determined to be hydrogen or ammonia, then the "integrated process" would instead be subject to the procedures in subpart P or subpart G, respectively.

In the proposed rule we used general language that would apply to various integrated process scenarios, but the only scenario we know of that meets these conditions is the methanol example described above. Therefore, the "integrated process" concept has been removed from the final rule, and §98.240 of subpart X explicitly states the applicability determination procedures for a process that produces methanol, hydrogen, or ammonia from synthesis gas.

See the petrochemical production response document for the response on comments that questioned whether processes that produce ethylene dichloride as an intermediate in the production of vinyl chloride monomer or processes that produce ethylene oxide as an intermediate in the production of ethylene glycol are "integrated processes". We have not included definitions for the terms "ethylene facility" and "EDC facility" because these terms are not used in the final rule (or the proposed rule). However, we have made some changes to §98.240 in the final rule to clarify the applicability requirements. For example, as noted above, the final rule specifies that all processes that produce a petrochemical are part of the petrochemical source category, except as specifically excluded. In addition, the final rule specifies that the petrochemical source category includes processes that produce a petrochemical as an intermediate for the onsite production of other chemicals as well as processes that produce a petrochemical as an end product for sale or shipment offsite.

Commenter Name: Traylor Champion
Commenter Affiliation: Georgia-Pacific, LLC (GP)
Document Control Number: EPA-HQ-OAR-2008-0508-0380.1
Comment Excerpt Number: 17

Comment: There is no definition of biogas in §98.6. Based on the current use of the term biogas in the proposed rule, it appears that EPA intends to define biogas as landfill gas, wastewater treatment plant digester gas, and manure management system digester gas. If EPA decides to define biogas, it should also indicate that NCGs and SOGs from pulping processes are excluded for the following reasons. a. It is unsafe to obtain samples from NCG and SOG streams The NCG and SOG systems are operated under vacuum and at very low oxygen levels to maintain

the gas stream below its explosive limit. If pulp mills were required to obtain samples of these gases for carbon content, the sampling procedures could lead to the introduction of oxygen into the piping system which could lead to operation into the explosive range resulting in very unsafe conditions. Further, the industry does not have any instrumentation to measure the flow of these gases, and it would not be feasible to install measurement devices. The motive force to collect NCG and SOG is from steam eductors rather than mechanical fans (again, the system is stringently designed to exclude air intrusion which could be introduced by a fan). Therefore, these systems operate at low vacuum that is at insufficient pressure for use of any flow restricting measurement device (such as an orifice). b. The amount of greenhouse gases (CO_2) from combustion of NCG and SOG is small compared with the total amount from a pulping operation. The National Council for Air and Stream Improvement (NCASI) has estimated the amount of greenhouse gas from NCG combustion for a typical Kraft pulp mill [Footnote: Memo from Brad Upton, NCASI, to Rebecca Nicholson, RTI International, dated April 30, 2008]. This analysis shows that CO_2 from NCG combustion is less than 0.08% of the total biomass combustion from the mill and less than 0.005% of the total methane and nitrous oxide of the mill's total GHG emissions. NCASI performed similar calculations for SOG [Footnote: Unpublished memo from Brad Upton, NCASI, to Alan Stinchfield, GP, dated April 29, 2009]. This analysis shows that CO_2 from SOG combustion is less than 0.5% of the total biomass combustion from the mill and less than 0.04% of the total methane and nitrous oxide of the mill's total GHG emissions.

Response: As constructed, the biomass definition includes spent liquors and noncondensible gases (NCGs) that are generated by pulping processes and liquid biofuels (e.g., cellulosic ethanol, biodiesel) derived from plants, animals and micro-organisms. Refer to the preamble discussion on the pulp and paper subpart for an explanation of gases that do not need to be reported in pulp mills. EPA determined that additional clarification of the materials covered by the definition is unnecessary. Additionally, we determined that a separate definition for the term "biogas" is not warranted because these materials (e.g., landfill gas, anaerobic digester gas) are sufficiently covered under the proposed definition of "biomass." Regarding the problem of sampling biogas streams, the stationary fuel combustion subpart has been changed since proposal to include an emission factor for CO_2 from biogas, such that sampling to determine carbon content is not necessary for units that combust biogas.

Commenter Name: David Stirpe
Commenter Affiliation: Alliance for Responsible Atmospheric Policy (ARAP)
Document Control Number: EPA-HQ-OAR-2008-0508-0527.1
Comment Excerpt Number: 3

Comment: The Alliance believes that the definition of "fluorinated gas" is too vague. It leaves much uncertainty as to what is included. In order to provide clear direction as to the fluorinated gases that are required to be reported, we request that EPA provide a positive specific list of covered compounds and their associated GWP value. GWP values that are not in the Fourth Assessment Report should be taken from a recent credible scientific assessment report. Without a specific list, there will be inconsistency in the reports since the definition will be interpreted differently among those required to report. The publication of a specific list is consistent with existing regulations dealing with the reporting and handling of hazardous materials, including existing Department of Transportation regulations, existing EPA regulations for Tier I/Tier II reporting, and for Toxic Release Inventory (TRI) reporting.

Response: See the preamble discussion on suppliers of industrial GHGs for the response on fluorinated GHGs to report.

Commenter Name: Lee Fuller
Commenter Affiliation: Independent Petroleum Association of America (IPAA)
Document Control Number: EPA-HQ-OAR-2008-0508-0431.1
Comment Excerpt Number: 2

Comment: We endorse the 25,000 tons/year reporting threshold for a facility. However, we are concerned about the scope of the facility definition. The proposed rule defines a facility as: Facility means any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas. Parts of the Clean Air Act define sources in the context of facilities; this definition defines facility in the context of a source. That being stated, the fundamental issue is creating a framework where the reporter can understand, logically, that a discrete operation constitutes a facility. This issue is particularly significant in the context of onshore petroleum and natural gas production facilities.

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

Commenter Name: Jerry Call
Commenter Affiliation: American Foundry Society (AFS)
Document Control Number: EPA-HQ-OAR-2008-0508-0356.2
Comment Excerpt Number: 19

Comment: The term, “fugitive emissions” is also defined differently in this proposed rule than EPA has defined it in the New Source Review (NSR) and the Title V Operating Permit Program. Proposed 40 CFR §98.2. In NSR and Title V, EPA defines "fugitive emissions" as "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening". EPA needs to provide a revised definition of the term, “fugitive emissions”, that is consistent with existing definitions to avoid unnecessary confusion.

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

Commenter Name: Jerry Call
Commenter Affiliation: American Foundry Society (AFS)
Document Control Number: EPA-HQ-OAR-2008-0508-0356.2
Comment Excerpt Number: 18

Comment: In the proposed regulation, the use and definition of the term, “facility,” is inconsistent with the definition of this term under the existing Clean Air Act (CAA) regulatory framework. Proposed 40 CFR §98.2. EPA has already defined the term, “facility,” in Part 52,

Part 70 and Part 63, as well as numerous federal and state guidance materials. Because the regulated community is already familiar with the existing definition of facility, especially as it relates to NSR and Title V, a different definition in this proposed regulation can cause unnecessary regulatory confusion and become a compliance “nightmare”. Given that this term and its definition may be used in future GHG regulatory efforts, AFS requests that EPA revise the definition of the term, “facility”, in this proposed regulation to be consistent with two existing definitions under the CAA.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: James E. Johnstone
Commenter Affiliation: Contek Solutions LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0328
Comment Excerpt Number: 1

Comment: Definition of "Fugitive Emissions" (§98.6): The definition of "Fugitive Emissions" is not consistent with previous EPA regulations or industry practice. The proposed definition states, "Fugitive emissions also mean CO_2 emissions resulting from combustion of natural gas in flares." This sentence should be removed from the definition of "Fugitive Emissions." The source, methods and quantification of determining a gas leak from an "open ended lines, equipment connections or seals to the atmosphere" is entirely different than determining emission from gases being combusted in a flare. Different types of emissions should not be combined.

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

Commenter Name: T. LaSalle
Commenter Affiliation: HLP Enginering Inc
Document Control Number: EPA-HQ-OAR-2008-0508-0268.1
Comment Excerpt Number: 5

Comment:
Would like to see the term 'and other contaminants' explained or further defined under the definit ion of 'Natural Gas Processing Facilities' under 98.6.

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

Commenter Name: Leslie Sue Ritts
Commenter Affiliation: National Environmental Development Association
Document Control Number: EPA-HQ-OAR-2008-0508-0504.1
Comment Excerpt Number: 6

Comment: The Notice defines "facility" in a footnote in the preamble of the Notice as "any physical property, plant, building, structure, source or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right of way and under common control or common ownership, that emits or may emit any greenhouse gas." Id. at 16467, FN 49. NEDA strongly urges EPA to amend the applicability definition by adding an element that is common to other CAA applicability definitions, which is the four-digit NAICS code that the Department of Commerce uses to identify manufacturing processes. (Alternatively, other CAA programs utilize the first two-digits of the SIC code previously used by the Commerce Department.) We assume that the absence of that code was an unintentional error. With that addition to the definition of "facility," NEDA/CAP agrees with EPA that this definition of "facility" will avoid the considerable confusion created over the past 35 years by the definition of "major source" utilized for determining the applicability of Title V and NSR for "major CAA sources." Further, because applicability of these mandatory reporting requirements should be as straight forward as possible, NEDA/CAP urges the Agency to place the definition of "facility" into the regulations themselves since a footnote in a preamble will become quickly unavailable to regulators and regulated entities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: Thomas M. Kiley
Commenter Affiliation: Northeast Gas Association (NGA)
Document Control Number: EPA-HQ-OAR-2008-0508-0558.1
Comment Excerpt Number: 5

Comment: In general for natural gas systems (production, gathering, storage, transmission and ultimately distribution), it would be desirable if the rule provided greater clarity on what defines a "facility" and what is the process that should be used to determine if a facility may be above the reporting threshold, and the estimation method to be used.

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

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 30

Comment: EPA should modify the definition for Engineering estimation on page 16620 as follows: "Engineering estimation means an estimate of fugitive or vented emissions based on engineering principles applied to measured, approximated, or design-based physical parameters such as dimensions of containment, pressures, temperatures, and compositions."

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

Because EPA is not going final with the oil and natural gas systems subpart, the term is no longer used in the rule.

Commenter Name: Ted Michaels
Commenter Affiliation: Energy Recovery Council (ERC)
Document Control Number: EPA-HQ-OAR-2008-0508-0544.1
Comment Excerpt Number: 5

Comment: Section 98.6 Definitions The following clarification should be incorporated in the rule definitions to insure all terms referenced in rule are defined. 1. A definition for Non-Biogenic or Anthropogenic CO_2 should be added as: "CO_2 emitted to the atmosphere from the combustion or thermal disassociation of fossil carbon in fossil based materials such as plastics, synthetic textiles and synthetic rubber." This defines non-biogenic CO_2 as determined through ASTM Method D 6866-06a. 2. The Greenhouse Gas definition should clarify that biogenic CO_2 is excluded consistent with the IPCC and all other GHG program reporting conventions. 3. The definition for CO_2e should be added to clarify the Section 98.36 data reporting requirements. "CO_2e means total GHG gases in equivalent CO_2 global warming potential including anthropogenic or non-Biogenic CO_2, CH_4, N_2O, SF_6, HFCs, PFCs and other fluorinated gases as defined in this section." 4. The definition of maximum rated input capacity (for Municipal Waste Combustion) should be revised consistent with the MWC unit capacity calculation in the Large MWC (> 250 tpd) NSPS standard under 40 CFR 60.59b (j) or the Subpart Eb citation can be referenced in the definition.

Response: The rule defines biomass and specifies how biogenic CO_2 emissions from biomass fuels are to be reported. Therefore, EPA determined that it is unnecessary to define non-biogenic or anthropogenic CO_2. However, some clarifications have been added to subpart A of the rule about the exclusion of emissions from biomass when determining applicability to the rule and in determining CO_2e. Regarding the comment on MWC, see EPA-HQ-OAR-2008-0508-0376.1, except 38.

Commenter Name: Justin T. Schneider
Commenter Affiliation: Indiana Farm Bureau, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0583.1
Comment Excerpt Number: 4

Comment: There is also concern among the public that the interpretation of the definition of "facility" may be broadened at some point to include any facility under common ownership. As written in the proposed rule in footnote 7, the definition is clear and does not allow for such interpretation. We urge EPA to implement the rule in a manner consistent with that definition.

Response: EPA concurs with the commenter's interpretation of Footnote 7. EPA did not change the definition of facility in the final rule.

Commenter Name: Don Scott
Commenter Affiliation: National Biodiesel Board (NBB)
Document Control Number: EPA-HQ-OAR-2008-0508-0591
Comment Excerpt Number: 3

Comment: The definition of biodiesel in this rule should be amended to correspond to the definition previously adopted by EPA through rulemaking. The term ’biodiesel” means a motor vehicle fuel which: (1) Meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 7545 of this title (Clean Air Act Section 211); (2) is a mono-alkyl ester; (3) meets ASTM specification D-6751- 07; (4) is intended for use in engines that are designed to run on conventional, petroleum-derived diesel fuel, and (5) is derived from nonpetroleum renewable resources.

Response: EPA agrees that the definition should be clarified for the final rule. In the final rule, EPA has defined biodiesel as: a mono-akyl ester derived from biomass as defined above and conforming to ASTM D6751-08, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels. EPA prefers this definition over the one recommended by the commenter because it builds on the definition of biomass provided in the rule; it does not rely on the term “renewable” which is not defined in this rule; and it does not rely on the end-use of a product, which a reporter may not know.

Commenter Name: Randy Armstrong
Commenter Affiliation: Shell Oil Company
Document Control Number: EPA-HQ-OAR-2008-0508-0651.1
Comment Excerpt Number: 3

Comment: Under §98.2(a), EPA proposes that owners or operators of facilities that meet the requirements in §98.2(a)(1), (a)(2) or (a)(3) are subject to the reporting requirements. Facilities have various business structures of ownership and operational control, which have implications on data availability and the ability to monitor and certify applicable GHG emissions. As API contends in its comments, the demarcation of a "reporter" is the one who has operational control. EPA says that "operational control" (see footnote on page 16592) is defined as "having the full authority to introduce and implement operational, environmental, health and safety policies." In order to clarify who is the "reporter" for a facility, EPA should include the following definition of operational control consistent with California’s AB32 program. "Operational control" for a facility subject to this rule means the authority to introduce and implement operating, environmental, health and safety policies. In any circumstance where this authority is shared among multiple entities, the entity holding the permit to operate from [designated authority] is considered to have operational control for purposes of this [rule].

Response: EPA determined that a definition for operational control is unnecessary. Owners and operators of facilities, through documents of agreement, are required to designate a representative who is responsible for reporting emissions on their behalf, please see response to EPA-HQ-OAR-2008-0508-0318, excerpt 1, as well as Volume 12 which includes responses to comments on applicability.

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: 2

Comment: FCG notes that EPA does not appear to have specified requirements for determining actual CO_2e emissions for non-ARP affected "facilities" under the proposed rule. Because the ARP regulates "units," not "facilities," and a facility can include both Acid Rain "affected" and "non-affected" units, the phrase "facilities that are subject to the Acid Rain Program" is somewhat ambiguous. EPA should reconsider carefully the definition of "facility" as used within this rulemaking related to electric utilities and ensure that it is consistent with the definition used for the ARP. Doing so will help alleviate potential confusion as well as the potential for significant changes to the current reporting system.

Response: EPA agrees that the proposed rule was some what confusing as it related to electricity generating units. The final rule has changed applicability of subpart D (Electricity Generation) so that subpart D applies only to units that report annual CO_2 emissions under part 75. However, facilities subject to subpart D must report emissions from all processes for which methods are provided in the final rule, including facilities that are not covered by the Acid Rain Program.

Commenter Name: Traylor Champion
Commenter Affiliation: Georgia-Pacific, LLC (GP)
Document Control Number: EPA-HQ-OAR-2008-0508-0380.1
Comment Excerpt Number: 15

Comment: The definition of facility is overly broad and should be narrowed based on NAICS distinction of industries. GP urges inclusion of a 4-digit NAICS distinction in the definition of facility, similar to the 2-digit SIC distinction used under the Title V permitting program. Without this qualifier, contiguous or adjacent facilities owned or operated by wholly separate reporting companies would be required to report, even though they do not otherwise trigger the rule's reporting thresholds/criteria. The proposed rule allows military installations the ability to classify their operations as more than a single facility based on distinct and independent functional groupings that are located within contiguous military properties (see 74 Fed. Reg. 16456, FN7). This ability should be extended to industrial sources as well.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: Ram K. Singhal
Commenter Affiliation: Rubber Manufacturers Association (RMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0600
Comment Excerpt Number: 2

Comment: EPA defines facility in a footnote of the preamble of the notice as "any physical property, plant, building, structure, source or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right of way and under common control or common ownership, that emits or may emit any greenhouse gas. See fn. 49, at page 16467. This definition will avoid the considerable confusion created by the definition of "major source" utilized under many CAA programs, but EPA requests that EPA also add to the definition that the property or stationary source equipment must share the same four-digit NAICs number (or first two digits of the SIC Code) in order to determine if a facility meets the applicability criteria in the final EPA mandatory GHG reporting rule. In addition, EPA suggests that EPA codify the definition of facility in the final general Part 98 rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: Lorraine Krupa Gershman
Commenter Affiliation: American Chemistry Council (ACC)
Document Control Number: EPA-HQ-OAR-2008-0508-0423.2
Comment Excerpt Number: 30

Comment: Compressor fugitive emissions are defined as ³natural gas emissions from all components in close physical proximity to compressors where mechanical and thermal cycles may cause elevated emission rates, including but not limited to open-ended blowdown vent stacks, piping and tubing connectors and flanges, pressure relief valves, pneumatic starter open-ended lines, instrument connections, cylinder valve covers, and fuel valves.´ We are uncertain as to what is meant by close physical proximity to compressors where mechanical and thermal cycles may cause elevated emission rates,´ and request clarification in the final rule.

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

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)
Document Control Number: EPA-HQ-OAR-2008-0508-0376.1
Comment Excerpt Number: 38

Comment: In Section 98.6, the definition of maximum rated input capacity (for Municipal Waste Combustion) should be revised consistent with the MWC unit capacity calculation in the Large MWC (> 250 tpd) NSPS standard under 40 CFR 60.59b (j) or the Subpart Eb citation can be referenced in the definition.

Response: EPA agrees with the commenter and has made this change in the final rule. Municipal waste combustor owners and operators are accustomed to the capacity calculations for their MWC units from the Part 60 rules (NSPS and Emission Guidelines (EG)), so referring to 60.58b(j) to determine the maximum rated input capacity provides a consistent approach. This reduces burden on reporting facilities and eliminates confusion of potentially having differing maximum rated input capacities for different air regulations. The NSPS/EG takes into account heat input capacity design considerations in determining capacity, as well as providing provisions for batch units, which are encountered in the smallest MWC units. The NSPS/EG also makes a distinction between refuse-derived fuels and mass burn units as far as heat content of waste goes. Related to this is that some facilities have accepted Federally enforceable operating permit limits that have de-rated their MWC unit from the original design capacity to a lesser amount of input, so the clause in the proposed definition "...as of the initial installation of the unit as specified by the manufacturer of the unit" has been removed, because it might cause confusion among implementing agencies.

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)
Document Control Number: EPA-HQ-OAR-2008-0508-0376.1
Comment Excerpt Number: 37

Comment: In Section 98.6, the definition for CO_2e should be added to clarify the Section 98.36 data reporting requirements. "CO_2e means total GHG gases in equivalent CO_2 global warming potential including anthropogenic or non-Biogenic CO_2, CH_4, N_2O, SF_6, HFCs, PFCs and other fluorinated gases as defined in this section."

Response: See response to EPA-HQ-OAR-2008-0508-0376.1, excerpt 5.

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)
Document Control Number: EPA-HQ-OAR-2008-0508-0376.1
Comment Excerpt Number: 36

Comment: In Section 98.6, the Greenhouse Gas definition should clarify that biogenic CO_2 is excluded consistent with the IPCC and all other GHG program reporting conventions.

Response: See response to EPA-HQ-OAR-2008-0508-0376.1, excerpt 5.

Commenter Name: Kerry Kelly
Commenter Affiliation: Waste Management (WM)
Document Control Number: EPA-HQ-OAR-2008-0508-0376.1
Comment Excerpt Number: 35

Comment: In Section 98.6, a definition for Non-Biogenic or Anthropogenic CO_2 should be added as: "CO_2 emitted to the atmosphere from the combustion or thermal disassociation of fossil carbon in fossil based materials such as plastics, synthetic textiles and synthetic rubber." This defines non-biogenic CO_2 as determined through ASTM Method D 6866-06a

Response: The rule defines biomass and specifies how biogenic emissions from biomass fuels are to be reported. Therefore, EPA determined that it is unnecessary to define non-biogenic or anthropogenic CO_2.

Commenter Name: Angela Burckhalter
Commenter Affiliation: Oklahoma Independent Petroleum Association (OIPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0386.1
Comment Excerpt Number: 29

Comment: EPA proposes new definitions that do not correlate to definitions established in the Clean Air Act and/or in subsequent air regulations that industry is familiar with and understands. EPA should adhere to those existing definitions to prevent confusion.

Response: All terms are defined within the context and intention of the GHG reporting rule. It is not always necessary or correct to adopt definitions from other rules or sections of the CAA that have different purposes.

Commenter Name: Thomas Siegrist
Commenter Affiliation: Koch Nitrogen Company LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0351.1
Comment Excerpt Number: 24

Comment: The Proposed Rule defines "facility" in a manner that is not consistent with the other established definitions that determine facility boundaries for purposes of establishing the applicability of various existing EPA air programs. This creates confusion and may lead to reporting obligations under the GHG rule that cross multiple facilities that currently are not considered common sources under the Clean Air Act. As an example, the definition of "major source" under the Part 70 operating permit program includes every stationary source (defined as every "building, structure, facility, or installation that emits or may emit...") "or group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control) belonging to a single major industrial grouping...". 40 CFR § 70.2. By contrast, the definition of "facility" in the Proposed Rule includes "any physical property, plant, building, structure, source or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit...." The differences in the definitions will require reevaluation of each major source boundary to determine if there is a different "facility" boundary for purposes of GHG reporting. This could cause substantial confusion initially, as entities determine if they are subject to the reporting rule, and then subsequently if the new GHG rule requirements are incorporated into Part 70 source permits. Some sources will likely be required to report on facility emissions for "facilities" that are different from the major sources for which their permits are issued. In addition, the Proposed Rules may create data gathering and accuracy problems for facilities that have been determined to be co-located under the Part 70 and New Source Review programs. This problem arises from the fact that co-located facilities may be owned by completely separate companies without any formal data sharing relationships. EPA specifically intends for the Proposed Rule to apply to such co-located facilities. See 74 Fed. Reg. at 16469. For facilities that collectively meet a threshold for reporting GHGs on the basis of co-location, the GHG reporting requirement should recognize that co-located facilities are often managed as entirely separate entities, with no common ownership or operations. This would mean that if a co-located collection of assets qualifies for reporting, the different owners/operators should be allowed to elect to file reports either as a single entity or as separate entities covering only those portions of the facility for which they have ownership or operational responsibilities. This concept should also be added to the self certification provisions at § 98.4.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1. Furthermore, “completely separate companies” with no common ownership or control are considered different facilities under the rule and therefore have different reporting responsibilities.

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

Document Control Number: EPA-HQ-OAR-2008-0508-0380.1
Comment Excerpt Number: 22

Comment: EPA should clearly state that a continuous opacity meter is not a CEMS. If EPA ultimately decides to retain the current Tier 4 methodology as presented in the proposed rule, EPA should clearly state that a continuous opacity monitoring system (COMS) is not a CEMS. A COMS does not meet the definition of a CEMS in §98.6 (74 FR 16618), but a lack of clarity in EPA's definition may lead to uncertainty in interpreting the language. This ambiguity could be easily clarified by adding a sentence to the CEMS definition: "A continuous opacity monitoring system (COMS) is not a CEMS under this subpart."

Response: EPA determined that clarification is not necessary. Under the Tier 4 methodology of subpart C, the specification of a CEMS is precisely described in 98.33(b)(4). Opacity monitors do not meet these requirements.

Commenter Name: Meg Voorhes
Commenter Affiliation: Social Investment Forum
Document Control Number: EPA-HQ-OAR-2008-0508-0657.1
Comment Excerpt Number: 2

Comment: Our reading of Footnote 30 indicates that companies would not be able to subdivide operations that are co-located in order to define two facilities so that neither exceeded the reporting threshold. We want to confirm that this reading of the Footnote is correct and suggest that EPA guard against such attempts by companies.

Response: EPA concurs with the commenter's interpretation of Footnote 30. The intent of the definition is to prevent facilities from subdividing operations that are co-located unless separate processes not under common control.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 28

Comment: Acid Gas §98.6 (p. 16616): BP requests replacing the EPA definition with the following: "The hydrogen sulfide and/or carbon dioxide contained in or extracted from gas or other streams" (from GPSA). Including the process in the definition is not appropriate.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 83

Comment: Natural gas processing facilities §98.6 (p. 16623): The definition of "Natural gas processing facilities" needs clarification. As written, with the use of "and", the definition implies that all conditions must be met: "engaged in the extraction of natural gas liquids from produced natural gas; fractionation of mixed natural gas liquids to natural gas products; and removal of CO_2, sulfur compounds, nitrogen, helium, water, and other contaminants."

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 42

Comment: Flare stack fugitive emissions §98.6 (p. 16620): BP strongly disagrees with the definition of "Flare stack fugitive emissions" that classifies this emission source as a fugitive emission. This runs counter to other EPA programs and the generally recognized classification of flaring as combustion.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 71

Comment: API suggests adding the following definition for "emission factor" from the API Compendium: "The emission rate for a particular emission source per unit of the source, when related to the activity data (e.g., amount of fuel consumed or counts of emission sources) results in absolute greenhouse gas emissions."

Response: See the response to comment EPA-HQ-OAR-2008-0508-0631.1, except 38.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 72

Comment: Engineering estimates §98.6 (p. 16620): API suggests removing the term "fugitive emissions" from the definition of Engineering Estimates. Engineering estimates should not be restricted just to fugitive emissions. The suggested revisions is: "For the purpose of this rule, an estimate of emissions based on engineering principles applied to measured and/or approximated physical parameters such as including, but not limited to dimensions of containment, actual

pressures, actual temperatures, and compositions." Engineering estimate can also refer to estimated fuel use based on engine run time, load, heat rate curve, and fuel characteristics.

Response: At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.
Because EPA is not going final with the oil and natural gas systems subpart, the definition of this term has been deleted in the final rule.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 73

Comment: Facility §98.6 (p.16620): EPA should clarify the definition of "facility" as it applies to offshore petroleum and natural gas production platforms. Some platforms under common ownership are connected by above sea level bridges and pipe ways though the structures of the platforms are not in physical contact. Such platforms should be considered one facility. Also, platforms only connected to common pipes below sea level to transport oil and gas from wells and that are not in physical contact should be considered separate facilities since they do not meet the "facility" definition. Thus, API suggests the definition of facility be revised to include the following clarification: "For purposes of this definition, offshore petroleum and natural gas production platforms should be treated as contiguous or adjacent only if connected by physical structures above sea level (e.g. bridges, pipe ways, etc). Connections below sea level such as export oil and gas pipelines do not make otherwise separate facilities contiguous or adjacent."

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 74

Comment: Feedstock §98.6 (p. 16620): It is not clear if the definition specifically excludes crude that is used for fuel. API requests clarification.

Response: The definition of "feedstock" states that "[s]upplemental fuel burned to provide heat or thermal energy is not a feedstock." The term "supplemental fuel" is defined as "a fuel burned within a petrochemical process that is not produced within the process itself" (i.e., it is not process off-gas or liquid wastes from the process). Crude burned as fuel meets the definition of "supplemental fuel". Therefore, crude used as fuel is not a feedstock to a petrochemical process.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1

Comment Excerpt Number: 75

Comment: Flare stack fugitive emissions §98.6 (p. 16620): API strongly disagrees with the definition of "Flare stack fugitive emissions" that classifies this emission source as a fugitive emission. This runs counter to other EPA programs and the generally recognized classification of flaring as combustion.

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 41

Comment: Feedstock §98.6 (p. 16620): It is not clear if the definition specifically excludes crude that is used for fuel. BP requests clarification.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0679.1, except 74.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 34

Comment: The proposed definition of the term "fugitive emissions" means "unintentional equipment emissions of methane...." The term "fugitive emissions" is used inconsistently throughout the proposed rule based on other definitions within the document. As an example, the combination of the definition for Blowdown vent stack fugitive emissions and B lowdown would imply that the term fugitive also includes the manual (intentional) release of natural gas. El Paso suggests that greater clarity would be brought to the proposed rule if fugitive and vented (process) emissions were treated differently. Fugitive, being those releases of natural gas from components not expected to have emissions (not physically controllable) and vented being releases of natural gas from components expected to have emissions (a vent or part of the process). Also, consistent with our recommendation for the definition of "flare" above, El Paso recommends revising the definition of "fugitive emissions" to remove the reference to "CO_2 emissions resulting from combustion of natural gas in flares." We recommend adopting the definition of "fugitive emissions" from the California Climate Action Reserve (CCAR) identified as follows: "Fugitive Emissions means Emissions that are not physically controlled but result from the intentional or unintentional release of GHGs. They commonly arise from the production, processing, transmission, storage and use of fuels or other chemicals, often through joints, seals, packing, gaskets, etc. " (GRP_V3_April2008_FINAL). To account for the vented emissions, we recommend the following definition: "Vented Emissions means direct releases to the atmosphere resulting from equipment design, regular process operations, maintenance activities, or emergency releases. Venting occurs when gas is intentionally or unintentionally released from a distinct point source from process equipment or pipelines and is typically associated with standard operating practices, maintenance, or upset events. Examples of planned

vented emissions include process emissions and process venting, equipment blowdown that reduces system pressure allowing safe access for maintenance and inspection, and pneumatic devices that utilize gas pressure as a motive force. Examples of unplanned vented emissions include blowdown from equipment emergency shutdowns and pipeline dig-ins."

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 36

Comment: Crude Oil §98.6 (p. 16618): The definition is too broad and could be interpreted to include natural gas. BP prefers the definition from the Glossary of Oilfield Production Terminology (GOT): "A mixture of hydrocarbons that exists in the liquid phase in the underground reservoir and remains liquid at atmospheric pressure after passing through surface separating facilities.

Response: EPA concurs with the commenter. The definition of crude oil has been changed in the final rule.

Commenter Name: Fiji George
Commenter Affiliation: El Paso Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0398.1
Comment Excerpt Number: 28

Comment: EPA should modify the definition for Reciprocating Compressor Rod Packing on page 16626 as follows: "Reciprocating compressor rod packing fugitive emissions means natural gas released from a connected tubing vent and gas released that passes around the rod packing gland. It also includes emission from uncovered distance piece, rod packing flange (on each cylinder) any packing vents and cover plates (on each cylinder)."

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 31

Comment: Blowdown vent stack fugitive emissions §98.6 (p. 16617): Blowdown vent stack fugitive emissions is defined as natural gas released due to maintenance and/or blowdown operations including but not limited to compressor blowdown, and emergency shut-down system testing. Blowdown stack emissions are not "fugitive" emissions as understood by industry or

conventionally defined under state or EPA mandated programs. As BP has stated above, we do not believe it is appropriate to classify blowdown vents as fugitive sources.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 69

Comment: Destruction efficiency §98.6 (p. 16618): The definition for "Destruction Efficiency" should not be specific to greenhouse gas emissions. In addition, the rule should provide only one definition for this term.

Response: EPA disagrees with the commenter. In a certain context (e.g. testing refinery flares), it would make sense to make the definition of destruction efficiency gas-specific. However, destruction efficiency is used in various subparts of the rule and therefore a broad definition is more appropriate. EPA has decided to keep the definition for destruction efficiency in terms of CO_2e. EPA only provides one definition for destruction efficiency in the final rule.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 29

Comment: Air injected flare §98.6 (p. 16616): Request the following changes to this definition: "A flare in which air is blown into the base of a flare stack to induce complete combustion." Remove, "of low Btu natural gas (i.e. high noncombustible component content.)" It is unnecessary to include the btu content of the gas stream being burned in the flare. At times high btu gas could be burned in an air injected flare to provide enough oxygen to promote complete combustion.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 68

Comment: Crude Oil §98.6 (p. 16618): The definition is too broad and could be interpreted to include natural gas. API prefers the definition from the Glossary of Oilfield Production Terminology (GOT): "A mixture of hydrocarbons that exists in the liquid phase in the

underground reservoir and remains liquid at atmospheric pressure after passing through surface separating facilities.

Response: EPA concurs with the commenter. EPA has changed the definition of crude oil in the final rule.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 81

Comment: LHV: Lower Heating Value or Net Calorific Value. The quantity of heat produced by the complete combustion of a unit volume or weight of fuel assuming that the produced water remains as a vapor and the heat of the vapor is not recovered. The difference between the HHV and LHV is the latent heat of vaporization of the product water (i.e., the LHV is reduced by the enthalpy needed to vaporize liquid water).

Response: The term lower heating value (LHV) or net calorific value is not used in the final rule and therefore EPA determined that a definition is unnecessary.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 82

Comment: Miscellaneous Products §98.6 (p. 16623): API suggests the addition of the word "refined" to the definition of Miscellaneous Products. The suggested revision is: "Include all refined petroleum products not classified elsewhere. It includes petrolatum lube refining by-products (aromatic extracts and tars) absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils."

Response: EPA agreed. The change has been made in the final rule.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 86

Comment: Operator §98.6 (p. 16624): EPA's definition of "Operator" refers to a single person. API suggests the following revision: "Operator means any entity that operates or supervises a facility or supply operation."

Response: EPA concluded that this change in unnecessary. In addition, the use of the term "entity" could create confusion that the accountable party is an organization and not a person.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 87

Comment: Owner §98.6 (p. 16624): EPA's definition of "Owner" refers to a single person. API suggests the following revision: "Owner means any entity that has legal or equitable title to, has a leasehold interest in, or control of a facility or supply operation."

Response: EPA concluded that this change in unnecessary. In addition, the use of the term "entity" could create confusion that the accountable party is an organization and not a person.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 88

Comment: EPA does not define the terms "Process Unit" or "Process Vent." These terms are used throughout the rule and need clarification.

Response: The term "process vent" is used in several subparts. Therefore, we agree with the commenter that a definition is needed in the final rule. Section 98.6 in the final rule defines "process vent" as: "a gas stream that: (1) is discharged through a conveyance to the atmosphere either directly or after passing through a control device; (2) originates from a unit operation, including but not limited to reactors (including reformers, crackers, and furnaces), separation equipment for products and recovered byproducts, and storage tanks; and (3) contains or has the potential to contain GHG that is generated in the process. Process vent does not include relief valve discharges, equipment leaks, gas streams routed to a fuel gas system, fugitive discharges from storage tanks, and in-situ sampling systems (online analyzers)."

The process vent definitions in MACT rules include de minimis thresholds for flow and concentration of hazardous air pollutants that are not relevant in this rule. Some definitions also exclude emissions during periods of startup, shutdown, and malfunction that are not relevant for point discharges that are monitored with CEMS. The term "process unit" is used in several subparts, and it is used directly in subpart X. In each case, the term refers to a distinct sequence or group of equipment that is used to produce a material that is part of a source category subject to reporting. For example, a facility may have two steam crackers, each with its own train of separation equipment to produce ethylene and other products, which means the facility has two ethylene process units. To clarify this point, the final rule defines "process unit" as: "the equipment assembled and connected by pipes and ducts to process raw materials and to manufacture either a final product or an intermediate used in the onsite production of other products. The process unit also includes the purification of recovered byproducts."

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 91

Comment: Sour natural gas §98.6 (p. 16626): Sour natural gas is defined as natural gas that contains significant concentrations of hydrogen sulfide that exceed the concentrations specified for commercially saleable natural gas delivered from transmission and distribution pipelines. EPA broadens the definition by including CO_2. Typically, commercially saleable natural gas contains about 4 to 8 ppm of hydrogen sulfide. States typically define a higher hydrogen sulfide concentration as sweet gas such as in the TCEQ 30 TAC 101.1 definition.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 89

Comment: Production Process Unit §98.6 (p. 16625): EPA's definition of "Production process unit" relates it only to CCS operations: "Production process unit means equipment used to capture a carbon dioxide stream." This is a common term and it is not appropriate to apply such as narrow definition.

Response: The term production process unit is used in and is adequately defined within the rule for suppliers of carbon dioxide source category. Therefore, EPA has removed the definition from section 98.6 in subpart A.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 90

Comment: Process Gas §98.6 (p. 16625): Process gas is defined as any gas generated by an industrial process such as petroleum refining. EPA should clarify if the definition applies to gas generated during normal operation or if it also applies to gases generated during startups and shutdowns, maintenance (such as blowdown vents or equipment purging), emergency situations (such as relief valve vents). If these vents are covered by the rule, the quantification of emissions should be handled under the de minimis threshold previously discussed or calculated using engineering analysis rather than in accordance to the monitoring requirements proposed in the rule for example in Subpart C.

Response: At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. Note that the final rule has been edited such that the definition of the term is unnecessary and the definition has been deleted it from section 98.6.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 92

Comment: Storage Tank §98.6 (p. 16626): The use of the word "other" in EPA's definition of "Storage Tank" is confusing: "storage tank means other vessel that is designed to contain an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water and that is constructed entirely of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide structural support." In addition, the definition is broad enough and could be interpreted to include sumps. Based on the methods in the subpart it does not appear EPA intended to cover sumps as a storage tank. API recommends specifically excluding sumps and or other similar units. An example of a rule (63.2406) where EPA has done this is below. Storage tank means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, or reinforced plastic) that provide structural support and is designed to hold a bulk quantity of liquid. Storage tanks do not include: (1) Units permanently attached to conveyances such as trucks, trailers, rail cars, barges, or ships; (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere; (3) Bottoms receivers; (4) Surge control vessels; (5) Vessels storing wastewater; or (6) Reactor vessels associated with a manufacturing process unit.

Response: EPA agrees with the commenter. The word "other" in the definition of storage tank has been replaced with "a" to eliminate confusion, and "(excluding sumps)" has also been added to the definition of storage tank.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 93

Comment: Storage wellhead fugitive emissions §98.6 (p. 16627): "storage station wellhead" is referenced in the definition of storage wellhead fugitive emissions but is not defined. EPA should clarify if this is different from the definition of wellhead.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 94

Comment: Storage station fugitive emissions §98.6 (p. 16627): Natural gas storage station is referenced in the definition of storage station fugitive emissions but is not defined.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 95

Comment: Uncovered anaerobic lagoon §98.6 (p. 16627): EPA's definition of "Uncovered anaerobic lagoon" contains information that is not appropriate for a definition. The text: "Lagoon supernatant is usually used to remove manure from the associated confinement facilities to the lagoon. Anaerobic lagoons are designed with varying lengths of storage (up to a year or greater), depending on the climate region, the volatile solids loading rate, and other operational factors. The water from the lagoon may be recycled as flush water or used to irrigate and fertilize fields." should be deleted.

Response: EPA disagrees that the information suggested for deletion is inappropriate in a definition. EPA believes that the additional description can be helpful to define the types of system configurations that may be encountered. However, EPA does agree that the definition could be more succinct and has revised the definition accordingly. Furthermore, "uncovered" has been removed from the definition because the term is used in its normal English context.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 96

Comment: You §98.6 (p. 16628):EPA's definition of "You" presumes that the reader is the owner/operator. API finds it odd that this definition is included in the regulation.

Response: Using the term "you" is a convention of plain English writing that is an attempt to make the rule easy to understand.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 78

Comment: Fugitive emissions §98.6 (p. 16621): As noted in a previous comment, API requests that EPA adopt a definition that is consistent with other long term practices of defining fugitive emissions.

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 38

Comment: BP suggests adding the following definition for "emission factor" from the API Compendium: "The emission rate for a particular emission source per unit of the source, when related to the activity data (e.g., amount of fuel consumed or counts of emission sources) results in absolute greenhouse gas emissions."

Response: EPA determined that a definition for emission factor is unnecessary. The term is specified clearly wherever it is used in the "Calculating GHG Emissions" section of each applicable subpart.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 44

Comment: Fuel gas systems §98.6 (p. 16621): EPA's definition for fuel gas systems needs to be more clearly defined EPA should explicitly note that this definition does not include natural gas fuel systems located at oil and gas system facilities.

Response: This definition is still included in the rule because it is relevant to subpart Y, petroleum refineries. However, at this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 48

Comment: EPA incorrectly identifies "flare stack fugitive emissions" as fugitive emissions. EPA defines fugitive emissions at 40 CFR 52.2 1(b)(20) as emissions not reasonably captured by a stack or vent. EPA should not redefine decades of precedent in a GHG reporting rule. Post-controlled emissions from any emission control device should never be considered "fugitive," but should conform to existing "process emissions" definitions.

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

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

Comment Excerpt Number: 19

Comment: The definitions of flare combustion efficiency and flare stack fugitive emissions in §98.6 refer only to natural gas, but natural gas (74 FR 16623) is defined to include "similarly constituted fuels such as field production gas, process gas, and fuel gas." It appears that the flare definitions should be referencing any gases containing carbon that are going to the flare, excluding biogenic gases.

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 45

Comment: Fugitive emissions §98.6 (p. 16621): BP requests that EPA adopt a definition that is consistent with other long term practices of defining fugitive emissions.

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 40

Comment: Facility §98.6 (p.16620): EPA should clarify the definition of "facility" as it applies to offshore petroleum and natural gas production platforms. Some platforms under common ownership are connected by above sea level bridges and pipe ways though the structures of the platforms are not in physical contact. Such platforms should be considered one facility. Also, platforms only connected to common pipes below sea level to transport oil and gas from wells and that are not in physical contact should be considered separate facilities since they do not meet the "facility" definition. Thus, BP suggests the definition of facility be revised to include the following clarification: "For purposes of this definition, offshore petroleum and natural gas production platforms should be treated as contiguous or adjacent only if connected by physical structures above sea level (e.g. bridges, pipe ways, etc). Connections below sea level such as export oil and gas pipelines do not make otherwise separate facilities contiguous or adjacent."

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 52

Comment: Production Process Unit §98.6 (p. 16625): EPA's definition of "Production process unit" relates it only to CCS operations: "Production process unit means equipment used to capture a carbon dioxide stream." This is a common term and it is not appropriate to apply such as narrow definition.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0679.1, excerpt 89.

Commenter Name: Marcelle Shoop
Commenter Affiliation: Rio Tinto Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0636.1
Comment Excerpt Number: 38

Comment: The proposed rule defines "facility" as "any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right-of-way and under common ownership or common control, that emits or may emit any greenhouse gas." (74 Fed. Reg. at 16620). This definition uses language similar-but not identical--to the definitions of "major source" under the Clean Air Act Title V permitting program (40 CFR 70.2), "major stationary source" under the prevention of significant deterioration (PSD) requirements (40 CFR 52.21 (b)(1), 51.166(b)(1 Xi», and "stationary source" under the new source review requirements (40 CFR 51.1 65(a)(1)(i». The interpretation and application of these "source" definitions under these CM programs has a long and unique history shaped by the contexts and purposes of those programs. Similarly, we would expect that the interpretation and application of the term "facility" will be made within the context and purpose of the GHG reporting rule. While the application of these respective terms may in many instances coincide such that a "source" and a "facility" are identical, we do not believe that this need be or will be the result in all instances. For example, Rio TInto expects that, at one of its operations, it may co-report GHG emissions for separate Title V sources located within a specific geographical area. Rio Tinto requests that EPA clarify in the preamble to the final rule that the definitions of "source" under these other CM programs noted above would not be precedential for purposes of interpreting the scope of "facility" under the GHG reporting requirements.

Response: EPA will make any necessary interpretative determinations regarding the GHG reporting rule in the context of the statutory purposes of the rule. To the extent that the definition of facility in the GHG reporting rule is similar to that of other programs, EPA may draw on general principles established under those programs. But EPA will not be bound by precedents of other rules in implementing the GHG reporting rule. Additional clarifying text in the preamble is unnecessary.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 56

Comment: Acid Gas §98.6 (p. 16616): API requests replacing the EPA definition with the following: "The hydrogen sulfide and/or carbon dioxide contained in or extracted from gas or other streams" (from GPSA). Including the process in the definition is not appropriate.

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

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2008-0508-0513.1
Comment Excerpt Number: 20

Comment: The definition of gasification and provisions in the proposed rule all stipulate that gasification is limited to conversion of a solid material into a gas. Gasification can also be used to convert liquids into a gas. The rule should not ignore that possibility or impose arbitrary limitations.

Response: EPA agrees with the commenter. The definition of gasification has been modified in the final rule.

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: 21

Comment: EPA is using the "petrochemical feedstocks" definition to refer only to those derived from petroleum, and the NGL definition to refer to liquids separated from natural gas, even though some of those can be derived from petroleum. EPA needs to ensure that any use of feedstocks considers all feedstocks under the various definitions.

Response: EPA has provided a general definition of feedstock in the final rule to ensure that all feedstocks are considered as appropriate. EPA has further defined specific feedstocks (e.g. non-crude feedstocks, waste feedstocks, and petrochemical feedstocks). Petrochemical feedstocks is defined as a feedstock derived from petroleum, which is consistent with the context for which it is used in the rule. Similarly, natural gas liquids (NGLs) is defined in terms of natural gas, which is consistent with the context for which it is used in the rule. Therefore, EPA has determined that a change to the definitions of petrochemical feedstocks and NGL is unnecessary.

Commenter Name: Pamela F. Faggert
Commenter Affiliation: Dominion
Document Control Number: EPA-HQ-OAR-2008-0508-1741
Comment Excerpt Number: 24

Comment: EPA proposes to require recording of the names and documentation of key facility personnel involved in calculating and reporting the GHG emissions. 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. 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 in Subpart A: Content of the Annual Report, the Abbreviated Emission Report, Recordkeeping, and the Monitoring Plan.

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: 49

Comment: The definition of facility, with respect to reporting boundaries, is unclear. EPA apparently intends to follow the same definition as Title V. However, this should be made clear in the rule. CIBO has remote facilities across the state, and remote campuses outside the main campus and country, so CIBO wants to be clear that its reporting includes only the boundary as defined in its Title V permit. It is not clear whether a facility that triggers the reporting threshold for one category (for example, combustion sources), will then have to report emissions for other categories (for example, agriculture). This should be made abundantly clear in the regulation. It is not clear whether it is required per category. If a source were to fall under two categories, would it have two reports (one per category), or only one per owner?

Response: With respect to the definition of facility, see the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1. See volume 12 of the comment response document on applicability determinations questions/issues concerning applicability determinations. A facility that is subject to the rule is required to report emissions from all applicable source categories for which calculation methods are specified in any subpart of the rule. See section 98.3 in the rule for the annual reporting requirements.

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: 36

Comment: Although the preamble indicates that biogenic CO_2 is to be reported separately from greenhouse gases, this is not clear in the proposed rule itself. We recommend that this be clarified in the rule language itself.

Response: Biogenic CO_2 emissions are excluded from applicability calculations. If a facility is subject to the rule however, the facility is required to report emissions according to methodologies and reporting requirements provided in the applicable subparts. Clarifying edits have been made in the final 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: 35

Comment: AF&PA is encouraged by the definition that EPA has proposed for biomass. As proposed the definition includes materials routinely combusted at forest products sites. Specifically, it would include spent pulping liquors. This is further supported by both Subpart AA and the Technical Support Document for the Pulp and Paper Sector which specifically state that spent liquor solids and spent pulping liquor are biogenic.

Response: EPA thanks the commenter for their input.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 39

Comment: Engineering estimates §98.6 (p. 16620): BP suggests removing the term "fugitive emissions" from the definition of Engineering Estimates. Engineering estimates should not be restricted just to fugitive emissions. The suggested revisions is: "For the purpose of this rule, an estimate of emissions based on engineering principles applied to measured and/or approximated physical parameters such as including, but not limited to dimensions of containment, actual pressures, actual temperatures, and compositions." Engineering estimate can also refer to estimated fuel use based on engine run time, load, heat rate curve, and fuel characteristics.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 61

Comment: API suggests adding the following definition for Carbon Dioxide: "A colorless, odorless, nonpoisonous gas that is a normal component of ambient air. Carbon dioxide is a product of fossil fuel combustion. Although CO_2 does not directly impair human health, it is a greenhouse gas that traps terrestrial (i.e. infrared) radiation and contributes to the potential for global warming."

Response: EPA determined that such definition for carbon dioxide is unnecessary because it is a common scientific term.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1

Comment Excerpt Number: 67

Comment: Compressor fugitive emissions §98.6 (p. 16618): 'Compressor fugitive emissions' are defined as "natural gas emissions from all components in close physical proximity to compressors where mechanical and thermal cycles may cause elevated emission rates, including but not limited to open-ended blowdown vent stacks, piping and tubing connectors and flanges, pressure relief valves, pneumatic starter open-ended lines, instrument connections, cylinder valve covers, and fuel valves." The definition of "Compressor Fugitive Emissions" is ambiguous. It would be helpful to add boundary definitions for a compressor, such as "on skid" or "in between shut down valves." Also API requests clarification on why EPA is providing separate definitions for "compressor fugitive emissions", "centrifugal compressor dry seals fugitive emissions" and "centrifugal compressor wet seals fugitive emissions." API also requests clarification on what is meant by "close physical proximity to compressors where mechanical and thermal cycles may cause elevated emission rates".

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

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 53

Comment: Sour natural gas §98.6 (p. 16626): Sour natural gas is defined as natural gas that contains significant concentrations of hydrogen sulfide and/or carbon dioxide that exceed the concentrations specified for commercially saleable natural gas delivered from transmission and distribution pipelines. Typically, commercially saleable natural gas contains about 4 to 8 ppm of hydrogen sulfide. States typically define a higher hydrogen sulfide concentration as sweet gas such as in the TCEQ 30 TAC 101.1 definition.

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 65

Comment: Connector §98.6 (p. 16618): Suggest removing the "Note: Connector is not limited to the definition above." This part of the definition is too open ended and leaves the definition too broad.

Response: EPA agrees with the commenter. The definition of connector has been changed in the final rule.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 64

Comment: Condensate §98.6 (p. 16618): API requests the following alternative definition: "Liquid formed by the condensation of a liquid or gas; specifically, the hydrocarbon liquid separated from natural gas because of changes in temperature and pressure when the gas from the reservoir was delivered to the surface separators. Such condensate remains liquid at atmospheric temperature and pressure."

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

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 51

Comment: EPA does not state what a day is or define the data period. An example of data affected by this is the information taken from flow meters. Marathon proposes that EPA further clarify the requirements for determining the data for a day by allowing each facility to choose a consistent 24 hour period (a "day") in which they collect and use the data according to EPA's requirements. An example would be a facility using information for a day from 12:00AM on one day to 12:00 AM of the next day. The time period for a day was not specified in the rule.

Response: EPA has provided a definition of "day" in the final rule to be any consistently-designated 24-hour period.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 62

Comment: Carbon dioxide production well §98.6 (p. 16617): "means any hole drilled in the earth to extract a carbon dioxide stream from a geologic formation or group of formations which contain deposits of carbon dioxide." API is concerned that wells drilled to produce hydrocarbons that have a significant concentration of associated carbon dioxide could be inappropriately considered a "carbon dioxide production well" even though each well is permitted by the state according to production type. API suggests the definition be changed to read: Carbon dioxide production well means any hole drilled in the earth for the primary purpose of extracting carbon dioxide from a geologic formation or group of formations which contain deposits of carbon dioxide.

Response: EPA concurs with the commenter. We have changed the definition of carbon dioxide production well in the final rule.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 77

Comment: Fuel gas systems §98.6 (p. 16621): EPA's definition for fuel gas systems needs to be more clearly defined. EPA should explicitly note that this definition does not include natural gas fuel systems located at oil and gas system facilities.

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

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 59

Comment: EPA defined "facility" in a manner that does not conform to 40 CFR 52.1(a) and/or 40 CFR 70.2 definitions of "stationary source." Part 98 facility definitions must not change historical facility definitions made for New Source Review ("NSR") or Title V purposes. Because of the different nature of activities between operating facilities and co-located research and development facilities and pilot plants, the existing CAA system regards research and development facilities at the same location as operating facilities, including co-located pilot plants, as stand-alone entities for Title V operating permit purposes. The existing corporate/stationary source designations have been established over time to meet existing Clean Air Act obligations, and should not be changed for any emissions reporting rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1138.1, excerpt 1.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 59

Comment: Blowdown §98.6 (p. 16617): The EPA definition does not recognize that the stream may contain more than just natural gas. API requests that the following definition from the GPSA be used instead: "The act of emptying or depressuring a vessel. This may also refer to the discarded material such as blowdown water from a boiler or cooling tower."

Response: EPA agrees with the commenter. The definition of blowdown has been revised in the final rule.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1

Comment Excerpt Number: 58

Comment: Anaerobic digester §98.6 (p. 16616): As stated, this definition could require other parts of a wastewater treatment plant to be brought into the rule. API suggests the following alternative definition for wastewater treatment: "The equipment designed and operated for waste stabilization by the microbial reduction (using acid forming and CH_4 forming bacteria, in the absence of oxygen) of complex organic compounds to CO_2 and CH_4, which is captured and flared or used as a fuel."

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

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 57

Comment: Air injected flare §98.6 (p. 16616): Request the following changes to this definition: "A flare in which air is blown into the base of a flare stack to induce complete combustion." Remove, "of low Btu natural gas (i.e. high noncombustible component content.)" It is unnecessary to include the Btu content of the gas stream being burned in the flare. At times high Btu gas could be burned in an air injected flare to provide enough oxygen to promote complete combustion.

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

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners (CIBO)
Document Control Number: EPA-HQ-OAR-2008-0508-0513.1
Comment Excerpt Number: 16

Comment: The proposal defines EGU as "any unit that combusts solid, liquid, or gaseous fuel and is physically connected to a generator to produce electricity." That definition is too inclusive in that it includes all non-utility generating units and associated combustion units. CIBO recommends EPA adopt the definition used in Title I of the Clean Air Act: ELECTRIC UTILITY STEAM GENERATING UNIT.—The term 'electric utility steam generating unit' means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale shall be considered an electric utility steam generating unit. 42 U.S.C. § 7412(a)(8). This is the definition that has been used consistently throughout CAA regulatory programs and the one that EPA should use for this program as well, to ensure equivalent regulatory treatment for all similarly situated sources.

Response: Please response to EPA-HQ-OAR-2008-0508-0423.2, excerpt 31. The final rule addresses the issue of how an EGU is defined by the more limited definition of source category in subpart D. As a result, combined heat and power units and small distributed generating units are treated the same as any other general fuel combustion unit located at an industrial, commercial, or institutional facility. Accordingly, the definition of EGU has been removed in the final rule.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 57

Comment: In Section 98.6, there is no definition of "process vent". If defined like Ethylene MACT it would exclude analyzer vents and off- line regeneration vents for Ethylene Plants which represent less than 0.001 % of GHG emissions. We propose that the EPA use the MACT definition of process vents.

Response: See response to EPA-HQ-OAR-2008-0508-0679.1, excerpt Number 88.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 63

Comment: Carbon dioxide equivalent (CO_2e) §98.6 (p. 16617): The EPA definition is unclear. API suggests the following definition from the API Compendium: "The mass (reported in metric tones) of a greenhouse gas species multiplied by the global warming potential (GWP) for that species. It is used to evaluate emissions of different greenhouse gases on a common basis – the mass of CO_2 emitted that would have an equivalent warming effect."

Response: EPA disagrees that the definition is unclear. For purposes of its uses in the rule, the definition of carbon dioxide equivalent or CO_2e is clearly defined by equation A-1, which is referenced in 98.6.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 43

Comment: Fuel gas (Still gas) §98.6 (p. 16621): EPA's definition for fuel gas (Still gas) needs to be more clearly defined. EPA should explicitly note that this definition does not include natural gas used as a fuel (gas) whether produced from oil and natural gas systems, obtained in the natural gas supply chain, or purchased as finished natural gas.

Response: In response to the comments received, EPA has greatly expanded §98.6 to include detailed explanations of the meanings of all terms used in 40 CFR Part 98 that required clarification. The final rule includes all additional and revised language deemed necessary.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 79

Comment: Heating value §98.6 (p. 16622): API suggests the following definition: "Heating Value: The amount of energy released when a fuel is burned completely. (See also HHV and LHV).

Response: EPA determined that a definition for the term heating value is not necessary in the final rule. The term high heat value or HHV is clearly defined in the final rule and LHV is not used.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 76

Comment: Fuel gas (Still gas) §98.6 (p. 16621): EPA's definition for fuel gas (still gas) needs to be more clearly defined. It is not clear how this term differs from the separate definition of "refinery fuel gas (still gas)". EPA should explicitly note that this definition does not include natural gas used as a fuel (gas) whether produced from oil and natural gas systems, obtained in the natural gas supply chain, or purchased as finished natural gas.

Response: In response to the comments received, EPA has greatly expanded §98.6 to include detailed explanations of the meanings of all terms used in 40 CFR Part 98 that required clarification. The final rule includes all additional and revised language deemed necessary.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 37

Comment: The GHG reporting rule contains more than three hundred definitions, many of which do not match definitions for the same function or equipment covered by other rules. For example, the definition of a Sulfur Recover Plant is not the same as the definition proposed in 40 CFR 60.101a. This type of discrepancy is particularly vexing since EPA and the industry just went through an extensive process of working together to formalize an accurate, meaningful and mutually acceptable definition of this process for the new NSPS Ja standard. Other terms with different meanings include: 1. Natural Gas Liquids (40 CFR 60.63 1) 2. Natural gas processing facilities vs Natural gas processing plant (40 CFR 60.63 1) 3. Oxygenates (40 CFR80.2) 4. Coke Burn Off (40CFR60.101) The existence of internally different definitions leads to confusion for both the affected facilities and for federal, state and local regulators who must ensure conformance to the rules. It becomes particularly burdensome for a facility that has to use different process boundaries and include or exclude certain equipment when setting up sampling and analysis programs for the different requirements of the multiple applicable rules. This

inconsistency also substantially increases the probability of making an error during the compliance assessments, which could result in a non-compliance citation. EPA is urged to adopt by reference all of the existing definitions for terms in other rules that are also included in the GHG Reporting Rule.

Response: Different environmental regulations may use the same definition of terms or may define terms differently depending on context and purposes of each rule. We have used similar definitions to other programs where appropriate, but have modified definitions where needed to accomplish the purposes of this rule. For example, the definition for sulfur recovery plant is identical to that provided in 40 CFR 60.101a, but excludes "...multiple sulfur recovery units are a single affected facility only when the units share the same source of sour gas. Sulfur recovery plants that receive source gas from completely segregated sour gas treatment systems are separate affected facilities." The quoted text has to do with describing a new source, which is not applicable to the MRR because the rule does not have different reporting requirements for new and existing facilities. EPA proposed to add "...or loading facilities..." by the secondary sulfur storage because the application of NSPS subpart Ja emission limits is not important for the purposes of this reporting rule. EPA added fluid coking units to the coke burn-off definition because we are requiring them to report emissions from coke burn-off for both the FCCU and the fluid coking unit.

Regarding the definition for natural gas processing 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 this subpart at this time.

Commenter Name: Renae Schmidt
Commenter Affiliation: CITGO Petroleum Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0726.1
Comment Excerpt Number: 32

Comment: The GHG reporting rule contains more that three hundred definitions, many of which do not match definitions for the same function or equipment covered by other rules. For example, the definition of a Sulfur Recover Plant is not the same as the definition proposed in 40 CFR 60.101 a. This type of discrepancy is particularly vexing since EPA and the industry just went through an extensive process of working together to formalize an accurate, meaningful and mutually acceptable definition of this process for the new NSPS Ja standard. Other terms with different meanings include Natural Gas Liquids (40 CFR 60.631) Natural gas processing facilities vs Natural gas processing plant (40 CFR60.63 1) Oxygenates (40 CFR80.2) Coke Burn Off (40CFR60. 1 0I) The existence of internally different definitions leads to confusion for both the affected facilities and for federal, state and local regulators who must ensure conformance to the rules. It becomes particularly burdensome for a facility that has to redraw process boundaries and include or exclude certain equipment when setting up sampling and analysis for the different requirements-of the applicable rules. EPA is urged to adopt by reference all the existing definitions that are also included in the GHG Reporting Rule.

Response: See response to EPA-HQ-OAR-2008-0508-0433.2, excerpt 37.

Commenter Name: Matt Smorch
Commenter Affiliation: Countrymark Cooperative, LLP
Document Control Number: EPA-HQ-OAR-2008-0508-1081.1
Comment Excerpt Number: 6

Comment: Countrymark suggests that sources should have a consistent definition with its existing title V air permit. One example is the use of emergency generators. Under present regulations, emergency generators operated for less than 500 hours per year are exempt from the emissions calculations. The proposed rule does not have a minimum for operating threshold for emergency generators.

Response: The definition of emergency generators in the final rule does not specify a maximum number of hours to qualify for the exemption for emergency generators. If Countymark chooses to report on emergency generators to be consistent with its title V permit, then they can choose to report emissions from exempt units.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 36

Comment: EPA should clarify the § 98.6 "fuel" definition to indicate that fuel "means solid, liquid or gaseous combustible materials that is intended to provide substantial heat input, as measured by HHV value, into a combustion device." EPA has previously recognized that materials below 5,000 British Thermal Units ("BTU") per pound ("lb") of material, as-fired, do not contribute significant heat of combustion in a combustion device. (74 Fed. Reg. 54, January 2, 2009, citing 63 Fed. Reg. 33781 and 64 Fed. Reg. 24251, the RCRA Comparable Fuels rule). In the existing comparable fuels regulations, EPA has addressed how much heating value is required before a material being combusted beneficially contributes heat generation. EPA's current scientific review indicates that heating values of materials being combusted below between 2,600 and 5,000 BTU/lb do not significantly contribute to the heat of combustion. As heat generation directly relates to combustion GHG emissions, which is EPA's interest in this proposal, EPA should limit the definition of "fuel" for Part 98 purposes to the RCRA comparable fuels definition. Below we clarify why the fuel definition should be restricted to materials intended to be combusted and providing significant heat value to a combustion device. Many materials described below may be combusted that do not significantly contribute to heating value, and should not be included as fuels subject to Part 98 monitoring, recordkeeping, and reporting. The EPA proposed definition of "fuel" includes all materials combusted at a reporting facility. This definition seems to inadvertently capture the thousands of air pollution control devices ("APCD") placed into service over the last half century to control volatile organic compound ("VOC") and other air emissions. Thousands of facilities have installed APCDs to comply with various EPA requirements, including the following: 1. Prevention of Significant Deterioration ("P SD") program at 40 CFR 51 and 52, specifically Best Available Control Technology ("BACT") and Lowest Achievable Emission Rate ("LAER") obligations; 2. NSPS at 40 CFR 60; 3. National Emissions Standards for Hazardous Air Pollutants ("NESHAP") at 40 CFR 61; 4. MACT at 40 CFR 63 and 65; 5. Reasonably Achievable Control Technology ("RACT") under the National Ambient Air Quality Standards ("NAAQS") programs implemented by the permitting authorities around the country; and 6. Various state and local air pollution control requirements. Facilities have installed these devices to bring many airsheds into

NAAQS compliance as the several NAAQS standards have evolved, avoid potential public health and nuisance issues, and balance the needs of the manufacturing facilities and their surrounding communities. As these emission control technologies have evolved over the decades, EPA and the permitting authorities have developed a wide ranging collection of applicable requirements governing the design and operations of these devices, including regulating the required emissions loading to the device, the destruction and removal efficiency ("DRE"), and/or outlet emission rates of various materials. These emission control devices combust the "supplemental" fuel, typically natural gas, and the "vent gas" fuel, the materials being subjected to emission control. Most emission control devices manage vent gases containing carbon-bearing materials.

Response: The definition of fuel has not been changed in the final rule. In the final rule, subpart C (Stationary Fuel Combustion Units) has been revised since proposal to require reporting of only those fuels listed in Table C-1 of subpart C, unless the combustion unit is larger than 250 million Btu per hour heat input and the fuel provides 10 percent or more of the annual heat input to the unit. With this change, a clarification to the definition of "fuel" is unnecessary. EPA concluded that basing applicability on annual heat input to the unit and not heat value of the fuel is a clearer and more relevant approach. Under this approach, substances that are combusted in small quantities or that have a low heat input would not have to be reported. Thus, the rule could apply to any substance combusted in any type of combustion device (except for those that are specifically excluded from subpart C of the rule) if the 10 percent heat input criterion is met for that substance. For example, emissions from the combustion of process off gases in a thermal oxidizer (or other type of emission control device) must be reported only if the off gases provide 10 percent or more of the annual heat input to the combustion device.

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: 17

Comment: The definition of emergency generator should be revised and expanded to encompass "emergency stationary internal combustion engine." The current definition and provisions, for example in 98.30(b), are restricted only to emergency generators, and ignore other emergency uses of IC engines, such as for fire pump service. EPA has recognized this service in other rulemakings. CIBO recommends using the approach taken in 40 CFR 63, Subpart ZZZZ. In § 63.6675, EPA treats emergency generators using these parameters: Emergency stationary RICE means any stationary RICE that operates in an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE may also operate an additional 50 hours per year in nonemergency situations. 40 C.F.R. § 63.6675 (2004).

Response: EPA agrees with the comment and has expanded the exemption in subpart C to include both emergency generators and emergency equipment.

Commenter Name: Gary Moore
Commenter Affiliation: Pensacola Plant of Ascend Performance Materials LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0366.1
Comment Excerpt Number: 2

Comment: Offgas streams from various chemical processes are required to be controlled in flares, thermal oxidizers, boilers or other thermal control devices by various Federal Rules such as the HON, MON or PSD regulations. These off gas streams typically have low BTU values and do not independently support combustion. It is unclear from the definitions in§ 98.6 whether these off gas streams would be classified as fuels as they are not combustible in the traditional use of the term. A clarification of the definition of fuel is required. We propose that these off gas streams which are controlled for regulatory purposes be excluded from the definition of fuel or that a minimum heat input of 300 BTU/scf be added to the definition of fuel. (This value comes from EPA's minimum heat input allowed for assisted flares in 40 CFR 60.18(c)(3)(ii).)

Response: See response to EPA-HQ-OAR-2008-0508-0511.1, excerpt 36

Commenter Name: Paul Sherman
Commenter Affiliation: North Carolina Farm Bureau Federation (NCFB)
Document Control Number: EPA-HQ-OAR-2008-0508-0429.1
Comment Excerpt Number: 1

Comment: The proposed rule defines "facility" as "any physical property, plant, building, structure, source, or stationary equipment located in one or more contiguous or adjacent properties in actual physical contact or separated solely by a public roadway or other public right of way and under common ownership or common control. .. " The interpretation of this defmition is important, because the reporting requirements are imposed at the facility level. Many agricultural or livestock operations have several different facilities in different locations. Some parts of these agricultural operations may not be "contiguous or adjacent" to one another and may be separated by some distances. As with other types of businesses, these are separate facilities, and each facility should be evaluated separately for purposes of determining whether it is subject to the requirements of this rule. We believe that the definition of "facility" in the proposed rule is clear. A facility includes only those areas adjacent or contiguous, or only separated by a road or right of way. We expect that the rule will be applied with respect to manure management systems in accordance with the definition contained in the rule.

Response: The final rule retains these fundamental provisions in the definition of facility.

---

2. INCORPORATION BY REFERENCE

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: 22

Comment: §98.7, test method for moisture, of the proposed rule should also include reference to ASTM D3173- Standard Test Method for Moisture in the Analysis Sample of Coal and Coke. This is already referenced in ASTM D3176, but is needed to allow results to be obtained on an As-Received basis (applicable to as-fired fuel quality).

Response: Section 98.7 of the rule incorporates only those methods that are specifically referenced in the rule. It is not necessary that the rule incorporate methods that are referred within the methods that are incorporated by reference in section 98.7.

Commenter Name: James A. Thomas
Commenter Affiliation: ASTM International
Document Control Number: EPA-HQ-OAR-2008-0508-0809.1
Comment Excerpt Number: 2

Comment: Page 16712 of the Federal Register references the following four coal sampling standards that have all been withdrawn by ASTM and replaced by Standard D7430-08ae1, Standard Practice for Mechanical Sampling of Coal. ASTM requests that all references to the following four standards be replaced by a reference to D7430. D65 18-07 Standard Practice for Bias Testing a Mechanical Coal Sampling System D4702-07 Standard Guide for Quality Management of Mechanical Coal Sampling Systems D7256/D7256M-08 Standard Practice for Mechanical Collection and Within-System Preparation of a Gross Sample of Coal from Moving Streams D49 16-04 Standard Practice for Mechanical Auger Sampling Incorrect Reference to CS-104 Pages 16628 and 16668 make reference to ASTM CS-104 (1985), Carbon Steel of Medium Carbon Content. This is an incorrect designation. ASTM researched the title and other similar designations in case of a typographical error, but has found no matches. ASTM recommends that you fix the reference or send a copy of this document to ASTM (Dan Smith dsmith@astm.org) so that this document can be reviewed and the reference corrected.

Response: EPA revised the final rule to refer to ASTM D9470, rather than ASTM D6518-07, D4702-07, D7256/D7256M-08, and D4916-04. EPA also updated section 98.7 of 40 CFR part 98, subpart A to include the standards that are referenced in the final rule. Section 98.7 includes the standard number, current version, title, availability, and the rule section in 40 CFR part 98 that refers to the standard. In the final rule, EPA corrected the reference to ASM CS-104 UNS No. G10460 – Alloy Digest April 1985 (Carbon Steel of Medium Carbon Content), authored by ASM International, not ASTM.

Commenter Name: See Table 6
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0709.1
Comment Excerpt Number: 7

Comment: Proposed section 98.7 would lock in the date of industry standards in existence as of 2009. AGA urges EPA to change this section to allow reporters to follow standards that are updated after the date of promulgation. Otherwise, the agency will lock in old procedures and prevent the use of updated standards. Industry consensus standards and measurement reports are revised through a rigorous process on a regular basis – often every 5 years if not more often. Reporters should be allowed to use the same updated standards that they will use for other government reporting and billing purposes.

Response: Incorporation by reference (IBR) allows Federal agencies, in their rulemakings, to refer to materials already published elsewhere. The legal effect of IBR is that the material is treated as if it were published in the Federal Register. This material, like any other properly issued rule, has the force and effect of law. The Office of Federal Register approves the IBR of each standard. Only the stated version of the standard (i.e., the version that is current at the time of the rulemaking) can be incorporated by reference. Naming a standard and subsequent revisions is prohibited. As stated in section 98.7 of the final rule, these materials are incorporated by reference as they exist on the date of approval. We plan to amend the rule in the future to incorporate new or revised methods are appropriate.

Commenter Name: James A. Thomas
Commenter Affiliation: ASTM International
Document Control Number: EPA-HQ-OAR-2008-0508-0809.1
Comment Excerpt Number: 1

Comment: ASTM has a proven process for maintaining our standards. ASTM standards are revised as needed by the appropriate technical subcommittee but at a minimum reviewed for revision, reapproval or withdrawal every four years. This keeps the ASTM standards relevant and technically credible. In order to ensure that the references in the EPA proposed rule remain current, ASTM recommends that the EPA exclude the year date when referencing an ASTM standard and require that the current version of the standard be used. If this approach is not feasible, ASTM requests that the EPA revise the references to reflect the current year dates as indicated in Attachment B. Please note that the highlighted versions in Attachment B indicate that the EPA reference is erroneous. In other words, there is no such version that has ever existed with that designation.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0709.1, excerpt 7.

Commenter Name: J. P. Cativiela
Commenter Affiliation: Dairy Cares
Document Control Number: EPA-HQ-OAR-2008-0508-1014.1
Comment Excerpt Number: 9

Comment: It is our understanding that EPA may be in the process of replacing EPA Method 351.3 with Standard Method 4500-N. If this is the case, EPA may wish to list this Standard in §98.364(c) so that dairies will be in compliance with the proposed rule if the laboratory analytical method changes in the near future.

Response: In the final rule, EPA changed the method for determining nitrogen content of manure from sampling/analysis to a look-up table; thus, a sampling method for nitrogen is no longer needed. Therefore, this comment no longer applies to the final rule.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 13

Comment: Marathon opposes the listing of the detailed methodologies used throughout the reporting rule. Marathon disagrees with this approach because in the future if these methodologies were revised, the updated versions would not be listed in the rule. Because of this, Marathon and other regulated entities would not be able to use the most recent version of the methodology and therefore provide the best possible data. Marathon proposes that EPA allow the use of "generally accepted methodologies" without listing the specific methodologies especially where the methodologies are well developed and widely available. Alternatively, EPA can refer to specific industry guidelines like the API Compendium while allowing for other standards and guidelines.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0433.2, excerpt 34 and EPA-HQ-OAR-2008-0508-0709.1, excerpt 7.

Commenter Name: See Table 3
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 34

Comment: Section §98.7 incorporates by reference over 50 standard methods for the proper installation, calibration and maintenance of various analytical and physical measurement devices. NPRA agrees this list of references is a helpful compilation of generally available standards, but is concerned that EPA has over-relied on this limited list. There are many other proven standards currently in common use by regulated sources that insure comparable accuracy and precision as the limited set of specifically incorporated standards. NPRA recommends that in the many locations within the proposed reporting rule where such standards are referenced, these methods not be described as the only acceptable methods, but indicate the reporting facility may employ “an applicable industry standard, best practice or manufacturer’s recommendations” for the required proper installation, calibration and/or maintenance of the device. Such restrictive references to §98.7 referenced standards are ubiquitous throughout the proposed reporting rule, including: a. §98.6 – Definitions (several); b. §98.34 – Monitoring and QA/QC requirements for stationary combustion calculations; c. §98.36 – Data Reporting Methods for stationary combustion; d. §98.53 and 54 – Calculating GHG Emissions and Monitoring and QA/QC requirements for adipic acid manufacturing calculations; e. §98.73 and 74 - Calculating GHG Emissions and Monitoring and QA/QC requirements for ammonia manufacturing calculations; f. §98.113 and 114 - Calculating GHG Emissions and Monitoring and QA/QC requirements for ferroalloy production calculations; g. §98.163 and 164 - Calculating GHG Emissions and Monitoring and QA/QC requirements for hydrogen production calculations; h. §98.183 and 184 - Calculating GHG Emissions and Monitoring and QA/QC requirements for lead production calculations; i. §98.193 and 194 - Calculating GHG Emissions and Monitoring and QA/QC requirements for line production calculations; j. §98.223 and 224 - Calculating GHG Emissions and Monitoring and QA/QC requirements for nitric acid production calculations; k. §98.243 and 244 - Calculating GHG Emissions and Monitoring and QA/QC requirements for petrochemical production calculations; l. §98.283 and 284 - Calculating GHG Emissions and Monitoring and QA/QC requirements for silicon carbide production calculations; m. §98.324 - Monitoring and QA/QC requirements for underground coal mines calculations; n. §98.334 - Monitoring and QA/QC requirements for zinc production calculations; z §98.344 - Monitoring and QA/QC requirements for landfill calculations; o. §98.3 64 - Monitoring and QA/QC requirements for manure management calculations.

Response: The final rule requires reporters to use the measurement methods specified in 40 CFR 98.7 as referenced in the various subparts in 40 CFR part 98. Uniform methods are needed to ensure consistency in emission estimates. The commenter's suggestion to use "an applicable industry standard or best practice" would be too open ended to generate comparable emission estimates in many cases. However, to provide some flexibility, many subparts allow reporters to use a range of methods to measure emissions and other parameters. In some cases, the rule allows the use of any "consensus standard," as appropriate. Also, the final rule expands the list of allowable methods in many subparts allows the use of the manufacturers' recommendations for the required proper installation, calibration, or maintenance of the device, as suggested by the commenter.

Commenter Name: Ron Downey
Commenter Affiliation: LWB Refractories
Document Control Number: EPA-HQ-OAR-2008-0508-0719.1
Comment Excerpt Number: 47

Comment: 40 C.F.R. 98.194(d) states that the NLA Protocol is incorporated by reference at 98.7. However, 40 C.F.R. 98.7 does not incorporate the NLA Protocol.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0719.1, excerpt 48. EPA updated section 98.7 of 40 CFR part 98, subpart A to list all of the standards that are referenced in the final rule.

Commenter Name: Ron Downey
Commenter Affiliation: LWB Refractories
Document Control Number: EPA-HQ-OAR-2008-0508-0719.1
Comment Excerpt Number: 48

Comment: The name of ASTM standard D1835-05 is missing in 40 C.F.R. 98.7(a)(7). The correct name for D1 83 5-05 is "Standard Specification for Liquefied Petroleum (LP) Gases."

Response: EPA revised the final rule to reflect the correct name and current version of each standard that is incorporated by reference. EPA also updated section 98.7 of 40 CFR part 98, subpart A to list all of the standards that are referenced in the final rule. Section 98.7 includes the standard number, current version, title, availability, and the rule section in 40 CFR part 98 that refers to the standard.

Commenter Name: None
Commenter Affiliation: Vectren Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0597
Comment Excerpt Number: 13

Comment: Proposed section 98.7 would lock in the date of industry standards in existence as of 2009. Vectren urges EPA to change this section to allow reporters to follow standards that are updated after the date of promulgation. Otherwise, the agency will lock in old procedures and prevent the use of updated standards. Industry consensus standards and measurement reports are

revised through a rigorous process on a regular basis – often at least every 5 years if not more often. Reporters should be allowed to use the same updated standards that they will use for other government reporting and billing purposes.

Response: See the response to comment EPA-HQ-OAR-2008-0508-709.1, excerpt 7.

Commenter Name: Keith Adams
Commenter Affiliation: Air Products and Chemicals, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-1142.1
Comment Excerpt Number: 17

Comment: Section §98.7 of the proposed rule incorporates by reference over 50 standard methods for the proper installation, calibration and maintenance of various analytical and physical measurement devices. Air Products agrees this list of references is a helpful compilation of generally available standards, but is concerned that EPA has over-relied on this limited list. There are many other proven standards currently in common use by regulated sources that insure comparable accuracy and precision as the limited set of specifically incorporated standards. We recommend that in the many locations within the proposed reporting rule where such standards are references, these methods not be described as the only acceptable methods, but indicate the reporting facility may employ "an applicable industry standard, best practice or manufacturer's recommendations" for the required proper installation, calibration and/or maintenance of the device.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0733.2, excerpt 34.

Commenter Name: Leslie Bellas
Commenter Affiliation: National Lime Association (NLA)
Document Control Number: EPA-HQ-OAR-2008-0508-0520.1
Comment Excerpt Number: 35

Comment: 40 C.F.R. § 98.7 lists many standards that are "incorporated by reference" into the Proposed Rule, although some of these standards do not appear elsewhere in the Rule. It is unduly burdensome to require the regulated community to review every standard listed to determine which standards/provisions apply to them. In some cases, such as ASTM D2234, the ASTM standards conflict with the Rule. During the May 14 conference call between NLA and EPA staff, EPA stated it will better explain the use(s) of each standard in the final rule. Due to the broad implications of this Rule, EPA should provide notice of those standards being incorporated and provide an opportunity for the public to submit comments.

Response: Regarding standards that 40 CFR 98.7 stated were incorporated by reference but did not appear in the proposed rule, EPA agrees that the proposed rule was not sufficiently explicit as to which methods apply and that determining which of the allowed methods to use could be burdensome for reporters. To clarify which methods apply, EPA revised each subpart in the final rule to specify the required or alternative methods. In the final rule, each subpart and section 98.7 reflect the correct name and current version of each standard that is incorporated by reference. In addition, section 98.7 lists the standard number, current version, title, availability, and the rule section in 40 CFR part 98 that refers to the standard.

We agree that ASTM D2234/D2234M-07, Standard Practice for Collection of a Gross Sample of Coal, is not compatible with the calculation methodologies in the rule, and the method has been removed.

Regarding notice of standards being incorporated and the opportunity for the public to submit comments, the proposed rule served as notice that the standards were being incorporated and provided the opportunity for the public to submit comments. EPA responses to those comments are documented in this section of this comment and response document.

Commenter Name: Leslie Bellas
Commenter Affiliation: National Lime Association (NLA)
Document Control Number: EPA-HQ-OAR-2008-0508-0520.1
Comment Excerpt Number: 48

Comment: The name of ASTM standard D1835-05 is missing in 40 C.F.R. 98.7(a)(7). The correct name for D1 83 5-05 is "Standard Specification for Liquefied Petroleum (LP) Gases."

Response: EPA revised the final rule to reflect the correct name and current version of each standard that is incorporated by reference. EPA also updated section 98.7 of 40 CFR part 98, subpart A to include the standards that are referenced in the final rule. Section 98.7 includes the standard number, current version, title, availability, and the rule section in 40 CFR part 98 that refers to the standard.

---

3. OTHER SUBPART A COMMENTS

Commenter Name: Shannon Broome
Commenter Affiliation: Air Permitting Forum
Document Control Number: EPA-HQ-OAR-2008-0508-0524.1
Comment Excerpt Number: 10

Comment: EPA should Air Permitting Forum Comments recognize that new methods of estimating emissions should not trigger serial "corrections" as more and more accurate methods become available, providing some margin within which reporting is not considered "inaccurate" (e.g., a percentage of the original estimate). It simply does not make sense to have facilities correcting reports that may be many years old, particularly when EPA may no longer be using the data. Improved reporting should be done on a going-forward basis but should not impose a significant burden on sources to re-file reports as measurement methods improve.

Response: For each reporting year, facilities that are subject to the rule must use those methods specified in the rule as the rule stands at the time. When new methods become available, EPA will review the methods and if appropriate, will amend the rule to incorporate different methods. If this occurs, reporters would not be required to amend previous years reports based on methods that were not required at the time of report submission.

Commenter Name: Lee Lemke
Commenter Affiliation: Georgia Mining Association (GMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0276.1
Comment Excerpt Number: 3

Comment: The final rule needs to specify how responsibility for reporting is handled when ownership of a facility changes mid-year, both with respect to determining the facility's status with respect to the reporting threshold and with respect to actual reporting responsibilities at a facility that has already been determined to exceed the reporting threshold. GMA proposes that in such cases, both parties should calculate their partial-year emissions separately and then make a joint determination of the facility's total annual emissions and of any reporting requirements. Each party would be responsible for the accuracy of their own emission calculation for the portion of the year they owned the facility, and both parties would be jointly responsible for completion of a joint determination of the facility's total annual emissions and reporting applicability. GMA proposes that each partial-year owner of the facility would be responsible for reporting emissions during their period of ownership separately. Handling ownership changes in this manner would meet the goals of the reporting requirement, while ensuring that neither party inadvertently discloses sensitive and/or confidential business information to what may be a competitor for the purposes of emission reporting, nor is responsible for any inaccuracy of the other party's emission calculations.

Response: The company that owns or operates the facility or supplier at the end of the reporting year will be responsible for naming a Designated Representing to submit the annual emissions report that covers emissions for the entire calendar year. Please see response to EPA-HQ-OAR-2008-0508-0218, excerpt 1 for more information about how the Designated Representative relates to the owner and operators of the facility. Regarding how responsibility is handled with respect to the reporting threshold, change of ownership should not affect a facility's status with respect to reporting threshold. Applicability to an emission threshold is determined based on annual emissions from the "facility" as defined in the rule.

Commenter Name: Kimberly S. Lagomarsino
Commenter Affiliation: Mississippi Lime
Document Control Number: EPA-HQ-OAR-2008-0508-1568
Comment Excerpt Number: 23

Comment: 40 CFR 98 Subpart C uses both "short tons" and "metric tons" terminology for required reporting and records retention. Suggestion: Please revise 98 Subpart C, including Table C-1, to use "metric tons" consistently, as this is the unit in which GHG emissions must ultimately be reported.

Response: EPA intentionally uses both unit formats in subpart C. The "short tons" format is normally used by U.S. companies for process data inputs (e.g., high heat value.) Thus, EPA allows this format rather than the metric format to make it easier for reporters to develop and QA their inputs to the emissions calculations equations. The outputs of the equations (e.g., unit and facility emissions) are expressed in "metric tons" so that reported data is consistent with international protocols for GHG emissions reporting, which use the metric format.

Commenter Name: William C. Herz
Commenter Affiliation: The Fertilizer Institute (TFI)
Document Control Number: EPA-HQ-OAR-2008-0508-0952.1
Comment Excerpt Number: 54

Comment: Under the NPRM, regulated facilities would be required to submit annual reports by March 31, 2011, for the calendar year ending 2010 and beyond. The NPRM further provides that these annual reports must be signed and dated with a certification, including an affirmation recognizing significant penalties (both civil and criminal) for submitting false statements. See proposed 40 C.F.R. § 98.4. Even the most scrupulous facility can make errors in monitoring or calculations, particularly given the extremely short timeframe given to the regulated community in which to understand its obligations under the NPRM prior to its implementation, due to EPA's refusal to extend the review period for the NPRM. To avoid penalizing good faith efforts to submit accurate information and encourage voluntary disclosure of erroneous reports, EPA should revise the NPRM to provide for an administrative amendment mechanism for annual reports which have already been submitted, without the facility facing any penalty for the initial inaccuracy.

Response: EPA has added a provision in 40 CFR 98.3 that requires the owner or operator to submit a revised emission report within 45 days of discovering or being notified by EPA of errors in an annual emissions report. For further discussion of this new provision, see the preamble for the response on the submittal date and making corrections to annual reports. The EPA did not include in this provision a data error threshold (e.g., 5 percent of reported CO_2e emissions), as requested by various commenters because some facilities are very large emitters and a 5 percent threshold would exclude the correction of emissions errors that are significant. It is up to each reporter to determine if a corrected report is necessary.

For more information about EPA's approach to resubmission of data please see sections II. J and V of the preamble and volume 11 of the response to comments document. For more information on compliance and enforcement, please see section VI of the preamble and volume 8 of the response to comments document.

Commenter Name: Paul Glader
Commenter Affiliation: Hecla Mining Company
Document Control Number: EPA-HQ-OAR-2008-0508-0579.1
Comment Excerpt Number: 10

Comment: Hecla also agrees that companies should be permitted to correct and revise submitted emissions data in the event that errors are subsequently identified. EPA should develop a system which does not encourage litigation.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Chris Hobson
Commenter Affiliation: Southern Company
Document Control Number: EPA-HQ-OAR-2008-0508-1645.2
Comment Excerpt Number: 9

Comment: Although provisions for the recalculation and submittal of data should not be used to relieve a reporting entity of penalties associated with the rule, these provisions could lead to a more accurate and complete data set. At a minimum, quarterly data submitted under the continuous emissions monitoring programs should continue to be reconciled at the end of the year. Provisions should also be included for revising data if incorrect data are identified and as updated information is available.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Jerry D. Worsham II
Commenter Affiliation: Environmental and Natural Resources, Gammage & Burnham P. L. C.
Document Control Number: EPA-HQ-OAR-2008-0508-0140
Comment Excerpt Number: 1

Comment: Under proposed 40 CFR § 98.3(b)(1), (b)(2) and (b)(3), facilities or suppliers are required to submit GHG emission reports to EPA by March 31, 2011 for the calendar year ending in 2010 and beyond. These GHG annual emission reports are required to be verified by the facility under 40 CFR § 98 .3(c)(8) which states, "A signed and dated certification statement provided by the designated representative of the owner or operator, according to the requirements of §98.4(e)(1)." Under proposed 40 CFR § 98 .4(e)(1), the required certification statement of the GHG annual emissions report must be verified and includes personal affirmation language and even recognizes that significant penalties [civil or criminal] may be imposed upon the designated representative of the owner or operator for submitting false statements. EPA must recognize that even with a facility's best efforts, these GHG annual emission reports may include inaccurate estimates or calculations which in retrospect may need withdrawal or revision by a facility. For example, see proposed regulations at 40 CFR § 98 .2(f) which states: Such owners and operators must reevaluate the applicability to this part to the facility or supplier (which reevaluation must include the revising of any relevant emissions calculations or other calculations) whenever there is any change to the facility or supplier that could cause the facility or supplier to meet the applicability requirements of paragraph (a) of this section. Such changes include but are not limited to process modifications, increases in operating hours, increases in production, changes in fuel or raw material use, addition of equipment, and facility expansion. COMMENT: I have significant experience with other EPA programs that require annual reporting (i .e., the Emergency Planning and Community Right to Know Act of 1986 (EPCRA) Section 313) and I can attest that most companies go to great lengths to comply with EPA regulations prior to submitting annual reports and certifying the results. Under other similar EPA programs, EPA has recognized that changes in calculations, facility facts and human errors do occur and EPA has provided an administrative process where a facility can submit a "Withdrawal" or "Voluntary Revision" of the annual EPA reporting form. Similar to the proposed GHG annual emission report, EPCRA has a certification statement. Proposed Solution: Amend the proposed GHG regulations to provide for the administrative withdrawal or revision of the GHG annual emission report. Develop appropriate GHG regulations and EPA forms for submitting Voluntary Revisions or Voluntary Withdrawals of GHG annual reports required under 40 CFR § 98.3(b)(1), (b)(2) and (b)(3) . (See Exhibit A for copies of EPA EPCRA Forms)

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54. Regarding comments on EPCRA, EPCRA provides for public notification of toxics releases by facilities. Because the EPCRA reporting program has different reporting requirements and objectives than the GHG reporting rule, patterning the GHG Mandatory Reporting Rule submissions and requirements on

EPCRA is not appropriate. For example, EPCRA allows reporters to estimate emissions using any method of their choosing and to voluntarily withdraw and replace prior year's data if they choose to estimate emissions using a different methodology. The GHG Mandatory Reporting Rule has prescribed monitoring and calculation methods, associated QA procedures, and emission verification requirements. The final GHG reporing rule has adopted a report revision process that is more suitable for the requirements of this GHG reporting program than the EPCRA process.

Commenter Name: Pamela F. Faggert
Commenter Affiliation: Dominion
Document Control Number: EPA-HQ-OAR-2008-0508-1741
Comment Excerpt Number: 26

Comment: It is very difficult in a program like this with such disparate methodologies to establish a single data availability requirement for all sources. Issues regarding data collection should be dealt with on a case by case basis. Likewise, decisions regarding resubmission also should be made on a case by case basis taking into account the significance of the difference between previously submitted and recalculated data and the overall potential impact of the error on the usefulness of the data. Reasonable judgment should be allowed to address missing data while ensuring that monitoring and measurement objectives are addressed.

Response: Regarding the issue of resubmission of data, see response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54. Regarding the issue of missing data, see preamble section - Summary of Major Changes since Proposal to Subpart C.

Commenter Name: Edgar O. Morris
Commenter Affiliation: Mosaic Fertilizer Company LLC
Document Control Number: EPA-HQ-OAR-2008-0508-0687.1
Comment Excerpt Number: 3

Comment: EPA has invited comment on whether to allow annual reports to be amended to revise previously reported data. See 74 Fed. Reg. at 16,474. EPA should clarify that annual reports may be amended without penalty, provided that there is a good faith reason to amend, such as new data, revised data or recalculated data This approach is consistent with the approach followed in TRI Reporting. See Toxic Release Inventory Reporting Forms and Instructions, Revised 2008 Version, EPA 260-K-08-001 at 4-5 (Oct. 2008), available at http://www.epa.gov/TRI/report/rfi/TRI_RFI_RY2008.pdf EPA should follow a similar approach here, on the same apparent rationale that applies for TRI reporting, in order to encourage collection of the most accurate information.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Linda D. Sullivan
Commenter Affiliation: National Grid
Document Control Number: EPA-HQ-OAR-2008-0508-0608.1
Comment Excerpt Number: 4

Comment: The NPRM specifies the information that must be included on annual GHG reports. See proposed §98.3. US EPA should clarify that annual reports may be amended without penalty, provided that there is a good faith reason, such as new data, revised or recalculated data, or other good faith reasons for amending. This approach is consistent with the approach followed in Toxic Release Inventory ("TRI") Reporting. See Toxic Release Inventory Reporting Forms and Instructions, EPA 260-K-08-001, October 2008, pages 4-5. US EPA should consider following a similar approach here.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Jeffrey A. Sitler
Commenter Affiliation: University of Virginia (UVA)
Document Control Number: EPA-HQ-OAR-2008-0508-0675.1
Comment Excerpt Number: 7

Comment: EPA should allow resubmission of previously reported data if noted errors are on the order of magnitude to significantly change the emissions results. Facilities should not be punished for violating the rule if the facility was unaware of the error at the initial time of submission and should include an explanation of the error and why it occurred in their submission. The EPA can then decide how serious the violation was and determine whether a penalty needs to be incurred. EPA will need to determine whether it is more important to them to have accurate data or they would rather punish facilities for unintentionally mis-reporting. If facilities were repeat offenders, clearly action would need to be taken but for an occasional error, punishing facilities would only discourage facilities from re-submitting data and would reduce the accuracy of the information. We believe reporters should submit recalculated data upon discovery of a significant error or omission; we recommend resubmittal of data if the MTeCO2 changes by ±5% from the initial submittal.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Sam Chamberlain
Commenter Affiliation: Murphy Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0625
Comment Excerpt Number: 9

Comment: EPA is considering whether or not to include provisions to require facilities to correct previously submitted data, under certain circumstances, and is referencing the procedure available in the California mandatory GHG reporting rule: “EPA is seeking comment on whether to include a provision to require a minimum standard for reported data (e.g., only 10% of the data reported can be generated using missing data procedures)”. (74 FR 68, page 16474) Murphy believes that flexibility should be provided for correcting errors, discovering key data elements “after the fact”, or simply inadvertently using the wrong calculation or premises for determining the GHG emission. In many of our facilities, responsibility for the operation of the process unit is often shared by several chemical engineers, etc. These individuals do not always know what process parameters are affecting different parts of the operation that may or may not be contributing to a source or quantity or quality for a GHG emission determination/calculation. Many times we have to get the “experts” of the process in the same room to reach consensus on certain and sometimes many process variables and calculations. As we learn more about the

process, corrected inventories should be able to be submitted without fear or repercussion to the individual or Responsible Official. The more flexible and open the system provides for reporting, then the better quality and quantity of data will be developed. Murphy emphatically supports a GHG emission rule that clearly states that a violation should ONLY be defined as non-reporting, late reporting, or egregious violation of reporting procedures. Mere recalculation due to inadvertent mistakes or filling in missing data for a set percentage of data loss should not be considered a violation.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Michael Carlson
Commenter Affiliation: MEC Environmental Consulting
Document Control Number: EPA-HQ-OAR-2008-0508-0615
Comment Excerpt Number: 9

Comment: Recalculation and correction of previously submitted data (16474) should be allowed but not required. This should be at the option of the reporting facility.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Steven M. Pirner
Commenter Affiliation: South Dakota Department of Environment and Natural Resources (SD DENR)
Document Control Number: EPA-HQ-OAR-2008-0508-0576
Comment Excerpt Number: 10

Comment: EPA requests comments on whether the mandatory greenhouse gas reporting program should include provisions to require reporters to submit recalculated data and under what circumstances such recalculations should be required. EPA's main objective is to collect accurate data. Therefore, SD DENR recommends EPA allow facilities to submit recalculated data to ensure accurate data is being used without the threat of penalizing someone for making a mistake. In this manner, EPA will be meeting its objective of the rule to collect comprehensive and accurate data for developing future policies for reducing carbon emissions.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Donald R. Schregardus
Commenter Affiliation: Department of the Navy, Department of Defense (DoD)
Document Control Number: EPA-HQ-OAR-2008-0508-0381.1
Comment Excerpt Number: 15

Comment: There are no provisions in the rule to allow facilities, suppliers or manufacturers to make and submit corrections to reports previously submitted to EPA. In the preamble at Section IV.G.3. (74 FR 16474), EPA discusses the potential benefits of requiring previously submitted data to be recalculated in order to ensure that the GHG emissions reported by a facility are as accurate as possible. The proposed California mandatory GHG reporting program, for example, allows reporters to revise submitted emissions data if errors are identified, subject to approval by

the program. EPA is considering whether or not to include provisions to require facilities to correct previously submitted data under certain circumstances. Though reporters are obligated to report data that are complete, accurate and in accordance with the requirements of this rule, there will be occasions when errors in calculations or submitted data will be identified by a source. Consistent with other emissions reporting programs under the CAA, including reporting provisions under the Acid Rain Program, the GHG reporting rule should include a procedure to allow facilities, suppliers or manufacturers subject to GHG reporting under this rule to make corrections to previously submitted reports to EPA to correct erroneous data/information unintentionally included but discovered after the report has been submitted. Whatever mechanism is used for data submission, it should include a provision that allows for corrections. EPA should include provisions in the rule that would allow facilities, suppliers or manufacturers to make and submit corrections to reports previously submitted to EPA if/when necessary. The database tool EPA develops to collect GHG data should include a revision feature for reporters.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Robert N. Steinwurtzel
Commenter Affiliation: Bingham McCutchen LLP on behalf of Association of Battery Recyclers (ABR)
Document Control Number: EPA-HQ-OAR-2008-0508-0660.1
Comment Excerpt Number: 15

Comment: To the extent the verification process identifies missing or incorrect information, facilities should be allowed to resubmit information that was identified as incorrect without ramifications. The Proposed Rule notes that even resubmission of information "does not necessarily reverse the potential rule violation and would not relieve the reporter of any penalties associated with that violation." Id. at 16,474. Because the proposed reporting rule is not being used to implement any current program under the CAA, but merely to inform future action, a rule violation should be limited to non-reporting. EPA should specifically state that mere recalculation due to inadvertent errors or reasonable mistakes or filling in missing data for a set percentage of data loss would not be considered a violation that would subject the reporter to penalties.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 16

Comment: Marathon proposes a procedure to account for inaccurate data. Although EPA addresses situations where data is missing, they do not address situations where data is inaccurate. Marathon proposes using the same procedure for inaccurate data as the missing data procedure proposed above, where the last quality assured value would be used until the next quality assured data value is given. For flow meters, best engineering estimates would be used. Determination of "inaccurate data" would be made by the appropriate personnel. It is essential to have a procedure outlined so that inaccurate data is not utilized in GHG emissions estimates.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 21

Comment: EPA should also consider how to authorize or require reporters to submit updated information as the data quality improves. In any new system, users will learn nuances of their manufacturing, distribution, and data management systems that could impact reported data quality. As described above, many reporters would need to implement new technologies to accommodate these GHG reporting requirements. EPA should offer a safe harbor for reporters who, especially in the first three years of the program, discover data errors, implementation problems, or data accuracy issues, and identify regulated GHG emissions from previously unknown sources that could impact reported GHG emissions. EPA should evaluate how the addition of thousands of GHG reporters would impact the EPA Audit Policy, especially concerning reporting rule self-disclosures for insignificant early-year reporting rule errors that would not become subject to the Audit Policy with the appropriate reporting phase-in provisions.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54. Thank you for your comment about impacts on the Audit Policy. We will take it under advisement.

Commenter Name: Karen St. John
Commenter Affiliation: BP America Inc. (BP)
Document Control Number: EPA-HQ-OAR-2008-0508-0631.1
Comment Excerpt Number: 22

Comment: BP agrees with the comments of the Natural Gas Supply Association (NGSA), which recommends a 'safe harbor' protection for good-faith reporting. A 'safe harbor' provision allows for reporting entities to comply as EPA intends without immediately being penalized if unintended errors in data reporting occur. Because the reporting rule is complex and lengthy, unintended reporting errors should not be immediately penalized without granting the reporting party an opportunity to identify the missing data and make the necessary corrections and adjustments. Safe harbor protections for good-faith reporting and certain clarifications to annual transaction report are needed while industry continues to adopt compliance protocols.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Patricia A. Meehan
Commenter Affiliation: New York Power Authority (NYPA)
Document Control Number: EPA-HQ-OAR-2008-0508-1569
Comment Excerpt Number: 3

Comment: While reporters will make a good faith effort to submit accurate data, there are instances of equipment malfunction and human error. It is our recommendation that the EPA require a reporter to submit recalculated data when the original data is inaccurate by 10 percent or more.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 26

Comment: Marathon proposes that voluntary recalculation due to inadvertent mistakes or filling in missing data using the correct missing data procedures be allowed without ramifications. EPA should follow current enforcement practices for facilities that resubmit data for other reporting rules including TRI. EPA has demonstrated with these emissions reports that resubmissions arc encouraged as better data is made available or mistakes are identified and are allowed without enforcement action. Facilities frequently make corrections under other reporting programs, including IRE and emissions inventory, without reprisal. A resubmission should not be interpreted as a facility intentionally making a mistake or omission.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: See Table 8
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0635
Comment Excerpt Number: 28

Comment: We urge EPA to reconsider its decision not to require facilities to correct previously submitted data when it is in error. Although such a requirement would impose some additional costs, facilities should not be able to avoid acknowledging errors when they discover them. Correcting such errors will help keep the entire system accurate and will also identify protocols which are particularly prone to generating errors, and so may warrant revision.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Thomas Diamond
Commenter Affiliation: Semiconductor Industry Association (SIA)
Document Control Number: EPA-HQ-OAR-2008-0508-0498.1
Comment Excerpt Number: 31

Comment: Under proposed 40 CFR § 98.3(b)(1), (b)(2) and (b)(3), facilities or suppliers are required to submit GHG emission reports to EPA by March 31, 2011 for the calendar year ending in 2010 and beyond. These GHG annual emission reports are required to be verified by the facility under 40 CFR § 98.3(c)(8) which states, "A signed and dated certification statement provided by the designated representative of the owner or operator, according to the requirements of § 98.4(e)(1)." Under proposed 40 CFR § 98.4(e)(1), the required certification statement of the GHG annual emissions report must be verified and includes personal affirmation language and even recognizes that significant penalties [civil or criminal] may be imposed upon the designated representative of the owner or operator for submitting false statements. EPA must recognize that even with a facility's best efforts, these GHG annual emission reports may include inaccurate estimates or calculations which in retrospect may need to be withdrawn or revised by

a facility. For example, see proposed regulations at 40 CFR § 98.2(f) which states: "Such owners and operators must reevaluate the applicability to this part to the facility or supplier (which reevaluation must include the revising of any relevant emissions calculations or other calculations) whenever there is any change to the facility or supplier that could cause the facility or supplier to meet the applicability requirements of paragraph (a) of this section. Such changes include but are not limited to process modifications, increases in operating hours, increases in production, changes in fuel or raw material use, addition of equipment, and facility expansion." Other EPA programs require annual reporting (i.e., the Emergency Planning and Community Right to Know Act of 1986 (EPCRA) Section 313) and that most companies go to great lengths to comply with EPA regulations prior to submitting annual reports and certifying the results. Under other similar EPA programs, EPA has recognized that changes in calculations, facility facts and human errors do occur and EPA has provided an administrative process where a facility can submit a “Withdrawal” or “Voluntary Revision” of the annual EPA reporting form. Similar to the proposed GHG annual emission report, EPCRA has a certification statement. SIA proposes that EPA amend the proposed GHG regulations to provide for the administrative withdrawal or revision of the GHG annual emission report. Develop appropriate GHG regulations and EPA forms for submitting Voluntary Revisions or Voluntary Withdrawals of GHG annual reports required under 40 CFR § 98.3(b)(1), (b)(2) and (b)(3). (See EPA EPCRA Forms for example).

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: See Table 5
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0679.1
Comment Excerpt Number: 33

Comment: EPA is considering whether or not to include provisions to require facilities to correct previously submitted data, under certain circumstances, and is referencing the procedure available in the California mandatory GHG reporting rule: “EPA is seeking comment on whether to include a provision to require a minimum standard for reported data (e.g., only 10% of the data reported can be generated using missing data procedures)”. It goes on to say: “Even if EPA were to allow recalculation of submitted data or accept data submitted using missing data procedures, that would not relieve the reporter of their obligation to report data that are complete, accurate, and in accordance with the requirements of this rule. Although submitting recalculated data or data using missing data procedures would correct the data that was wrong that resubmission or missing data procedures does not necessarily reverse the potential rule violation and would not relieve the reporter of any penalties associated with that violation.” (74 FR 68, page 16474) API comments EPA’s proposed approach is not comparable to the California data recalculation example. The California provision was crafted within the context of a system that relies on third-party verification, where data corrections are permitted - without penalty - following the auditors’ review of the preliminary data submitted during a reporting cycle. Corrected inventories are to be submitted following the comments received from verifiers to close the verification cycle. See 7 C.C.R. § 95104(d) (allowing revision of a data report if, during the course of receiving verification services and prior to completion of a verification opinion, an operator chooses to make a correction or improvement). For the proposed rule, EPA has proposed self-certification with EPA verification. The agency contends that submitting recalculated data or data using missing data procedures would “not necessarily reverse the potential rule violation and would not relieve the reporter of any penalties associated with that

violation" (74 FR 68, page 16474). Such an approach is unwarranted because it would penalize companies that, through independent verification efforts or through improvements to monitoring mechanisms, are able to improve their data. The rule should not be crafted in a way that creates a disincentive to improve the accuracy of the data reported through such efforts. API contends that for the purpose of this reporting rule, rule violation should be defined as non-reporting, late reporting, or egregious violation of reporting procedures. Mere recalculation due to inadvertent mistakes or filling-in missing data for a set percentage of data loss should not be considered a violation. Especially given that the primary purpose behind the proposed rule is accurate data collection for the purposes of informing future agency actions, facilities should be permitted the flexibility to resubmit information that was identified as incorrect without ramifications. EPA should specifically stipulate that facilities (and their representatives) would have no liability if they follow the missing data procedures that are specifically outlined in the rule. Hence, if the final rule would require submission of missing and/or recalculated it should state and make clear that such a recalculation or a revision of a previously submitted report shall not be considered evidence that any prior report is in noncompliance with the rule.

Response: Regarding the issue of facilities submitting data error reports, see the response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54. Regarding the opinion that the rule might penalize companies that improve their monitoring mechanisms, refer to the response to EPA-HQ-OAR-2008-0508-0524.1, excerpt 10.

Commenter Name: Gregory A. Wilkins
Commenter Affiliation: Marathon Oil Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0712.1
Comment Excerpt Number: 40

Comment: The preamble states: "EPA is seeking comment on whether the mandatory GHG reporting program should include provisions to require reporters to submit recalculated data and under what circumstances such recalculations should be required." Marathon proposes that if the correction results in sonic appreciable emissions change (5%), then that correction would be made by the affected facility.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Marcelle Shoop
Commenter Affiliation: Rio Tinto Services, Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0636.1
Comment Excerpt Number: 40

Comment: EPA seeks comment on whether the mandatory GHG reporting program should include provisions to require reporters to submit recalculated data and under what circumstances such recalculations should be required. (74 Fed. Reg. at 16474) To ensure accuracy, resubmission or recalculation of missing or incorrect data is appropriate. However, EPA should apply a threshold where any errors under a certain threshold (e.g. 5%) would not need to be recalculated. The rule should also allow for voluntary resubmission or recalculation of data by the reporter.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Andrew C. Lawrence
Commenter Affiliation: Department of Energy (DOE)
Document Control Number: EPA-HQ-OAR-2008-0508-0612.1
Comment Excerpt Number: 13

Comment: There are no provisions in the rule to allow facilities, suppliers or manufacturers to make and submit corrections to reports previously submitted to EPA. Though reporters are obligated to report data that are complete, accurate and in accordance with the requirements of this rule, there will be occasions when reporters will discover errors in calculations or submitted data. Consistent with other emissions reporting programs under the CAA, the GHG reporting rule should include a procedure to allow facilities, suppliers or manufacturers subject to GHG reporting under this rule to make corrections to previously submitted reports to EPA to correct erroneous data/information unintentionally included but discovered after the report has been submitted. Whatever mechanism is used for data submission, it should include a provision that allows for corrections.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

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: 17

Comment: It is unclear from the NPRM, when a facility must report errors found in past emission reports. RMA recommends that the EPA provide clear guidance indicating what errors on past emissions report would trigger reporting the error to EPA. We further recommend that EPA institute a self-audit program to correct errors on past reports. A self-audit program will ensure the accuracy of emissions reporting while minimizing the burden on facilities.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Benjamin Brandes
Commenter Affiliation: National Mining Association (NMA)
Document Control Number: EPA-HQ-OAR-2008-0508-0466.1
Comment Excerpt Number: 18

Comment: NMA agrees that companies should be permitted to correct and revise submitted emissions data in the event that errors are subsequently identified. Reporting entities should not be penalized in cases where inadvertent errors are subsequently noticed and corrected. As is the case with the Toxics Release Inventory (TRI) Program, where courts usually do not enforce penalties assuming an error is corrected in a timely fashion, EPA should be cautious in developing a system which would only promote litigation and which would serve no environmental benefit.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Jeff A. Myrom
Commenter Affiliation: MidAmerican Energy Holdings Company
Document Control Number: EPA-HQ-OAR-2008-0508-0581.1
Comment Excerpt Number: 26

Comment: Reporters are unlikely to submit corrected data if it exposes them to Clean Air Act violation fines of up to $32,500 per day as well as other administrative, civil, and criminal measures.1 If the EPA is unwilling to accept corrections without a threat of penalties, similar to self-audit privileges already in effect, then resubmission of recalculated data is unlikely to occur and there is no need for such provisions. However, the purpose of an emissions inventory is to create credible, accurate and consistent data for comparative purposes, and thus EPA is encouraged to allow resubmission of corrections without penalty if such errors are self-disclosed by the reporter.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Filipa Rio
Commenter Affiliation: Alliance of Automobile Manufacturers (Alliance)
Document Control Number: EPA-HQ-OAR-2008-0508-0630.1
Comment Excerpt Number: 27

Comment: The proposed reporting rule does not provide any clear direction on how a facility would handle corrections or revisions to data previously reported. The Alliance recommends that EPA allow and encourage reporters to revise submitted emissions data if errors or other reasons for changes are identified and to clarify when and under what circumstances corrections should be submitted. This is particularly important as GHG reporting will be a new requirement to many facilities and reporting errors during the initial reporting years would likely be more common. Therefore, flexibility must be provided to assure complete and accurate data without risk of enforcement. The Alliance proposes that a facility be required to revise/resubmit its annual report if an error is discovered that would result in a change greater than five percent of reported CO_2e emissions. This concept has been endorsed by several existing GHG reporting programs including The Climate Registry ("TCR") and the Western Climate Initiative ("WCI"). The Alliance recommends that a revision/resubmittal be completed within 120 days of discovery.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Glenn Hamer
Commenter Affiliation: Arizona Chamber of Commerce and Industry
Document Control Number: EPA-HQ-OAR-2008-0508-0564.1
Comment Excerpt Number: 1

Comment: The Arizona Chamber notes that other EPA programs require annual reporting (i.e., the Emergency Planning and Community Right to Know Act of 1986 (EPCRA) Section 313) and that most companies go to great lengths to comply with EPA regulations prior to submitting annual reports and certifying the results. Under other similar EPA programs, EPA has recognized that changes in calculations, facility facts and human errors do occur and EPA has provided an administrative process where a facility can submit a “Withdrawal” or “Voluntary Revision” of

the annual EPA reporting form. Similar to the proposed GHG annual emission report, EPCRA has a certification statement. Proposed Solution: Amend the proposed GHG regulations to provide for the administrative withdrawal or revision of the GHG annual emission report. Develop appropriate G HG regulations and EPA forms for submitting Voluntary Revisions or Voluntary Withdrawals of GHG annual reports required under 40 CFR § 98.3(b)(1), (b)(2) and (b)(3). (See EPA EPCRA Forms for example).

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Michael W. Stroben
Commenter Affiliation: Duke Energy Corporation
Document Control Number: EPA-HQ-OAR-2008-0508-0407.1
Comment Excerpt Number: 5

Comment: Decisions regarding resubmission of recalculated data should be made on a case by case basis taking into account the significance of the difference between previously submitted and recalculated data and the overall potential impact of the error on the usefulness of the data. However, EPA should not attempt to prohibit resubmitted data, if doing so is necessary to make the submitted data consistent with other records the source is required to keep. Sources should not be required to retain two sets of data if they are not prepared to do so.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: David Stirpe
Commenter Affiliation: Alliance for Responsible Atmospheric Policy (ARAP)
Document Control Number: EPA-HQ-OAR-2008-0508-0527.1
Comment Excerpt Number: 8

Comment: EPA also notes that corrections and recalculations in the emissions data should be encouraged. We agree with these statements.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: See Table 7
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0395.1
Comment Excerpt Number: 14

Comment: The proposed rule requires that a facility's designated representative sign and date a certification statement which includes personal affirmation language and states that significant civil or criminal penalties may be imposed upon the designated representative for submitting false statements. TCFA urges EPA to recognize that even with a facility's best efforts reports may include inaccurate estimates or calculations which may need to be withdrawn or revised by the facility. Consequently, TCFA urges the EPA to recognize that changes in calculations, facility facts, and human errors do occur and provide an administrative process whereby a reporter would have an opportunity to submit voluntarily recalculated or missing data, or to provide updated reports based on new emissions estimating methodologies that may become

available. This would provide EPA and the facilities affected by the rule with a means to create and maintain the most accurate database possible. Finally, a reporter should have the option to update any previously submitted report at any point in time that the reporter becomes aware of miscalculated, missing or updated emissions estimation methodologies that may become available. If such a revised report indicates that the reporter falls below the reporting threshold no additional reports should be required to be submitted, unless the reporter exceeds the threshold at some point in the future.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54 for a discussion of EPA's final provisions in the rule for facilities to submit a revised emission report for data errors in their annual emission report. Regarding the issue of when a report indicates that the facility's emissions fell below the reporting threshold, see the preamble section on reporting frequency and provisions to cease reporting.

Commenter Name: Angela Burckhalter
Commenter Affiliation: Oklahoma Independent Petroleum Association (OIPA)
Document Control Number: EPA-HQ-OAR-2008-0508-0386.1
Comment Excerpt Number: 14

Comment: EPA does not provide a way for reporting entities to modify submitted data. Reporting entities should be allowed to submit recalculations without penalties. This resubmitted data will ultimately refine and provide EPA and policymakers with the most accurate information possible. Even EPA is allowed to resubmit its Inventory report to the UNFCCC with the most accurate data. We request EPA include in the rule a process whereby reporting entities can resubmit GHG emission data without penalties.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: See Table 7
Commenter Affiliation:
Document Control Number: EPA-HQ-OAR-2008-0508-0425.1
Comment Excerpt Number: 19

Comment: Section IV.E.3 of the proposed rule Preamble requires that a facility’s designated representative sign and date a certification statement which includes personal affirmation language and states that significant civil or criminal penalties may be imposed upon the designated representative for submitting false statements. CLA urges EPA to recognize that, even with a facility’s best efforts, reports may include inaccurate estimates or calculations which may need to be withdrawn or revised by the facility. Consequently, CLA urges the EPA to recognize that changes in calculations, facility facts, and human errors do occur and provide an administrative process whereby a reporter would have an opportunity to submit voluntarily recalculated or missing data, or to provide updated reports based on new emissions estimating methodologies that may become available. This would provide EPA and the facilities affected by the rule with a means to create and maintain the most accurate database possible. Finally, a reporter should have the option to update any previously submitted report at any point in time that the reporter becomes aware of miscalculated, missing or updated emissions estimation methodologies that may become available. If such a revised report indicates that the reporter falls

below the reporting threshold no additional reports should be required to be submitted, unless the reporter exceeds the threshold at some point in the future.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54 for a discussion of EPA's final provisions in the rule for facilities to submit a revised emission report for data errors in their annual emission report. Regarding the issue of when a report indicates that the facility's emissions fell below the reporting threshold, see the preamble section on reporting frequency and provisions to cease reporting.

Commenter Name: Maureen Beatty
Commenter Affiliation: National Refrigerants, Inc. (NRI)
Document Control Number: EPA-HQ-OAR-2008-0508-0434.1
Comment Excerpt Number: 19

Comment: Similarly, EPA should encourage entities to make corrections and recalculations of emissions data where appropriate.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

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: 28

Comment: Indiana believes that there should be no requirements for recalculations of previously submitted data, however, facilities should be allowed to recalculate and revise data as they deem appropriate.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: Ushma N. Domadia
Commenter Affiliation: Drexel University Earle Mack College of Law
Document Control Number: EPA-HQ-OAR-2008-0508-0234
Comment Excerpt Number: 5

Comment: There should also be provisions as to when incorrect data calculations should be resubmitted. The benefit in requiring previously submitted data to be recalculated is that it ensures that the GHG emissions reported by a facility are as accurate as possible. Although there would be added costs to the facilities in requiring reporters to recalculate the inconsistencies and corrections, it will hopefully influence facilities to have a quality control checkpoint to check the data that is being submitted prior to submission.

Response: See response to EPA-HQ-OAR-2008-0508-0952.1, excerpt 54.

Commenter Name: See Table 3
Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0433.2
Comment Excerpt Number: 39

Comment: EPA should change the CO_2e reporting units throughout the GHG reporting rule from the non-standard "metric ton(ne)s" cited in the FR proposed rule and supporting documents to be consistent with long-standing EPA policy of metrification. The proper and equivalent reporting unit should be megagrams (Mg) as it is used in all other recent EPA regulations. This will help to avoid confusion among personnel at the numerous facilities that will be subjected to EPA emissions inventory reporting for the first time regarding the difference between "metric tons" (long tons) and U.S. standard (short) tons. A number of currently-regulated facilities have been cited for violations of permitted emission or operating limits over the years because their personnel did not properly use the correct "ton" as required by the permits and overlying rules.

Response: See response to comment EPA-HQ-OAR-2008-0508-1568, excerpt 23.

Commenter Name: Leslie Bellas
Commenter Affiliation: National Lime Association (NLA)
Document Control Number: EPA-HQ-OAR-2008-0508-0520.1
Comment Excerpt Number: 33

Comment: Throughout the proposed rule, EPA uses pounds, metric tons, and short tons. NLA proposes that one unit be used consistently throughout the Rule, and all pertinent equations and tables be revised accordingly.

Response: See response to comment EPA-HQ-OAR-2008-0508-1568, excerpt 23.

Commenter Name: Rich Raiders
Commenter Affiliation: Arkema Inc.
Document Control Number: EPA-HQ-OAR-2008-0508-0511.1
Comment Excerpt Number: 72

Comment: The proposed organization of Part 98 is unworkable and should be substantially modified. EPA should include a common provisions section into the reserved Subpart B that includes common monitoring, recordkeeping, data management, reporting, and compliance management requirements that impact multiple source categories.

Response: The general provisions to the rule are contained in subpart A. The requirements (e.g., monitoring, recordkeeping, and reporting) that are common to all source categories are contained in subpart A. Each reporter that is subject to the rule must comply with subpart A and the provisions of each applicable subpart.

Table 1

COMMENTER	AFFILIATE	DCN
Mark Dopp	American Meat Institute (AMI)	EPA-HQ-OAR-2008-0508-0440.1
Stewart T. Leeth	Smithfield Foods, Inc.	EPA-HQ-OAR-2008-0508-0553

Table 2

COMMENTER	AFFILIATE	DCN
Bruce Thompson	American Exploration and Production Council	EPA-HQ-OAR-2008-0508-0367.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

Table 3

COMMENTER	AFFILIATE	DCN
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1 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 4

COMMENTER	AFFILIATE	DCN
Michael Formica	National Pork Producers Council (NPPC)	EPA-HQ-OAR-2008-0508-0435.1
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 5

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 6

COMMENTER	AFFILIATE	DCN
Pamela A. Lacey	American Gas Association (AGA)	EPA-HQ-OAR-2008-0508-0709.1
Richard Bye	CenterPoint Energy, Inc.	EPA-HQ-OAR-2008-0508-2124.1

Table 7

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 8

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