



**Sent electronically**

March 7, 2011

EPA Air Docket  
Mailcode 2822T  
1200 Pennsylvania Avenue, NW  
Washington, DC 20004

**Re: Call for Information: Information on Inputs to Emission Equations Under the Mandatory Reporting of Greenhouse Gases Rule [EPA-HQ-OAR-2010-0964; 75 Fed. Reg. 81366, December 27, 2010]**

The American Chemistry Council (ACC)<sup>1</sup> appreciates the opportunity to submit comments on Environmental Protection Agency's (EPA) Call for Information: Information on Inputs to Emission Equations Under the Mandatory Reporting of Greenhouse Gases Rule (EPA-HQ-OAR-2010-0964; 75 Fed. Reg. 81366, December 27, 2010).

We believe that it is crucial that EPA takes the time to review the additional information that will be submitted in response to its call for information before requiring the submittal of any data that may be considered CBI. Only after careful review and evaluation of the potential impacts of releasing sensitive data should EPA proceed with requiring the reporting of such data elements under the MRR.

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<sup>1</sup> *The American Chemistry Council (ACC) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care<sup>®</sup>, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$674 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.*

As we have stated repeatedly in multiple prior comments, and particularly in our comments dated September 7, 2010<sup>2</sup>, ACC members are very concerned with how confidential business information (CBI) will be handled under the mandatory reporting rule ((MRR) or Part 98) for greenhouse gas (GHG) emissions. EPA proposed (see 75 FR 39094, July 7, 2010) to publicly report inputs to emission equations data, but as we have noted, much of that information is sensitive and not publicly reported elsewhere.

In the call for information, EPA solicits a large amount of information and viewpoints regarding how the public availability of inputs to emission equations in Part 98 could cause competitive harm, as well as additional approaches to calculating GHG emissions. ACC member companies are impacted by a number of subparts in the MRR, and we provide detailed comments below on the subparts of most concern. In addition, ACC members companies will be filing individual comments on this call for information.

ACC continues to assert that inputs to emission equations data is CBI, and if EPA requires this data to be reported, it needs to be protected as such and not disclosed to the public. Alternatively, there may be other ways to protect such input data by utilizing third-party audits and installing direct emissions measurement systems, but these would come at considerable costs to industry. For a reporting rule with no underlying control requirements, EPA should carefully balance costs to industry with the need to reveal all submitted data.

In addition, Part 98 does not allow sources to petition to use a different method than the calculation methodologies prescribed in the various subparts of the rule. We appreciate that EPA has attempted to build flexibility into the calculation methodologies and yet ensure consistency of all reporters by using the same basic emission calculation equations with best available inputs. For most reporters, the Agency has achieved this flexibility and consistency. However, *all* covered facilities might not be able to use the same basic emissions calculation equations due to a variety of reasons, including safety concerns, technical infeasibility, and trade secret disclosure. The Agency has existing regulations that allow sources to a request alternative methods to meet regulatory requirements (see 40 CFR 60.13(i) - NSPS Alternative Monitoring Procedure and 40 CFR 63.8(f) – MACT Alternative Monitoring Procedure). ACC respectfully requests that EPA provide a mechanism for sources to petition the Administrator under Part 98 for the use of alternative calculation methods. This would provide for an additional flexibility to some reporters without sacrificing CBI or the accuracy of the reported emissions.

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<sup>2</sup> See Docket ID EPA-HQ-OAR-2009-0924

March 7, 2011

If you would like to discuss any of the comments in more detail, please contact me at (202) 249-6411 or [lorraine\\_gershman@americanchemistry.com](mailto:lorraine_gershman@americanchemistry.com).

Very truly yours,

A handwritten signature in black ink, appearing to read "Lorraine Krupa Gershman". The signature is fluid and cursive, with the first name "Lorraine" being the most prominent.

Lorraine Krupa Gershman  
Director, American Chemistry Council

## **Subpart C – Stationary Combustion**

### ***Specific information identifying how public availability of any inputs to emission equations data elements would cause harm to any reporter.***

Throughout Subpart C, calculations require the use of actual fuel usage data and measured high heating value (HHV) and carbon data, and §98.36(e) requires reporting of this data. See the following subparts for reporting requirements:

- §98.36(2)(i)
- §98.36(2)(ii)(A)
- §98.36(2)(ii)(C)
- §98.36(2)(iv)(A)
- §98.36(2)(iv)(C)

While the reporting of the fuel data is considered to be inputs to emission equations, we request that EPA change the reporting and recordkeeping for these data as follows:

- This data should be classified as CBI.
- Eliminate the requirement to report these data in any routine report.

Release of these data would harm the competitive position of companies who rely on this information to remain confidential.

For example, some ACC member companies price raw material purchases and product sales based on a combination of a base price, a fuel usage factor, and other relevant factors. Should these companies be required to submit fuel data, high heating value data, and carbon data to EPA as non-confidential data, the competitors for product sales would easily be able to calculate the fuel component of the pricing, including relative amounts of purchased natural gas and recovered process gas. Through this, the competitors would be able to undercut the pricing in competitive bids, thus leading to loss of sales, loss of competition, and loss of a free market. From a raw materials standpoint, bidding companies would be able to calculate the company's profit margin and would then be able to cut into it unfairly by driving raw material prices up to the maximum amount the profit margin would bear, thus unfairly destroying our competitive position.

ACC members cover a large spectrum of companies. Some companies are small, specialty firms with a limited product line and others are large multinationals producing hundreds of products. For those larger companies whose stationary combustion sources such as boilers serve multiple manufacturing process units throughout their larger integrated manufacturing complexes, the individual contribution of the heat into a given product may be masked; however, for a smaller company manufacturing a smaller or more limited product slate, the contribution to a specific product would be more readily discerned. Thus, the release of fuel usage data, HHV data, and carbon content data could result in substantial harm to smaller chemical companies, and these companies should be allowed to seek CBI protection for this data.

## **Subpart L- Fluorinated Gas Production**

### ***I. Specific information identifying how public availability of any inputs to emission equations data elements would cause harm to any reporter.***

#### Data elements that are inputs to emissions equations and CBI under Subpart L

For purposes of §98.126 (Subpart L), EPA will need to consider the implications of export control requirements on potential release of information on inputs to emissions equations. As discussed in detail in ACC's September 7, 2010 comments on EPA's Proposed Confidentiality Determinations, Subpart L covers facilities that produce components made from fluorinated compounds. This is a category of products and intermediate materials that may be controlled under the Export Administration Regulations (EAR). This technology is expressly controlled for export due to national security, nuclear non-proliferation, anti-terrorism, missile technology, and other risks. The prohibitions against exports include "deemed exports," *i.e.*, the sharing within the U.S. of controlled technology to those who are not U.S. citizens or permanent residents, refugees or asylees of the U.S. and possess citizenship of countries to which the technical data is controlled.

Because the level and detail of emissions information currently required by Part 98 could constitute the disclosure of controlled production technology, and possibly, technical data to the public, EPA will need to follow the requirements for requesting authorization from other government agencies or implement an export control plan to assure compliance with all U.S. export control regulations, including putting in place the appropriate controls. ACC's September 7, 2010 comments include more detail on these requirements. ACC's comments ask first, that such detailed emissions information not be required for submittal under Part 98, and second, that if submittal is required, any controlled technology should be determined to be CBI, and that EPA adopt whatever additional restrictions are necessary to comply with export control regulations.

Aside from the export control considerations, the following are specific data elements listed by EPA under §98.126 that ACC members consider and treat as CBI. The following general considerations regarding CBI apply to all of the inputs to emissions equations under §§98.126(b) and (c) but are also applicable to other data elements in Subpart L.

Some of the facilities subject to Subpart L are specialized materials manufacturers, manufacturing specific chemicals that are produced by no other facility in the world. In one case, a company has over \$100 million dollars and five decades in research and development to develop the unique processes at its facilities. These processes have customized configurations and customized process characteristics.

There is no patent for process-related information. The facilities rely on trade secret protection to maintain the value of their investment in technology. They are very careful to take measures to preserve the secrecy of this information, including: (a) requesting that the information be held confidential in this and other submissions to federal, state and local agencies, (b) keeping the

information in secure buildings, protected by security guards at entrances, to which non-company personnel do not have access (unless given special security clearance or escort), (c) entering confidentiality agreements with their employees, and (d) entering confidentiality agreements with their consultants and contractors.

If the inputs to emission calculations and other specific process-related information described in more detail below are made public, this would reveal highly confidential aspects of process configurations and characteristics for these Subpart L facilities. It could allow competitors to duplicate the process and create the products without having to make the multi-million research and development investments, thus giving them a substantial competitive advantage. Because they have not had to incur the R&D costs, it could allow competitors to out-compete these facilities, causing loss of sales, business, and potentially loss of jobs.

Based on EPA's CBI determinations and the methods that are used to determine fluorinated greenhouse gas (F-GHG) emissions, the information being reported in §98.126 would provide a detailed roadmap of an F-GHG manufacturing facility. In addition, ACC member company concerns go well beyond those reporting elements that are considered "inputs to emission equations." Unlike many other source categories where reported emissions will be limited to carbon dioxide alone, Subpart L data will be chemical specific. Such emissions information, when coupled with process descriptions, will provide detailed information that has not previously been placed in the public domain. This information would include the production quantities of products (which are considered CBI under Subpart OO) and all isolated intermediates. If the methods used to determine emissions are based on the mass balance, emission factor or emission calculation factor approaches, EPA is asking facilities to report this information as well as data on product chemical compositions (also required under Subpart OO but there treated as CBI), process yields, and raw materials usage. Competitors may well be able to use the information to reverse engineer products and to ascertain capacity and capacity utilization, which are important to assessing competitive positions and pricing.

Because EPA has requested reporting of F-GHGs by the specific F-GHG rather than by the general CO<sub>2</sub> equivalents, this has the potential to make each type of input to emission equations listed below CBI. Some plants subject to Subpart L manufacture specific chemicals that are not produced by any other plant in the world, much less the United States. Accordingly, requiring the reporting of specific F-GHGs creates the very real possibility that a specific F-GHG will reveal a specific chemical produced by that plant and will give information allowing a competitor to extrapolate the quantity of that chemical produced by that plant. The ACC has commented previously that EPA should not require the reporting of specific F-GHGs but instead should require the reporting of CO<sub>2</sub>e so as to avoid this initial confidentiality concern. Nevertheless, because the current proposed reporting rule specifies that the reporting must be F-GHG-specific, for purposes of these comments we must assume that this will continue to be the case. If so, this exacerbates the confidentiality issues associated with each of the inputs discussed below. Reporting the inputs to emission equations listed below, in the context of emissions by specific F-GHG, will reveal very sensitive manufacturing and process information, often by specific chemical produced, that would be very valuable to competitors. In order to

avoid the concerns, EPA should allow aggregation by CO<sub>2</sub>e of all of the GHGs emitted by the facility, and recognize the confidential status of the following inputs to emission equations, due to the concerns noted below.

a. **Data Reporting for all facilities under Section 98.126(a)**

- Sections 98.126(a)(2)(i)-(iv) (and/or 98.126(a)(3) of the April 12, 2010 re-proposed rule): While not listed by EPA as “inputs to emissions equations,” reporting emissions for specific processes would result in the availability of process specific information that has not been placed in the public domain. ACC member companies believe reporting emissions by individual processes constitutes CBI data, and the release of this data has the potential to provide road-maps for the process and how it is configured. This type of “static characteristic” that is not an input to emission equations is considered CBI by many facilities and they exercise great care protecting this technology-sensitive information.
- §§ 98.126(a)(3)-(6): ACC would note that the CBI determination for §98.126(a)(6) is consistent with those determinations made for the same information that is being reported under Subpart OO although this same information, *i.e.*, production volume, would not be considered CBI because it is an “input to a emission calculation” under the general sections of 98.126 (b) and (c).

As noted above, the annual emissions of each GHG by process as well as for equipment leaks reveals confidential information.

b. **Reporting for the Mass Balance Approach**

- §98.126(b)(2): In some cases the basic chemical equations for a process may have been placed in the public sector while at the same time there are other processes where balanced chemical equations have not been placed in the public sector. It would be inappropriate to assume that the CBI concerns are consistent across the entire industry. The production of certain chemicals is well understood in the industry. In other cases a product may be unique and/or export controlled and this information may be highly confidential. Where process stoichiometry is understood, the additional step of requiring the emission calculation inputs implicates confidential information because these inputs currently are confidential.
- §§98.126(b)(3) and (6) and 98.126(b)(3) and (4) of the original April 12, 2010 re-proposed rule: This information is confidential business information. Because the balanced chemical equation is public information, the mass of each reactant fed into the production process would provide competitors information on specific production quantities and process yields. This information is not in the public domain. The mass

and composition of the process inputs and outputs could also be used to determine the presence and elemental composition of proprietary additives. It is confidential information alone; in combination with the addition of the mass of product produced (§98.126(b)(7)), the mass of product emitted (§98.126(b)(4)), and mass of each byproduct emitted (§98.126(b)(5)), would provide competitors a detailed understanding of the manufacturing process at a particular Subpart L facility. Because some Subpart L facilities have invested substantial R&D in the millions of dollars and over 30 years of experience in developing unique process characteristics, the mass of reactants could be highly confidential information.

- §§98.126(b)(4) and (5): The information being reported under these subsections may not have been placed in the public domain. As indicated earlier, emissions are not always associated with the manufacture of a specific product. More importantly, the data elements in conjunction with reactant inputs and other outputs will provide one of the information pieces that is necessary to determine the process yield. It provides information on manufacturing formulas and process yields that could be used by a competitor to try to duplicate the manufacturing process. The mass and composition of the process inputs and outputs could also be used to determine the presence and elemental composition of proprietary additives. It is not public information.
- §98.126(b)(7): The mass and chemical formula of each fluorine-containing product produced by the process is confidential information. EPA has recognized this in its determination under §98.126(a)(6) and in Subpart OO where production volume information is being treated universally as CBI.

c. **Reporting for the Emission Factor and the Emission Calculation Factor Approach**

- §98.126(c)(1)-(3): Whereas information contained in other paragraphs of §98.126 would be sufficient alone to compromise trade secrets, the information contained in these three reporting elements is highly confidential because it could be used to determine the quantities and contents of all manufacturing streams. Since §98.126(a)(3) is simply the product of §§98.126(c)(1) and (2), reporting any two elements will allow for the third to be calculated. The information being reported in these sections could provide the mass and composition of all elements of the process. For example, a fluorinated-GHG product is manufactured using a series of processes, resulting in an isolated intermediate. These may include a variety of reactions and synthesis operations. Some of these materials are specialty fluids that are made in small volumes and have insignificant contributions to F-GHG emissions. While these rules do provide for some flexibility where process emissions are low, there are no “reporting” thresholds. Each process, regardless of the emissions, must be reported to the same level of detail. Where the mass removed from the process and sent to a destruction device is not reported elsewhere, it could be easily determined by material balance for each of the separate process steps. Since the quantity

of all these isolated intermediates are being reported under the subpart, the quantity of material being added to each subsequent process (isolated intermediate produced previously) would be known. The emission streams themselves and/or fugitive emission estimates could provide the elemental composition of these isolated intermediates. For some processes, the emissions from the process and the output from the process could provide a material balance for the entire process. Individual process yields could be easily calculated. The mass and composition of the process inputs and outputs could also be used to determine the presence and elemental composition of proprietary additives.

Much of this information would not assist the Agency or any outside party in verifying emissions. The emission factor itself would be based largely on operating conditions that are not contained in the reported information. For example, the emissions from a process may occur when the process vessel is vented during sample collection. The quantity of the emissions would be determined by the vessel pressure, temperature, head space, and individual vapor pressures. None of this information is being reported under the rule, but it would be contained in facility records. So whereas the proposed rules would require that a great deal of information be provided to outside parties on production schemes and quantities, process yields and composition of intermediates and final products, this actually provides very little information on the manner in which an emission estimate is made.

- §98.126(c)(4): Fugitive air emissions may be determined using various methods. For an operation that involves the handling of the final product, the composition of the fugitive air emission stream could easily be identical to the product content, since fugitive emissions are assumed to be reflective of the process fluid. Because this information is being reported by process and because all amounts are reportable, the composition of the product can be determined from this information. EPA has considered this type of composition information CBI under Subpart OO and under §98.126(a)(6). Normally reports of process fugitive emissions are aggregated for an entire facility or production operation. In addition, this emissions information typically will be reported as part of a chemical group, i.e., VOCs. Reporting this type of information by process in the specificity required under Subpart L could result in the disclosure of confidential business information.

***II. Which, if any, data that are inputs to emission equations are already publicly available, discernable from other publicly available data, or otherwise not sensitive for any reporter.***

Almost none of the inputs to emission equations are already publicly available. For some facilities some of this information may be available; for other facilities with confidential processes this information is not reported to agencies. Typically the latter type of facility would not be asked by agencies for this type of information. In the rare situation in which some of this information is requested, the facility is granted CBI protection or the facility and the agency agree to provide information in an alternative way that is not confidential. Accordingly, it is

inappropriate to assume that any of this data is “not sensitive to any reporter” (emphasis added). In publishing its CBI determinations on July 7, 2010, EPA failed to recognize that while some of this information may be “discernable from other publicly available data” for some facilities, for many other facilities it is not. This is especially true for Subpart L, where products may be unique and the processes used in their manufacture will have customized configurations. ACC would also point out that “static characteristics” that are not inputs to emissions can also be considered CBI, and these facilities exercise great care protecting technology-sensitive information. For some facilities, the products being manufactured are common commercial chemicals and detailed process and chemical information is available in the public sector. However for many other facilities, the products being manufactured are unique, potentially subject to export control requirements, and certain information is not released to the public sector.

Inputs to emission equations that are not routinely reported in the specific manner specified in §98.126 include:

1. Information on emissions of F-GHGs commonly will be reported both for air permit applications and in state emission inventory reports as part of a chemical group, e.g. volatile organic compounds (VOCs). Unless individual chemicals are considered Hazardous Air Pollutants (HAPs) (either individually or part of a HAP chemical group, such as glycol ethers) or subject to some other state reporting requirement, reports on the detailed composition of an individual vent stream by fluorinated GHG is not usually required and not reported at all sites. Even if emission reporting is done by an individual HAP, this would not lead to information on specific F-GHGs.
2. Descriptions of individual pieces of equipment that are contained in air permit applications may only be referenced when the equipment is dedicated to a specific product. In other cases, the equipment may receive a generic description that would not contain a listing of the specific products that are being manufactured using that equipment. Processes covered by National Emission Standards for HAPs may be required to report detailed information on “operating scenarios,” but emissions information is limited to HAPs and product specific identifying information is considered and handled as CBI. The use and emissions of HAPs would not be considered as sensitive as specific information on the composition of fluorinated-GHG because their use may be generic to many applications, i.e., xylene could be used as a cleaning solvent or for some other application – either way, it would not necessarily provide detailed information on a specific process.

For example, an F-GHG is produced in a flexible batch processing unit. That unit is currently subject to a number of air emissions regulations and construction and operating permits. Past permit applications have contained information on maximum emission rates of criteria pollutants and various reports may require information on these same parameters as well as HAPs or other state regulated materials. The facility will utilize the emission factor approach in determining and reporting emissions under this subpart.

§98.126(a)(2)(i) requires the reporting of “*Each fluorinated gas production process and all fluorinated gas production processes combined.*” The emissions information that is reported under §98.126(a)(2)(i), combined with the “mass of each fluorinated GHG emitted from each process vent (metric tons)” being reported under §98.126(c)(3), will in some cases provide sensitive trade secret information. If the process is a simple packaging operation, the emissions from the process may be determined by chemical engineering equations using the product constituent vapor pressures. In this case the chemical composition of the product can be determined from the emissions stream. Similar information could be extracted from data reported under §98.126(c)(4), “*The mass of each fluorinated GHG emitted from equipment leaks (metric tons),*” since the mass of fugitive emissions of each constituent will be directly proportional to the composition of each constituent. We note that EPA determined that none of this information was subject to CBI protection, but when this same information is reported pursuant to §98.126(a)(6), “the chemical formula and total mass produced of the fluorinated gas product in metric tons, by chemical and process,” EPA determined it is CBI. All of the above information on production outputs and F-GHGs from process vents and processes should be held confidential.

The CBI implications of reporting under the material balance method described in §98.123(b) are particularly onerous. For this rule, each process would be required to report complete information on the balanced chemical equation (§98.126(b)(2)). While EPA originally proposed to require only the mass of each reactant added under §§98.126(b)(3) and (6) (and not the formula), there would be little difficulty in determining how much of each reactant was added to and removed from the process. With the additional reporting of the mass of product produced (§98.126(b)(7)), mass of product emitted (§98.126(b)(4)), and mass of each byproduct emitted (§98.126(b)(5)), a detailed understanding of the process can be obtained. For some facilities, the basic chemical equations for a process may have been placed in the public sector. However for other facilities, this type of detailed information would provide competitors with information on specific production quantities and process yields, and create substantial harm to the competitive position.

***III. Additional calculation or measurement approaches for a particular subpart that would comparably measure or calculate GHG emissions but would not use data elements that you consider to be sensitive as inputs to emission equations.***

ACC believes that the intention of the MRR rule is to establish a national GHG emissions data base and not to assess compliance with individual permit or process limits or to evaluate local air quality impacts. A simple way for the Agency to address the many CBI concerns of industry would be to simply report these chemical emissions as an aggregation either in terms of total CO<sub>2</sub>e for a process or for an entire site. Aggregation is a method that would protect detailed process information, yet provide the public, regulatory authorities and policy makers with GHG emissions data. Some form of aggregation typically is the method used by air agencies to protect confidential business information.

There are no other calculations or measurement methods that could be used for all of the diverse sources that are regulated under this subpart. The various calculation methods that are listed in the rule were the result of an extensive evaluation by EPA which drew on significant input from the regulated companies. They represent the current practices in the industry.

In previous conversations with ACC, EPA representatives have suggested that Continuous Emissions Monitors (CEMs) might be an acceptable substitute. ACC would note that while CEMs could possibly be used on some air streams and for some constituents, they are not amenable for the universe of processes and vent streams in this source category. ACC also believes that it would be unfair to afford certain parties CBI protection simply because an operation may be compatible with this type of measurement method. Irrespective of these issues, the use of CEMs would not be economical and would not be effective in measuring all of the constituents of concern. The installed cost of a single CEM on a vent would be on the order of \$200,000. A large chemical facility can have more than 100 individual vent locations. Moreover, in addition to the cost of the CEMs, mass or volumetric flowmeters would also be required. The measurement devices might not be capable of measuring all constituents and separate analytical measurements would be required for some constituents. It is not clear how this data would be incorporated into a continuous measurement.

In addition to the above, even if a CEM were available for the constituent of interest, these measurement methods would be substantively compromised in batch processes where both mass flow and concentration measurements would need to be integrated. This technical limitation for this type of monitoring method is well understood in the industry even when source testing professionals are employed for this purpose.

***IV. Verification approaches that could be used to verify emission figures and that would not require reporting to EPA the specific data elements you consider sensitive.***

Aggregation of emissions information can be verified using the same traditional means used for reporting of air emission inventory information or air permitting compliance certifications: responsible company officer sign emission reports, and calculation records and other documents are retained on-site to support the reports. This approach would avoid the need to submit sensitive inputs to emission equations. In addition, if the Agency believes it is necessary at this time, third party audits could be used to verify emission information. This has been done already in the context of GHG reporting, in the area of climate inventory procedures and quantities. Audits of this type, if conducted at a reasonable frequency, may be an acceptable alternative for many sites.

In EPA's previous communications, ACC has been led to understand that the purpose of these broad requests for detailed process information were intended to provide the basis for future policy and rule development and not to "verify reported GHG emissions." ACC would point out that much of data being reported by EPA would do little in verifying emission estimates. For example under §§98.126(c)(1)-(3), the quantity of the activity measurement is used to convert

the process vent specific emission factor into the mass of each fluorinated GHG emitted. Based on the language in the request for comments, the purpose of reporting both the production quantity and the emission factor is presumed to allow EPA to verify that the mass reported in (c)(3) is correct. This is a simple multiplication and there is little value in reporting this information. It is unlikely that any errors or omissions will occur at this step in the emission calculation process. True “verification” of the emission factor could only occur by an evaluation of the detailed engineering calculations or emission testing results that serve as the basis of the emission factor. We would also point out that the production quantity being reported under these sections may be identical to the values being reported under Subpart OO where EPA has provided broad CBI protections.

## **Subpart O – HCFC-22 Production**

*Specific information identifying how public availability of any inputs to emission equations data elements would cause harm to any reporter.*

The following information was proposed by EPA not to be afforded treatment as CBI but should be treated as CBI:

- §98.156(b)(1), Annual mass of HFC-23 fed into the thermal oxidizer. The destruction of HFC-23 is equivalent to production which can correlate to HCFC-22 production quantity. Subpart OO treats this information as confidential, meaning that EPA already realizes the sensitive nature of such information. With such information, competitors can gain unfair advantage in understanding market competitiveness.
- §§98.156(a)(7) to (a)(10), Annual mass of HFC-23 generated, sold, destroyed off-site, and inventory. While ACC agrees that *emissions* of HFC-23 are not CBI, the underlying data and calculations used to derive the emissions through mass balance essentially provide production quantity, similar to the comment above. EPA already recognizes the business sensitive nature of production information.
- §98.156(a)(2), Loss Factor used to account for the loss of HCFC-22 upstream of the measurement. Emission factors in conjunction with TRI emissions of HCFC-22 can be used to back calculate production, or other production activity which is CBI. As noted above, EPA already recognizes the business sensitive nature of production information.

## Subpart P - Hydrogen Production

### *I. Specific information identifying how public availability of any inputs to emission equations data elements would cause harm to any reporter.*

#### Data elements that are inputs to emissions equations and CBI under Subpart P

Under §98.160 (Subpart P) of the MRR, EPA asks for operating data that has been used to calculate the emissions of CO<sub>2</sub> and minor combustion by-products, CH<sub>4</sub> and N<sub>2</sub>O. Specifically, EPA seeks reporting of:

- Monthly consumption of fuels, by type, used for hydrogen production (§98.166(b)(2))
- Monthly consumption of feedstocks, by type, used for hydrogen production (§98.166(b)(2))
- Monthly analyses of carbon content for fuels used for hydrogen production (§98.166(b)(5))
- Monthly analyses of carbon content for feedstocks used for hydrogen production (§98.166(b)(5))
- Monthly analyses of the molecular weight of gaseous fuels (§98.166(b)(6))
- Monthly analyses of the molecular weight of gaseous feedstocks (§98.166(b)(6))

Hydrogen manufacturers consider such data confidential business information and have taken measures to claim as CBI and protect such information from public disclosure due to the potential use by competitors and customers to negatively affect our competitive position. The basis for this representation is made below for each of the claimed data elements.

#### **a. Data Element(s)**

- Monthly consumption of fuels, by type, used for hydrogen production (§98.166(b)(2))
- Monthly consumption of feedstocks, by type, used for hydrogen production (§98.166(b)(2))

#### *Aspect of the Facility Revealed by Disclosure of Data Element*

Energy consumption represents the single largest (70-80<sup>+</sup>%) component of the variable operating costs of hydrogen production. Public disclosure of the actual consumption of the fuel and feedstock streams directly reveals total energy consumption, and hence the *major operational cost*. Further, disclosing the fuel and feedstock consumption, by type, provides an insight to the *energy sourcing options* exercised by the facility. In addition, by having to disclose the fuel and feedstock separately, information about the facilities *actual production* and its *process efficiency* can be determined.

*Basis of Harm upon Disclosure*

Understanding fuel and feedstock consumption provides insight to competitors and customers regarding a facility's actual operating costs and process efficiency. Such information can influence the competitive nature of current supply relationships and future business opportunities, both in the US and in foreign markets.

Understanding the actual selection among alternate fuel and feedstock choices provides further insight into actual operating costs and process capabilities. Some fuel and feedstock sourcing options may be considered "disadvantaged fuels:" by-product energy streams that have lesser value than primary fuels of commerce (e.g., natural gas). A facility which has developed commercial arrangements and process capability to employ such secondary energy sources holds a competitive advantage over facilities that may only have access to, or capability to use, primary energy sources as fuel and/or feedstock. While the availability of, and the conceptual potential to employ such disadvantaged fuels is known in the industry, public disclosure of the specific split between such secondary and primary energy sources, provides insight to competitors and customers regarding a facility's actual operating costs and process capabilities that the facility considered CBI.

As is demonstrated below, feedstock consumption data can provide a reasonably accurate estimate of a facility's actual production. Disclosure of actual production from a facility provides competitive information about the relative revenue and profitability of a production facility. When actual production is compared with nameplate capacity (information typically included in public documents, such as air permit applications), competitors and customers understand a facility's capacity utilization. Such information distorts the balance in competitive negotiations and commercial bids for increase or additional sales.

Further, and of utmost concern, is the ability of a competitor to make a reasonably accurate assessment of a facility's process efficiency by back calculation from the split between energy used as feedstock and fuel. The pathway for this "reverse engineering" is as follows:

1. Feedstock consumption can be used, applying well known process chemistry (stoichiometry) to calculate the amount of crude hydrogen product produced. This might be considered the "productive" portion of the facilities energy consumption – it yields product. This is a quick and effective means to obtain a reasonable estimate of actual hydrogen production for the facility.
2. Fuel consumption can be used to determine the amount of energy required to provide the process conditions (typically furnace temperature) to allow the feedstock to be converted into product hydrogen. The fuel consumption may be considered the "non-productive" of the facilities total energy consumption.
3. With the hydrogen production estimated from the feedstock consumption (step 1) and the energy required to sustain the conversion process (fuel consumption – step 2), confidential business information regarding the efficiency of the production process and facility design can be determined.

4. After correcting for the energy consumption of the endothermic and exothermic reactions to produce hydrogen (a value that can be calculated from known process chemistry and thermodynamics, and the production quantity of hydrogen from the reported “feedstock consumption” value), the remaining useful energy from fuel consumption provides an estimate of the thermal energy available for subsequent heat recovery, and hence steam production. Steam is a valued second product of hydrogen production and the amount of steam produced and exported provides further insight to the operating costs and revenue of a hydrogen production facility.

The high energy intensity of hydrogen production requires high process efficiency in order to remain competitive in the industry. Differences of as little as 1% in delivered efficiency can swing the economics of which technology or which supplier should be employed. Disclosure of the process information as outlined above creates a clear competitive threat, both for U.S. based production opportunities as well as international opportunities.

Industrial gas companies invest millions of dollars every year in process efficiency improvements in order to remain competitive in a very competitive industry. Any domestic or international competitor who can exploit publically disclosed information and thus short-circuit the discovery and implementation phases of such R&D has expropriated the investment of the actual innovators and gains the benefit at little or no cost. This stifles future innovation – in this case, innovation that leads to greater process efficiency, reduced energy consumption, and reduced greenhouse gas emissions – all stated goals of the EPA climate change program.

Further, disclosure, through back-calculation, of facility production provides actual production data that is not readily available, particularly on a facility by facility basis. U.S. Federal Trade Commission regulations typically preclude such disclosures among competitors due to the risk for such information to be misused in anti-competitive behaviors.

#### *Industry Efforts to Keep Data Confidential*

The industrial gases industry strives to protect the underlying data that indicates the primary cost/revenue position of their facilities and process designs. State (or air quality district) requirements for disclosure of criteria pollutant and/or GHG emissions either do not require submittal of the fuel consumption data elements EPA has asked for, or allow such data to be claimed and protected as confidential business information – regardless of whether such data is used in emission calculations. In some cases (e.g. California, Alberta, Ontario), such data is verified by a third party entity, bound by confidentiality provisions of the reporting rules and/or the contract with the reporting facility. In all cases, the protected data is available for review by the regulatory authority on an “as requested” basis – with confidentiality provisions employed.

In air permit applications (for initial construction, modifications or renewals), facility capacity and firing rates (e.g., fuel consumptions) and, only when necessary, feedstock consumption rates, are typically provided at maximum operating conditions with, where

appropriate, a margin of safety applied to insure continuous compliance. Fuel/feedstock characterization (alternate types of fuel/feedstock types and/or sources) is only provided in a broad range to reflect the potential diversity of sourcing alternatives and, where necessary, reflect the maximum emission range that could result from the differing chemical compositions of the alternative fuel/feedstock. Actual capacity, firing rates, fuel and feedstock source and consumption are not provided in such applications.

As demonstrated above, it is not difficult to calculate a reasonable estimate of a facility's actual hydrogen production given the reported feedstock consumption, characterization, and well known process chemistry. Even EPA has agreed that disclosure of a facility's actual production is considered CBI. While reporting the "Annual quantity of Hydrogen Produced (No CEMS)" (§98.166(b)(3)) is required under the MRR, Table A-1 of the CBI Proposal<sup>3</sup> indicates such data is "Production/Throughput Data that are Not Inputs to Emission Equations" and thus considered CBI.

Industry participants submitted comments to EPA during the proposal phase of the MRR, seeking assurance that confidentiality provisions would be adequate to protect such data reporting. Had EPA been clearer in the proposed rule about the granularity of the data being considered for disclosure, industry participants would have commented even more forcefully on the need to provide confidentiality protection to such data.

When faced with the same concerns regarding the proposed release of similar information under California's mandatory GHG reporting rules, ACC member companies commented vigorously and successfully to reduce the data reporting requirements under California's rule. We routinely request, and are granted, confidentiality protection under California's rules. Some firms with operations in jurisdictions outside the U.S. (e.g. Alberta and Ontario, Canada) continue to make the same requests that are granted under their respective reporting rules as well.

#### Similar Publicly Available Information

As discussed above, maximum fuel consumption rates are often included in air permit applications, although such data reflect more generalized operating conditions and provide a more crude approximation of process efficiency. Maximum production rates are similarly represented, but do not reflect actual production in any time period. Actual production data is not readily available, particularly on a facility by facility basis. U.S. Federal Trade Commission regulations typically preclude such disclosures among competitors due the risk for such information to be misused in anti-competitive behaviors.

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<sup>3</sup> Proposed Confidentiality Determinations for Data Required Under the Mandatory Greenhouse Gas Reporting Rule and Proposed Amendment to Special Rules Governing Certain Information Obtained Under the Clean Air Act; Proposed Rule – July 7, 2010

**b. Data Element(s)**

- Monthly analyses of carbon content for fuels used for hydrogen production (§98.166(b)(5))
- Monthly analyses of carbon content for feedstocks used for hydrogen production (§98.166(b)(5))
- Monthly analyses of the molecular weight of gaseous fuels (§98.166(b)(6))
- Monthly analyses of the molecular weight of gaseous feedstocks (§98.166(b)(6))

*Aspect of the Facility Revealed by Disclosure of Data Element*

Energy consumption represents the single largest (70-80<sup>+</sup>%) component of the variable operating costs of hydrogen production. Public disclosure of the carbon content and molecular weight of the fuel and feedstock streams reveals characteristics about the compositional nature of the individual fuel/feedstocks and their sources. While this is no revelation for common primary fuels of commerce (e.g., natural gas), it is a unique characterization of alternative, secondary energy sources. Such compositional characterization allows determination of energy value and hydrogen content (as H<sub>2</sub>), values which reflect the inherent value of such alternative energy streams as fuel and feedstock, respectively

Since energy is a major component of the facility operating cost, insights into the relative “value” of individual energy sources would potentially compromise competitive advantages due to superior energy sourcing alternatives. Further, disclosure that provides insight into the range of fuel and feedstock compositional variability reveals insights into the facility’s process capability to productively use alternative energy sources – another aspect of potential competitive advantage.

*Basis of Harm upon Disclosure*

Understanding the potential trade-offs between alternative fuel/feedstock options (based on compositional differences and hence “value” of the unique attributes noted above), particularly when coupled with disclosure of their corresponding consumption, provides insight to competitors and customers regarding a facility’s actual operating costs and process capability. Such information can influence the competitive nature of current supply relationships and future business opportunities, both in the US and in foreign markets.

Some fuel and feedstock sourcing options may be considered “disadvantaged fuels:” by-product energy streams that have lesser value than primary fuels of commerce (e.g., natural gas). Alternatively, such secondary energy streams may have varying amounts of hydrogen content (as H<sub>2</sub>) which, when employed as feedstock, allow for increased product yield without corresponding feedstock consumption and reduced fuel consumption. Disclosure of the carbon content and molecular weight, along with general descriptions of the sources (routinely provided as public information in air permit applications) enables a knowledgeable supplier of the alternative energy source to make a more “informed” assessment of the

relative value of the alternative energy source (relative to other available fuels/feedstock choices) and can influence the availability and price a facility may incur.

Similarly, disclosure which reveals the potential advantaged value of alternative energy supplies is a reflection on the relative cost of production and thus informs competitors and customers on the competitive position of a specific facility's supply.

Further, disclosure that provides insight into the range of fuel and feedstock compositional variability reveals insights into the facility's process capability to productively use alternative energy sources. A process/facility design that has incorporated features that allow for the enhanced flexibility to utilize such secondary energy sources represents a potential competitive advantage. Since such operating flexibility can offer opportunities for reduced operating cost, disclosure of this operating flexibility reveals the design advantage. Knowledge of this operating flexibility provides insights relative to both existing production facilities (and their competitive position relative to customers and competitors) as well as indicates advantages in potential process design for future hydrogen supply opportunities in the U.S. and internationally.

#### Industry Efforts to Keep Data Confidential

The industrial gases industry strives to protect the underlying data that could disclose the primary cost/revenue position of their facilities and process designs. State (or air quality district) requirements for disclosure of criteria pollutant and/or GHG emissions typically do not require submittal of the fuel composition data elements EPA has asked for in Part 98, or allow such data to be claimed and protected as confidential business information – regardless of whether such data is used in emission calculations. In some cases (e.g. California, Alberta, Ontario), such data is verified by a third party entity, bound by confidentiality provisions of the reporting rules and/or the contract with the reporting facility. In all cases, the protected data is available for review by the regulatory authority on an “as requested” basis – with confidentiality provisions employed.

#### Similar Publicly Available Information

As discussed above, a range of fuel composition may be included in air permit applications, although such representations reflect more generalized operating conditions. Composition of feedstocks is not typically included in air permit applications.

## ***II. Which, if any, data that are inputs to emission equations are already publicly available, discernable from other publicly available data, or otherwise not sensitive for any reporter.***

Virtually none of the data elements described above are already publicly available. What can be publicly available are general industry design aspects and theoretical yields; the data elements we seek to protect relate to the actual performance characteristics of the subject facilities.

- General industry knowledge about potential alternate fuels and feedstocks provides information about what might be theoretically possible or is known to have been achieved in the industry. Providing the actual fuel and feedstock characteristics (e.g. carbon content and molecular weight) describes what is actually achievable at a specific facility.
- General industry knowledge about typical process efficiencies provides information about what the potential energy consumption, and hence energy cost, could be for a given process design/configuration. Providing the actual fuel and feedstock consumptions describes what efficiency is actually achievable at a specific facility.
- General industry knowledge of stated nameplate capacity of a facility provides information about what the maximum production might be for that facility. Similarly, aggregated trade association data about total production can yield an overall estimate of capacity utilization. Providing feedstock consumption data that allows actual production to be reliably estimated further describes the actual process efficiency and capacity utilization of a specific facility.

In cases where a competitor or customer seeks detailed process efficiency information by obtaining proposals from engineering firms skilled in the science/art of such process design, such disclosures will be constrained by confidentiality/non-disclosure agreements. Further, additional process design enhancements, discovered and implemented by current producers, will not be known to the third-party engineering firms and thus cannot be included in their technology offerings in response to a business inquiry from a customer or competitor of a current producer. Public disclosure of the resulting efficiency improvements implemented in actual operating facilities erodes the competitive position created by existing producers' investment in process analysis and improvement.

***III. Additional calculation or measurement approaches for a particular subpart that would comparably measure or calculate GHG emissions but would not use data elements that you consider to be sensitive as inputs to emission equations.***

At a minimum, allowing the aggregation of fuel and feedstock consumption data would help obscure and protect the specific information regarding actual efficiency and production. Such aggregation would not compromise the calculation of the CO<sub>2</sub> emissions per equations P-1, P-2, and P-3 under §98.163(b). This approach would not compromise data accuracy at all, nor would it require any increased cost.

Further, EPA should allow the consumption to be reported on a “carbon feed” basis – not requiring the disaggregation of fuel/feedstock by type (e.g., tons of fuel/feedstock carbon input to the process). This implies consolidation of the terms “Fdstk<sub>n</sub> \* CC<sub>n</sub>” in equations P-1, P-2, and P-3 (§98.163(b)) into a single term “FFdstkCarbon” (in units of “kg carbon”). Such a method will still rely on calculation algorithms based on fuel/feedstock consumption and characterization

(carbon content and molecular weight) that must be protected as CBI. Again, this approach would not compromise data accuracy, nor require any increased cost.

Additionally, facilities should be given sufficient time to consider and implement alternative, direct emission measurement techniques, if feasible from a technical and resource perspective. This would obviate the need for the data elements otherwise relied upon in emission calculation equations. EPA has already accepted the accuracy of CO<sub>2</sub> Continuous Emissions Monitoring System (CEMS) reported emissions values (following the appropriate CEMS assurance protocols) – although it is likely the acceptable inaccuracy inherent in using CEMS are at least as large, and probably larger, than estimates from the calculations using measured consumptions of cost-bearing streams (e.g., natural gas from supply billing meters subject to commercial calibrations standards). EPA should acknowledge that CO<sub>2</sub> CEMS measurement techniques are very costly for facilities that may not have other CEMS already installed to satisfy other environmental compliance requirements (e.g., NO<sub>x</sub>, CO, etc.). ACC believes that this is an unacceptably costly alternative to protecting CBI that could otherwise be protected by reasonable Part 98 reporting rules. Estimates for facilities with no current CEMS systems can require \$100,000 - \$300,000 to design and install a CO<sub>2</sub> CEMS, and have ongoing operations costs of approximately \$10,000 - \$25,000 per year, which is a great cost for many facilities to absorb when compared to utilizing emission calculations.

***IV. Verification approaches that could be used to verify emission figures and that would not require reporting to EPA the specific data elements you consider sensitive.***

EPA should allow for self-certification of the reported results, with the same legal liabilities associated with any factual misrepresentations borne by the facility's responsible official submitting the data. This approach is deemed sufficient for other EPA and state reporting requirements and should be acceptable for GHG emission reporting. EPA has not explained why this approach is unacceptable. Underlying data would be retained solely at the facility and be made available, upon request, for review by EPA or its designated contractor, with all the appropriate confidentiality protections employed.

An alternative, though less attractive approach is for EPA to allow subject sources to employ third-party verification and thereby limit the extent of back-up, calculation supporting data that must be reported, in this way allowing sources to protect process and operating data deemed CBI by them. This would actually improve the confidence and integrity of the reported emissions values, since a more detailed, independent review of the underlying data will be performed. Unfortunately, this approach is a costly alternative for protecting CBI that could otherwise be protected by reasonable EPA reporting rules.

## **Subpart X – Petrochemical Production**

### ***I. Specific information identifying how public availability of any inputs to emission equations data elements would cause harm to any reporter.***

The material balance compliance approach requires the input of extensive process data such as that related to feed rates and production volumes, among other data. Companies consider and treat this data as confidential because its public disclosure can provide competitors, feedstock suppliers and customers insight into the company's operations – from raw material needs, to inventories, to production capacity – fundamentally disadvantaging US manufacturers subject to Subpart X in what is increasingly a global marketplace.

Furthermore, ACC believes that the data inputs required by 40 CFR 98.246(a)(4) and (5) are considered process data, not emissions data, that should be considered CBI even though these data are required for emission calculations. Industry prefers to maintain transparency with the public and EPA, and the industry has no issue with making publicly available the quantity of greenhouse gases directly emitted to the atmosphere from its processes. Likewise, industry does not object to submitting material balance information to the EPA provided it is held by EPA as CBI. However, we strongly object to its release to the public.

Additional specific information identifying how public availability of the emission equation data inputs that make up material balances will cause harm to the reporting company include:

- Reporting of raw material usage and production rates will put the reporting company at a severe competitive disadvantage because it can be used to:
  - Assess the overall efficiency and capabilities of a given petrochemical process;
  - Determine a company's cost basis and pricing structure; and
  - Identify the limits of our feedstock flexibility.
- Disclosing material balance information can provide competitors these same insights into a company's derivative products not subject to this rule.
- The public availability of this information will allow feedstock suppliers to evaluate feedstock demand fluctuations and set prices accordingly.
- Similarly, a company's customers will undoubtedly scrutinize these data to identify periods of high production volumes during which they may be able to purchase products at reduced prices.
- Detailing of raw materials and product streams will make vulnerable industry's proprietary facility designs unrelated to the desired outcomes of GHG emission reporting and again negatively impacting the reporting company's competitive advantages.

- Release of this information may further adversely impact publicly traded companies as Wall Street analysts and the financial media scrutinize these data for trading purposes. That this occurs is exemplified by the fact that petrochemical trade journals constantly monitor state and EPA release report filings to evaluate whether release events will adversely impact the supply of a given petrochemical.

***II. Which, if any, data that are inputs emission equations are already publicly available, discernable from other publicly available data, or otherwise not sensitive for any reporter?***

- ACC is not aware of any monthly reporting of actual quantities of petrochemical process feedstocks or products either in a public or confidential forum.
- Projected maximum hourly and projected annual production rates may be contained in air permit applications, but this information is stamped "Business Confidential" and is treated as "Business Confidential" by state permitting agencies. This information typically is not included in permit terms and conditions.

***III. Additional calculation or measurement approaches for a particular subpart that would comparably measure or calculate GHG emissions but would not use data elements that you consider to be sensitive as inputs to emission equations.***

ACC believes that one approach for this subpart is to adopt the flexibility to use Subpart PP methodologies in Subpart X for process vents, or the ability to utilize the Subpart PP calculation methodology for CO<sub>2</sub> emissions from process vents. Utilizing Subpart PP calculation methodologies in Subpart X would help industry avoid the use of a mass balance based equation and subsequently avoid the public reporting of CBI.

CO<sub>2</sub> emissions from Subpart X units are comparable in mass to the CO<sub>2</sub> emissions from natural gas boilers for steam generation which require Subpart C Tier 2 methodology. However, to directly measure emissions in Subpart X necessitates the use of Subpart C Tier 4, which is considerably more stringent than the other Subpart C Tier calculations. Tier 4 methodology requires a CO<sub>2</sub> CEMS which is not practical in all situations. We do not believe that CO<sub>2</sub> emissions in Subpart X require Subpart C Tier 4 standards; rather, CO<sub>2</sub> being sent to third parties for control should be allowed to calculate using Subpart PP.

We respectfully request altering the calculation methodology to provide the ability to substitute information calculated under Subpart PP with the applicable CO<sub>2</sub> emission vents in Subpart X. Subpart PP currently requires the calculation of CO<sub>2</sub> streams sent offsite from a Subpart X facility. The current methodology requires that the CO<sub>2</sub> streams be double reported under both Subpart X and Subpart PP. Rather than double reporting the CO<sub>2</sub>, we suggest providing the

flexibility in Subpart X to substitute Subpart PP values for CO<sub>2</sub> streams. Companies would report all other emissions calculations in Subpart X consistent with §98.243(b).

Another suggestion is to require that the monthly raw material usage rates and production rates be recorded by the owner/operator, and that only the annual CO<sub>2</sub> mass emission rates from process operations and process off-gas combustion (as calculated by Equation X-4) be reported. As a verification approach, EPA could then compare annual CO<sub>2</sub> mass emission rates between petrochemical product types to see if any values are potentially inaccurate.

EPA's publication, "Technical Support Document for the Petrochemical Production Sector: Proposed Rule for Mandatory Reporting of Greenhouse Gases" contains information on the annual production capacity of each petrochemical process covered by this rule so EPA should be able to review annual CO<sub>2</sub> emissions along with this information to verify the reported numbers.

Some Subpart X facilities which are required to report GHG emissions by material balance have process vents that contain a mixture of GHG compounds (e.g. methane and CO<sub>2</sub>) and hydrocarbons. These process vents are frequently routed to a combustion unit (typically a boiler) for energy recovery. Compliance with Subpart X will result in these GHG emissions associated with these streams being double counted – under both Subpart X and Subpart C. We respectfully request that such facilities be allowed to report GHG emissions pursuant to Subpart C in lieu of complying with Subpart X. This alternative method of compliance would increase the accuracy of the source's GHG emissions reports by eliminating the double counting of these emissions, add compliance flexibility for the subject sources and would allow some sources to avoid having to release mass balance information the sources consider CBI. This amendment could be made as follows:

#### §98.240 Definition of Source Category

(g) A petrochemical production process that directs its GHG emissions subject to Subpart X to a Subpart C covered combustion unit is not part of the petrochemical source category.

In addition to the alternative methods listed above, EPA could add further flexibility to this subpart by allowing facilities to use both a mass balance and continuous emissions monitoring system (CEMS) for a petrochemical process unit. EPA rejected this approach in the final rule (see 74 Fed. Reg. 56322) based on, it appears, the fact that the entity proposing it had not suggested a technique to reconcile the use of CEMS with a material balance. One instance where this is possible is when a portion of a source category has a distinct intermediate feedstock and a distinct product, both with measureable carbon contents. This portion of the subcategory could easily avail itself of the material balance option, leaving the other portions of the source category, i.e. the process emissions from sources that precede the distinct feedstock or are after the distinct product, to rely on CEMS. The CEMS data and the material balance data could then be compiled for a total source category GHG emissions number. This added flexibility would

maintain the current accuracy of the emissions for the process unit but would alleviate the concerns of at least one Subpart X subject company of having to divulge CBI.

Finally, many facilities made the decision prior to 2010 to use the material balance approach to comply with Subpart X with the understanding that the material balance calculations and data would be afforded CBI protection. If EPA agrees to allow facilities to use both the material balance and CEMS methodologies, such facilities should be afforded a compliance period in which to install the required CEMS and put in place the QA/QC programs, and should not be required to disclose the material balance information they consider CBI that has been relied on to calculate GHG emissions prior to the time required to get the CEMS installed and operational.

## **Subpart EE – Titanium Dioxide Production**

*Specific information identifying how public availability of any inputs to emission equations data elements would cause harm to any reporter.*

Within the TiO<sub>2</sub> business, there is significant risk from the exposure of CBI to public or competitive factions. We know that emerging and competitive TiO<sub>2</sub> manufacturers – particularly in China – are actively engaged in elaborate and intricate searches for further insight into the technology and operations used by better and larger scale producers and the efficiency specifics therein. Our member companies have worked hard for many years to safeguard the CBI aspects of their processes and must be allowed to continue to do so.

The proposed non-CBI determinations for Subpart EE that ACC is contesting are as follows:

- Any disclosure of Annual Production Capacity (§98.316(a)(3)) and/or Monthly Production of Titanium Dioxide (§98.316(b)(8)). This information provides competitive interests with direct intelligence relating to (1) the market supply and availability of TiO<sub>2</sub>, (2) the relative cost of manufacture based on the calculated utilization of capacity rating, and (3) product pricing flexibility or inflexibility based on (1) and (2). If this intelligence is acquired, it would be used against the U.S. manufacturer either in a small increment of business (e.g., a single developing country) or on a larger basis (e.g., the entire Asia-Pacific region).
- Similarly, although less directly, the release of Calcined Petroleum Coke Consumption (§98.316(b)(6)) and/or Monthly Carbon Content Factor of Petroleum Coke (§98.316 (b)(9)) data elements allow competitive interests to calculate information about processes that our members consider CBI.
- The Number of Separate Chloride Process Lines Located at the Facility (§98.316(b)(14)) falls into the same category as Production and Capacity CBI noted above.