

May 5, 2011

VIA ELECTRONIC FILING

EPA Docket Center
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail Code: 28221T
Washington, D.C. 20460
ATTN: Docket EPA-HQ-OAR-2011-0083

RE: Deferral for CO₂ Emissions From Bioenergy and Other Biogenic Sources Under the Prevention of Significant Deterioration (PSD) and Title V Programs: Proposed Rule, 76 Fed. Reg. 15,249 (Mar. 21, 2011)

The Renewable Fuels Association (RFA) respectfully submits these comments on the U.S. Environmental Protection Agency's (EPA) proposed Deferral for CO₂ Emissions from Bioenergy and Other Biogenic Sources under the Prevention of Significant Deterioration (PSD) and Title V Programs, 76 Fed. Reg. 15,249 (Mar. 21, 2011). RFA is the national trade association for the domestic ethanol industry. Our membership includes ethanol producers and suppliers, gasoline marketers, agricultural organizations and state agencies dedicated to the continued expansion and promotion of fuel ethanol.

For decades, the ethanol industry has moved this country toward increased use of cleaner burning fuels and independence from foreign sources of petroleum, all while continually making dramatic improvements in the energy efficiency and overall sustainability of the production process. Indeed, ethanol facilities already use the best available control technology and continue to develop advanced technologies to reduce energy use and, therefore, greenhouse gas (GHG) emissions.

RFA submitted comments on EPA's Call for Information: Information on Greenhouse Gas Emissions Associated with Bioenergy and Other Biogenic Sources, 75 Fed. Reg. 41,173 (July 15, 2010), which are incorporated by reference and attached to these comments. As indicated in those comments, while RFA generally supports a national policy to address climate change, inclusion of biogenic GHG emissions in determinations of applicability of the PSD or Title V Permitting Programs is not justified, runs afoul of accepted national and international GHG accounting methods, and is contrary to public policies enacted to encourage development of a robust renewable fuels industry in the United States. In short, RFA believes EPA must follow its own long-standing policy of treating biogenic CO₂ emissions as carbon neutral with respect to PSD and Title V permitting.

In its proposal to defer their inclusion, EPA indicates it has authority to provide a broad exemption for biogenic CO₂ emissions for purposes of PSD and Title V permitting, which is supported by the evidence submitted by the public in commenting on the Tailoring Rule and EPA's Call for Information. RFA agrees and strongly supports a permanent exemption for biogenic CO₂ emissions. We believe a failure by EPA to exempt biogenic emissions from biofuels production and combustion would have devastating impacts on the existing bioenergy industry and would significantly threaten further development of renewable energy sources. In addition, such a shift in the handling of biogenic CO₂ emissions would, in fact, serve to increase GHG emissions by continuing to favor fossil fuels over renewable energy sources.

Although EPA identifies several alternative methods of accounting for biogenic CO₂ emissions, each has its own complications and does not change the fact that EPA has not found that biogenic CO₂ emissions endanger public health or the environment, as opposed to CO₂ emissions from the combustion of fossil fuels. Nonetheless, among the potential alternatives identified for an accounting methodology, if EPA does not provide a categorical exemption, EPA should utilize the feedstock-based approach. In particular, planted crops such as corn are regenerated annually. Thus, the carbon cycle for planted crops is rapid and does not raise the concerns identified by opponents of using biomass and noted by EPA as requiring further review. EPA should not, however, impose a case-by-case, facility specific analysis. We agree that such an analysis would be "prohibitively time-consuming and complex for facilities and permitting authorities." 76 Fed. Reg. at 15,259.

While RFA believes EPA can, and should, permanently exempt biogenic CO₂ emissions based on carbon neutrality, RFA believes EPA should, at a minimum, defer the inclusion of biogenic emissions to give EPA time to consider these issues. However, RFA has several concerns regarding the proposed implementation of this deferral and with how EPA will conduct this review. In particular, EPA's proposed revision to the definition of "subject to regulation" does not necessarily allow for a deferral for three years of biogenic CO₂ emissions given EPA's commitment to issue new source performance standards for utilities and oil refineries in 2012. In addition, EPA does not provide States with sufficient time to have any required revisions or legislation to implement this proposed change in the definition by July 1, 2011. EPA must take additional action, as necessary, to ensure the three-year deferral can be effectuated.

EPA has indicated it needs the deferral period to further review the carbon cycles of various types of biomass. While RFA appreciated the work of EPA on the Renewable Fuel Standard and continues to work with EPA on its effective implementation, RFA did note several concerns with the peer review process in that case. Thus, RFA urges EPA, with respect to any independent panel review used as part of its consideration during this deferral period, to engage in an open and transparent process to ensure objectivity and participation by the public. In particular, EPA should, at a minimum and consistent with peer review guidance, allow stakeholders to nominate members of the panel, which may not be excluded purely on the grounds that they may have ties to industry, should provide a voice representing all

EPA Docket Center

May 5, 2011

Page 3

stakeholder interests, should allow the public to comment on the charge questions to the panel, and should allow the public to provide comments to the panel itself.

RFA welcomes the opportunity to work with EPA on this issue, but urges that any action by EPA consider the extent of EPA's authority under the Clean Air Act, the purposes of the PSD and Title V Permitting Programs, and the national goals of moving away from dependence on fossil fuels and foreign sources of energy.

* * *

RFA appreciates the opportunity to comment on this important matter. Please feel free to contact me at (202) 289-3835 with any questions or comments.

Sincerely,

Bob Dinneen

A handwritten signature in black ink that reads "Bob Dinneen". The signature is written in a cursive style with a long horizontal stroke at the end.

President & CEO
Renewable Fuels Association

**Comments of the Renewable Fuels Association on
Deferral for CO₂ Emissions From Bioenergy and Other Biogenic Sources Under the Prevention
of Significant Deterioration (PSD) and Title V Programs; Proposed Rule
76 Fed. Reg. 15,249 (Mar. 21, 2011)**

EPA's "Tailoring Rule" addresses how to determine when a stationary source is a major stationary source subject to permitting requirements under the Clean Air Act's Prevention of Significant Deterioration (PSD) and Title V programs based on greenhouse gas (GHG) emissions. In the final Tailoring Rule, EPA, without explanation, changed its long-standing policy to treat biogenic CO₂ emissions as carbon neutral, asserting only that the proposed Tailoring Rule did not address the issue of exemptions for biomass combustion or biogenic emissions and that EPA did not consider such emissions in developing its legal rationale supporting the Tailoring Rule. 75 Fed. Reg. 31,514, 31,590-31,591 (June 3, 2010). EPA also indicated, however, that it would seek further comment on the issue, which it did through a Call for Information, 75 Fed. Reg. 41,173 (July 15, 2010). As a result of the information provided by the public and in response to a petition for reconsideration submitted by the National Alliance of Forest Owners,¹ EPA determined that it should further consider the inclusion of biogenic CO₂ emissions for purposes of PSD and Title V permitting.

As part of its response to the petition for reconsideration, EPA's Proposed Rule would defer for three years the inclusion of CO₂ emissions from bioenergy and other biogenic sources, which are referred to as "biogenic CO₂ emissions," in determining the applicability of stationary source PSD and Title V permitting requirements. During this three-year period, EPA proposes "to conduct a detailed examination of the science, to engage with an independent scientific panel and then, if appropriate, to initiate a notice and comment rulemaking to implement an accounting approach." 76 Fed. Reg. at 15,259. EPA recognizes that it has authority "to establish exemptions 'when the burdens of the regulation yield a gain of trivial or no value.'" *Id.* at 15,261 (quoting *Alabama Power Co. v. Costle*, 636 F.2d 323, 360 (D.C. Cir. 1980)). EPA further found that it "has sufficient information at this time to conclude that at least some biomass feedstocks that may be utilized to produce energy have a negligible impact on the net carbon cycle . . ." *Id.* As such, EPA has authority, and support, to simply exempt biogenic CO₂ emissions, rather than defer their inclusion in PSD/Title V applicability determinations for only three years. If EPA subsequently determines that certain biogenic CO₂ emissions also endanger public health and welfare, it can then utilize its authority under the Clean Air Act to regulate such emissions. In fact, EPA has more than ample support to find that planted crops, which regenerate annually (as opposed to the 10-15 years EPA found was "a relatively short period of time" for residue material to decompose and, thus, have a "negligible impact on the carbon cycle"), have a rapid carbon cycle to support a finding of carbon neutrality. 76 Fed. Reg. at 15,261.

¹ Because EPA's reversal of position in the final Tailoring Rule with respect to biogenic emissions, EPA properly granted the petition for reconsideration.

Alternatively, RFA agrees that EPA has authority to defer the inclusion of biogenic CO₂ emissions in determining applicability of PSD and Title V permitting. However, it has concerns regarding the proposed implementation of this deferral, as further outlined below.

I. EPA SHOULD POSTPONE THE JULY 1, 2011 DATE FOR GREENHOUSE GASES TO TRIGGER PSD PERMITTING REQUIREMENTS ENTIRELY.

The Tailoring Rule established a phasing-in of facilities that will become subject to GHG emissions. Starting July 1, 2011, GHGs can directly cause a source to be considered “major” for purposes of the PSD and Title V permitting programs and increases in GHG emissions can trigger the modification requirements of the regulation. The Proposed Rule indicates that EPA is seeking to undergo an expedited rulemaking to defer the inclusion of biogenic CO₂ emissions in the PSD and Title V permitting requirements. But, States are not prepared to implement the program beginning on July 1, 2011, and EPA’s Proposed Rule addresses a significant part of the current Tailoring Rule for many facilities. Moreover, there are pending petitions for reconsideration regarding EPA’s position that GHGs can trigger PSD and Title V permitting under the statutory language, which have requested a stay of the rule, as well as pending Court cases.² Thus, while the proposal is correct in trying to move quickly to address concerns before July 1, EPA’s action falls short of what is required. EPA should then defer the July 1, 2011 trigger date entirely.

EPA has, in fact, recognized that facilities and states are simply not ready to implement a GHG permitting program. After the Tailoring Rule was finalized, EPA acted to defer the January 2, 2011 trigger date for certain sources, because EPA found the Tailoring Rule moves too quickly to implement PSD for GHGs (under the Agency’s current interpretation of the statute).³ Under the Tailoring Rule, a source or modification that would be major only for GHGs must begin actual construction prior to July 1, 2011, in order to avoid PSD applicability for GHGs and for all other attainment pollutants that trigger the significance levels. EPA has also required that in addition to obtaining the minor New Source Review (NSR) permit, a facility must begin its construction such that even if a source obtains a minor NSR permit in June, it must rush to start construction to avoid the permitting requirements. However, in many states,

² The underlying premise of the Proposed Rule is that GHGs are able to trigger PSD even though there is no National Ambient Air Quality Standard (NAAQS) for GHGs. As outlined in the comments RFA joined in submitting to EPA on the Tailoring Rule, this premise is incorrect. Congress contemplated that only criteria pollutants can trigger PSD permitting requirements. RFA’s comments on the proposed Tailoring Rule are incorporated herein by reference. See EPA-HQ-OAR-2009-0517-5126.1; EPA-HQ-OAR-2009-0517-5181.1.

³ For example, in the case of the Avenal Power Center, Assistant Administrator McCarthy determined that the facility should be grandfathered for GHG PSD requirements since it had a complete permit application filed and its permit experienced delays, notwithstanding EPA’s clear statements in the final Tailoring Rule that grandfathering based on applications would be inappropriate. Decl. of Regina McCarthy, *Avenal Power Center, LLC v. EPA*, Case No. 10-cv-00383-RJL (D.D.C. filed Jan. 31, 2011).

the minor NSR permitting backlog is significant and obtaining the required permits to begin construction may not be possible. Thus, there is even greater justification for deferring the July 1, 2011 trigger date, which brings far more sources into the program, than the January 2, 2011 trigger date that applied only to sources that otherwise would be required to obtain a PSD permit based on non-GHG emissions.

In support of the July 1, 2011 date to bring sources into the PSD permitting program based solely on GHG emissions, EPA merely noted that it believed there was sufficient time for sources to “begin actual construction” before July 1, 2011. 75 Fed. Reg. at 31,594. But this unsupported belief is incorrect. Minor NSR permitting can take well over a year, particularly when one considers the potential for appeals from members of the public and other regulatory approvals that may apply.

Given these facts, and in light of the pending petitions for reconsideration and litigation challenging whether non-criteria pollutants can trigger PSD in the first instance, EPA should defer the July 1, 2011 trigger date to allow time for resolution of the litigation in these cases or at least until permit backlogs are sufficiently cleared for projects that were being planned when the Tailoring Rule was issued. By 2013, the litigation in the U.S. Court of Appeals for the D.C. Circuit challenging EPA’s suite of GHG rules should be resolved and EPA will be able to provide sources (and the implementing States) with more certainty regarding the applicable regulatory requirements.

II. EPA HAS AUTHORITY TO EXEMPT BIOGENIC CO₂ EMISSIONS FROM THE PSD AND TITLE V PERMITTING PROGRAMS.

EPA states in the proposal that the following categories of emissions would constitute biogenic CO₂ emissions:

- CO₂ generated from the biological decomposition of waste in landfills, wastewater treatment or manure management processes;
- CO₂ from the combustion of biogas collected from biological decomposition of waste in landfills, wastewater treatment or manure management processes;
- CO₂ from fermentation during ethanol production;
- CO₂ from combustion of the biological fraction of municipal solid waste or biosolids;
- CO₂ from combustion of the biological fraction of tire-derived fuel; and
- CO₂ derived from combustion of biological material, including all types of wood and wood waste, forest residue, and agricultural material.

RFA agrees that these all constitute biogenic CO₂ emissions, but also clarifies that CO₂ emissions from the combustion of renewable fuels, such as ethanol and biodiesel, in stationary power

units also constitute biogenic CO₂ emissions. For example, ethanol- and biodiesel-fueled power generators can be used for applications such as powering irrigation pumps. There is no reason to limit the exclusion to the list above and EPA should clarify in the final rule that the CO₂ emissions from the combustion of liquid biofuels, such as ethanol, in engines is intended to be within the scope of the emissions subject to the deferral. Therefore, EPA should add the following to its list of examples:

- CO₂ from combustion of liquid biofuels in stationary power units.

All of these examples are appropriate for exclusion. Several of them examples identify renewable sources of energy or the processes involved in producing them that provide numerous benefits compared to combustion of fossil fuels. In particular, these emissions do not contribute to climate change because renewable sources of energy are “carbon neutral.” Thus, RFA believes that EPA has the authority to permanently exclude biogenic CO₂ emissions from counting toward the PSD and Title V thresholds today.⁴

A. EPA has Made No Finding that Biogenic CO₂ Emissions Endanger Public Health or the Environment.

Because they are carbon neutral, biogenic sources of CO₂ emissions are not causing or contributing to the air pollution EPA is seeking to regulate under the CAA.⁵ Biogenic CO₂ emissions do not result in a net increase of CO₂ in the atmosphere and, therefore, do not cause or contribute to climate change.

CO₂ released when biomass is combusted (or fermented) has been previously removed from the atmosphere via photosynthesis. Although there may be temporary shifts between atmospheric and terrestrial stocks of carbon within the active carbon cycle, the carbon released into the atmosphere during this process is not “new” carbon being introduced into the earth’s carbon cycle. Biogenic carbon emissions then are considered carbon “neutral” based on this biogenic carbon uptake credit. In other words, carbon emissions from biomass are offset by the prior absorption of carbon through photosynthesis that created the biomass. For annual crops, this carbon cycle occurs every year with each new harvest -- a mere blip on the screen with respect to climate change.

⁴ EPA’s failure to do so in the final Tailoring Rule is being challenged in the D.C. Circuit. *National Alliance of Forest Owners and American Forest & Paper Association v. EPA*, No. 10-1209 (D.C. Cir. filed Aug. 2, 2010). RFA notes that submission of these comments should not indicate RFA’s agreement that GHGs in general are “subject to regulation” under the Clean Air Act, much less that biogenic CO₂ emissions are “subject to regulation.” RFA refers EPA to and incorporates by reference its comments that it submitted with numerous other trade associations on the proposed Tailoring Rule. EPA-HQ-OAR-2009-0517-5181.1.

⁵ These comments do not address the appropriateness of the endangerment finding for GHGs.

The Clean Air Act requires EPA to make a finding that the regulated pollutant presents a health or environmental risk, including Section 202(a), under which EPA has determined GHG emissions from motor vehicles should be regulated in the so-called “Tailpipe Rule.” 42 U.S.C. §7521(a).⁶ In its endangerment finding for the Tailpipe Rule, EPA found that GHGs are naturally occurring and that the “adding” of GHGs into the atmosphere by human activities has intensified the naturally-occurring greenhouse effect. 74 Fed. Reg. 66,496, 66,499, 66,517 (Dec. 15, 2009). It further identifies *anthropogenic emissions* as the primary drivers of climate change, resulting in the purported need to regulate such emissions. *Id.*; *see also* 75 Fed. Reg. 25,324, 25,326, 25,399, 25,491-25,492 (May 7, 2010).

The combustion of biomass is in stark contrast to the carbon cycle for fossil fuels, such as petroleum, which transfers large amounts of carbon from geologic reserves into the atmosphere. When fossil fuels are combusted, more CO₂ is released than plants can process so CO₂ begins to build up in the atmosphere and, thus, the burning of fossil fuels adds to terrestrial carbon at a rate that cannot be fully recycled. It is these additions of the carbon previously stored in the fossil fuels into the active global carbon cycle that resulted in EPA’s endangerment finding.⁷ Thus, unlike combustion of biomass and other biogenic CO₂ emissions, the burning of petroleum adds what is essentially “new” carbon to the present carbon cycle, which EPA has found can remain in the atmosphere for decades to centuries. 75 Fed. Reg. at 25,397; *see also* 76 Fed. Reg. at 15,254 (“Biogenic CO₂ differs qualitatively from fossil CO₂ in that there is a significant difference between fossil carbon and biogenic carbon in the length of time required to replenish the reservoirs where the carbon is stored.”).

It is these “additions” to the atmosphere that EPA believes have resulted in climate change because they are outside the normal carbon cycle. Because they are carbon neutral, biogenic sources of CO₂ emissions are not causing or contributing to the air pollution EPA is seeking to regulate under the Clean Air Act, and EPA has made no finding as such. Therefore, EPA can properly exclude them from those pollutants “subject to regulation.”

⁶ The same holds true for regulation of pollutants under Section 111. 42 U.S.C. §7411(b).

⁷ While deforestation may also contribute to human-caused CO₂ emissions, forest carbon stock continues to grow in the United States, indicating that the biomass carbon cycle is accomplishing net removals of carbon from the atmosphere and in fact is in surplus. EPA has recognized as much on several occasions. 76 Fed. Reg. at 15,254 (“Future national projections under business as usual (BAU), as reported in the Fifth U.S. Climate Action Report (CAR) submitted to the UNFCCC in 2010, suggest that this LULUCF sink is likely to continue, if not increase in size, at least until 2020.”); *see also* EPA, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act: EPA’s Response to Public Comments, Volume 10: The Cause or Contribute Finding at 10-11 (2010) (declining to include land use emissions in endangerment finding and noting “U.S. land-use change and forestry sector is a big net sink”). Indeed, EPA’s decision not to include land use emissions in its endangerment finding provides further support that it should not (and cannot) now regulate biogenic CO₂ emissions through the PSD and Title V permitting programs.

B. EPA Properly Recognizes Its Authority to Exempt Biogenic CO₂ Emissions From Regulation Under the Clean Air Act and Should Exercise That Authority Here.

Notwithstanding whether EPA actually has “regulated” biogenic CO₂ emissions and such regulation is proper under the Clean Air Act, EPA has asserted discretion to define which chemicals are included in the “air pollutant” called “greenhouse gases” that will be subject to PSD. See 74 Fed. Reg. at 55,329; see also *Massachusetts v. EPA*, 549 U.S. 497 (2007) (“As we have repeated time and again, an agency has broad discretion to choose how best to marshal its limited resources and personnel to carry out its delegated responsibilities.”) (citations omitted). Under this discretion, EPA may (and should) focus on non-biogenic sources of CO₂.

Indeed, the carbon neutrality and the rapid carbon cycle of biomass are sufficient to support a finding that biogenic CO₂ emissions present a *de minimis*, if any, adverse effect on human health or the environment. In the Proposed Rule, EPA recognizes its authority to exempt certain *de minimis* pollution sources from the PSD program. See 76 Fed. Reg. at 15,261 (quoting *Alabama Power Co. v. Costle*, 636 F.2d 323, 360 (D.C. Cir. 1980)); see also *Ober v. Whitman*, 243 F.3d 1190, 1195 (9th Cir. 2001) (holding that EPA was permitted to exempt *de minimis* sources of particulate matter from pollution controls); *W. States Petroleum Ass’n v. EPA*, 87 F.3d 280, 283-85 (9th Cir. 1996) (analyzing Clean Air Act regulations which explicitly allow state programs to exclude insignificant activities and emissions from permit applications and reversing EPA decision disapproving a state permit program which exempted such activities); *Ohio v. EPA*, 997 F.2d 1520, 1534-35 (D.C. Cir. 1993) (upholding EPA’s recognition of a *de minimis* exemption from the Comprehensive Environmental Response, Compensation, and Liability Act requirement for periodic review at certain Superfund sites). EPA further found that it “has sufficient information at this time to conclude that at least some biomass feedstocks that may be utilized to produce energy have a negligible impact on the net carbon cycle . . .” 76 Fed. Reg. at 15,261. RFA agrees and, thus, believes EPA can implement an exemption for biogenic CO₂ emissions now.⁸

In addition, in passing the Clean Air Act, Congress was concerned with increased urbanization and the impacts of such development on air quality. 42 U.S.C. §7401(a)(2). Increased use of biomass and biofuels as an energy source in lieu of fossil fuels also addresses these concerns by promoting rural economies and preserving agricultural lands. With the added incentive of using agricultural feedstocks for biofuel production, agricultural lands are more likely to stay agricultural lands. EPA’s National Inventory has consistently shown net sequestration of cropland that remained cropland since 1990. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2009*, EPA 430-R-11-005, at 7-1 to 7-2 (Apr. 15, 2011).⁹ Thus, concerns that increased biofuel production has resulted in loss of forestland are

⁸ Moreover, increasing the use of biomass over fossil fuels reduces this “new” carbon, better addressing the atmospheric buildup of CO₂ and moving back to a balance in the natural, global carbon cycle. Biomass, unlike fossil fuels, recycle this CO₂.

⁹ This net sequestration is substantially greater than estimated net CO₂ fluxes associated with conversion of land to cropland. EPA estimated that total land use, land-use change, and

wholly misplaced and without empirical support, and promotion of agricultural lands further the goals of the Act.

Put simply, biogenic CO₂ emissions do not result in a net increase of CO₂ in the atmosphere and, therefore, do not contribute to climate change. Under this discretion, EPA may focus on non-biogenic sources of CO₂. EPA has utilized similar authority in its PSD regulations in excluding certain compounds from the definition of “volatile organic compounds” for the purposes of applying the PSD regulations, including applicability thresholds. See 40 C.F.R. §§52.21(b)(2)(ii) and 52.21(b)(30) (incorporating by reference 40 C.F.R. §51.100(s)). EPA did so based on the fact that these compounds exhibit negligible photochemical reactivity, *i.e.*, their emission will not contribute significantly to the formation of ground-level ozone. EPA also has invoked this discretion in its use of significant impact levels, which reflect levels below which EPA considers an emissions increase to be *de minimis*. 76 Fed. Reg. at 15,261.

In addition, it would lead to “absurd results” if EPA counts biogenic CO₂ emissions towards the threshold for determining whether a facility is a major stationary source or whether the net increase in emissions from the facility constitutes a major modification. It would be unnecessary and unfair for EPA to regulate sources based on emissions that do not contribute to climate change. It would also create a disincentive to use these renewable sources of fuel, and would distract EPA from focusing on non-biogenic sources. Thus, exclusion of biogenic CO₂ emissions from the PSD and Title V requirements are consistent with EPA’s rationale and purpose for the Tailoring Rule.

C. Adherence to the Carbon Neutrality Presumption in the PSD Program Would Bring it Back in Line with EPA’s Other Regulations and International Programs.

The carbon neutrality of biomass used as an energy source and feedstock for biofuels has long been established and recognized in the scientific community and has long served as the basis for accounting of GHG emissions. An exclusion of biogenic CO₂ emissions based on their carbon neutrality also is consistent with other EPA rulemakings, EPA’s GHG Inventory, and international programs.¹⁰ See, *e.g.*, 74 Fed. Reg. 24,904, 25,039 (May 26, 2009); 74 Fed. Reg. 56,260, 56,351 (Oct. 30, 2009); see also RFA Comments on Call for Information at 8-12 (EPA-HQ-OAR-2010-0560-0194.1) (Attachment).

forestry activities in 2009 resulted in a net carbon sequestration of 1,015.1 Tg CO₂ Eq., representing an offset of approximately 15.3% of total U.S. CO₂ emissions and an increase in forestry net carbon sequestration of approximately 17.8% between 1990 and 2009. This was occurring at the same time ethanol production has been on the increase.

¹⁰ It also is consistent with EPA’s own programs seeking to promote GHG reductions (such as EPA’s Climate Leaders) and the programs of other federal agencies seeking to promote the use of bioenergy. See Dep’t of Energy, *Technical Guidelines: Voluntary Reporting of Greenhouse Gases (1605(b)) Program* at 77 (Jan. 2007) (“Reporters that operate vehicles using pure biofuels within their entity should not add the carbon dioxide emissions from those fuels to their inventory of mobile source emissions because *such emissions are considered biogenic and the recycling of the carbon is not credited elsewhere.*”).

Although EPA correctly notes the “Inventory does not exclude [CO₂ emissions from biomass],” 76 Fed. Reg. at 15,256, these emissions are *not inventoried at the point of fuel combustion*. 74 Fed. Reg. at 56,351. This is more than just to “avoid double-counting” as EPA suggests. 76 Fed. Reg. at 15,256. Indeed, it appears that EPA’s chief concern with extending the GHG Inventory treatment of biogenic CO₂ to the Tailoring Rule is that the Inventory was “...not designed to quantify the net atmospheric impacts of a particular type of fuel from a stationary source over a specified time period that extends into the future.” 76 Fed. Reg. at 15,254. While this may be technically true, if the GHG Inventory shows no net change in carbon stocks in the “land use change/forestry” account, then there would be no net change in atmospheric CO₂ levels as a result of combusting biomass for energy. EPA recognizes as much in its discussion regarding the “contingent exclusion” (discussed further below).¹¹ In fact, biogenic emissions associated with biomass are purposefully and more appropriately allocated to the land use inventory. It is there where increases in carbon sequestration on land are addressed. If such is not the case, then the carbon uptake also must be credited to the biomass user and the biofuel producer (resulting in an emissions factor of zero in any event), but the picture of land use changes may not be accurately depicted. Further, policies expressly addressing land use will have an actual and direct influence on management decisions to reduce land use changes. Those management decisions will influence emissions associated with the land use inventory and result in real reductions of GHG emissions from that sector. The same cannot be said if these emissions are included in the PSD permitting program, because the only influence biomass users would have to avoid these emissions is to continue use of fossil fuels, undermining clear and important national energy and national security policies.

D. The PSD Program’s Focus on Emissions from a Facility Does Not Preclude Adherence to the Carbon Neutrality Principle, Which is Applied in ALL Other Contexts.

Some may argue that the PSD program requires consideration of all emissions from a *facility*, and that the facility should be defined by its boundaries. Indeed, EPA has indicated that the Clean Air Act typically applies on the unit, process or facility scale. 75 Fed. Reg. at 41,176. But, Congress still intended to focus on significant sources of emissions affecting air quality. *See, e.g.*, 42 U.S.C. §7475(a)(3); *Alabama Power v. Costle*, 636 F.2d 323, 354 (D.C. Cir. 1979) (“[A] further look at the legislative history reveal[s] that Congress was concerned with large industrial enterprises—*major actual emitters of air pollution.*”) (emphasis added). EPA’s PSD regulations similarly focus on the emissions increases from the project *that will cause or contribute to air pollution* in violation of: (1) Any national ambient air quality standard in any air quality control region; or (2) Any applicable maximum allowable increase over the baseline concentration in any area. 40 C.F.R. §52.21(k); *see also* 40 C.F.R. §52.21(b)(5) (defining “stationary source” as “any building, structure, facility, or installation which emits or may emit a

¹¹ Because the harms EPA alleges it intends to address in regulating GHG emissions are global in nature and not localized, RFA believes the use of a “State scale” for such an exclusion is inappropriate.

regulated NSR pollutant”). Unlike the emissions of particulate matter or other criteria pollutant from a particular facility that may have direct impacts on the public or environment, it is not the biogenic CO₂ emissions *from the facility* that are causing or contributing to climate change -- the purported basis for EPA’s regulation of GHG emissions from mobile sources. Thus, to the extent EPA may consider GHG emissions in establishing PSD or Title V applicability, the application of the carbon neutrality convention for biogenic emissions to the PSD and Title V applicability is appropriate based on the needs and purposes of the programs.

E. Failure to Exempt Biogenic CO₂ Emissions from Stationary Source Regulation Will have Deleterious Impacts on the Renewable Energy Industry, Including Biofuels, Undermining the Ability of this Country to Achieve its Long-Standing Policy Goals to Reduce Dependence on Fossil Fuels and Foreign Sources of Oil.

The purposes of the Clean Air Act, and the PSD program, include ensuring protection of *air quality* in balance with the productive goals of society, including allowing for economic growth. 42 U.S.C. §§ 7401(b)(1), 7470(3). Significant concerns have been raised regarding the potential impacts on the economy of EPA’s regulation of GHG emissions. These concerns are even more pronounced with respect to attempts to regulate biogenic CO₂ emissions. Inclusion of biogenic CO₂ emissions in the PSD permitting program may substantially impact the economy, particularly the economy of rural communities across the country.

As exemplified in the passage of the Energy Independence and Security Act of 2007, Congress has determined that the country should move toward domestic renewable forms of energy, including biomass-derived fuels, and away from fossil fuels and foreign sources of oil. In so doing, Congress recognized the energy, environmental, economic and security benefits of moving toward renewable forms of energy. EPA has also recognized the advantages to using biomass, in particular, instead of fossil fuels for meeting energy needs. The government has established numerous programs, grants and loans to promote investment and advancements in renewable forms of energy. While EPA has attempted to preserve these goals through its guidance on best available control technology, failing to exempt biogenic CO₂ emissions from GHG regulations diminishes the appeal of biomass and biofuels as tools to reduce GHG emissions and fight climate change. This will result in reduced investment in renewables/biofuels markets and reconsideration of plans to utilize biomass energy in lieu of fossil fuels. This will result, therefore, in *more fossil fuel use* in direct contradiction to this Nation’s policy goals. Comparing the carbon cycle of planted crops to that of fossil fuels clearly shows that the biogenic CO₂ emissions from the combustion or use of planted crops do not result in a net increase of CO₂ emissions.

Indeed, EPA appears to recognize that including biogenic CO₂ in the tailoring rule may be “counterproductive” and discouraging to the use of bioenergy. 76 Fed. Reg. at 15,262. The carbon neutrality convention, therefore, is not only scientifically valid, but it best effectuates Congressional policy regarding increasing use of domestic renewable sources of energy—policy that EPA should advance, not undermine.

III. ALTHOUGH EPA CURRENTLY CAN EXEMPT BIOGENIC CO₂ EMISSIONS, IF IT NONETHELESS DETERMINES IT MUST FURTHER CONSIDER THE ISSUE, IT HAS AUTHORITY TO DEFER THEIR INCLUSION IN THE PSD AND TITLE V PERMITTING PROGRAMS, BUT SHOULD DO SO WITH MODIFICATIONS.

EPA explains in the preamble its concerns that it had not properly proposed to include biogenic CO₂ emissions in the applicability determinations for PSD and Title V and that the benefits of using biomass based fuels support the deferral and a process to develop accounting systems for such emissions in the context of applicability. Courts have deferred to agencies regarding implementation of regulations when the statute is silent regarding the implementation deadline. *See, e.g., NRDC v. EPA*, 194 F.3d 130, 137 (D.C. Cir. 1999). EPA need only identify a reasonable explanation for an extended phase-in plan. *Id.* EPA has taken a similar approach in the past. *See* 73 Fed. Reg. 28,321, 28,334-28,335 (May 16, 2008) (adopting a transition period approach for inclusion of condensable PM emissions for NSR permitting to allow EPA to assess capabilities of test methods available to measure condensables and possibly revise them to improve performance). EPA has indicated that it needs more time to consider the complexities associated with accounting for biogenic CO₂ emissions. Although RFA believes that EPA can categorically exclude biogenic emissions now, EPA's decision to defer inclusion of biogenic emissions is reasonable and consistent with its discretion. Nonetheless, EPA should make some modifications to its proposal, as further outlined below.

A. EPA Should Clarify How Potential Emissions Will Be Calculated from Emissions Units Co-Firing Biomass with Other Fuels or Using Fossil Fuels as a Backup Fuel.

In the Proposed Rule, EPA states that the deferral will apply to biogenic CO₂ emissions from biogenic feedstocks and is not limited to specific types of facilities. RFA agrees that EPA should not limit the deferral based on the type of facility. EPA seeks comment on ways to ensure there is an accurate estimate of how much biogenic CO₂ is subject to the deferral for a specific facility, particularly when combusting mixed fuels.

RFA notes that the PSD rules in some States may not be consistent, and EPA must clarify how facilities that co-fire biomass and fossil fuels will conduct PSD applicability analyses in States that have adopted the 2002 New Source Review (NSR) rules and States that have not. For a new facility or modification, EPA's PSD rules require that sources compare baseline emissions with a projection of future emissions following the project. If the project will result in an emissions increase of a particular pollutant, the increase is compared with the significance level for that pollutant to determine if a PSD permit is required. In 2002, EPA adopted revisions to its PSD rules, which provided that baseline emissions are to be calculated using the highest two consecutive years of emissions in the prior 10 years and future emissions are to be projected based on actual emissions levels. While most States have adopted these provisions, a few states continue to implement EPA's prior rules and to interpret those rules as requiring a comparison of baseline emissions prior to a project with potential emissions following a project.

For example, in States that have adopted the 2002 NSR rules, sources projecting future actual emissions should make a reasonable projection of the percentage of biogenic feedstocks

and fossil fuels that will be used in the 5 or 10 year period following the change and then determine future emissions based on only the fossil fuel percentage. As another example, if a source is installing a new emissions unit that will have biogenic fuels as a primary feedstock, and fossil fuels as a backup, the source should not be required to calculate future potential emissions based on fossil fuel firing 100% of the time. EPA needs to clarify these points since many facilities will use fossil fuels as backup or alternate fuels. Moreover, in States that apply an actual-to-potential emissions test, potential emissions should not be calculated based on a back-up fossil fuel but rather an allocation should be made and emissions attributable to biogenic feedstocks should not be included. If EPA requires emissions to be based on a fossil fuel that is a back up, the deferral proposed here will have little effect on PSD and Title V applicability determinations because the fossil fuel-based emissions will likely result in PSD or Title V being triggered for GHGs.

EPA also requests comment on whether this deferral should specify that stationary sources subject to the PSD and Title V programs use a specific method for determining their biogenic CO₂ emissions. Any method for calculating biogenic emissions, including emissions from ethanol fermentation, should be simple, and should conform to those methodologies used in the reporting rules to which facilities may already be subject.

EPA's GHG Reporting Rule requests information on biogenic emissions from covered sources, which include certain downstream facilities that emit GHGs (primarily large facilities emitting 25,000 metric tons or more of CO₂ equivalent (CO₂e) GHG emissions per year). 74 Fed. Reg. at 56,264. EPA had found that this threshold achieves reporting of 92% of the country's GHG emissions. *Id.* at 56,314. The reporting rule provided a method to calculate biogenic emissions.¹²

States have also required reporting of emissions and have developed methodologies for calculating emissions that largely utilize emission factors. For example, the Iowa Department of Natural Resources (DNR) has tracked biogenic emissions in that State and has provided guidance on calculating those emissions. RFA refers EPA to this guidance, including that related to emissions from fermentation during the ethanol process. See Iowa DNR, *Estimation of Greenhouse Gas Emissions: Recommended Methods for Selected Stationary Source Categories* (last updated Mar. 17, 2011), http://www.iowadnr.gov/air/prof/ghg/files/ghg_estimation_methods.pdf; RTI International, *GHG Emissions Estimation Methodology for Selected Biogenic Source Categories*, at 4-1 to 4-6 (2010), available at http://www.epa.gov/ttn/chief/efpac/ghg/GHG_Biogenic_Report_revised_Dec1410.pdf.

¹² “The approach used for most units is to use a default high heat value and default CO₂ emission factor to estimate emissions. For determining the biomass fraction of CO₂ emissions from units that burn MSW or mixed fuels, and from units that co-fire biomass with fossil fuels and measure CO₂ emissions using CEMS, use the specific methods provided in the rule.” 74 Fed. Reg. at 56,290.

Calculation of emissions for purposes of the PSD program should track the methodologies used for reporting to the extent applicable and practicable.

Regardless of the methodology used, once a methodology is established, EPA must ensure that future changes in methodology do not adversely affect prior good faith applicability determinations. Any changes must be implemented prospectively only.

B. EPA Should Ensure that Excluding Biogenic CO₂ Emissions from the “Subject to Regulation” Definition Will Address Those Emissions for PSD Applicability If EPA Regulates GHGs Under an NSPS.

EPA proposes to defer for three years “biogenic CO₂ emissions from the definition of ‘subject to regulation,’ as that term was defined for purposes of the Tailoring Rule, ... while EPA further considers, through notice and comment rulemaking, the approach to accounting for these emissions on a permanent basis.” 76 Fed. Reg. at 15,260. The proposed rule would, then, revise the definition of “subject to regulation” to provide that “prior to [DATE 3 YEARS AFTER THE EFFECTIVE DATE OF THE FINAL DEFERRAL RULE], the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or micro-organisms” But, by only revising the definition of the term “subject to regulation” to address the deferral, EPA only “solves” the problem it has identified until a new source performance standard (NSPS) is issued applicable to CO₂.

EPA’s definition of “regulated NSR pollutant” includes a list of types of pollutants regulated under the Act, including, among others, “[a]ny pollutant that is subject to any standard promulgated under section 111 of the Act.” *E.g.*, 40 C.F.R. §52.21(b)(50). EPA’s “subject to regulation” definition, however, only applies to “[a]ny pollutant that otherwise is subject to regulation under the Act” *Id.* Thus, EPA’s proposal appears not to exclude biogenic CO₂ emissions to the extent CO₂ becomes a regulated NSR pollutant under the “any pollutant that is subject to any standard promulgated under section 111 of the Act” clause of its regulated NSR pollutant definition. EPA has agreed to issue a “standard promulgated under section 111 of the Act” for the utility and refining sectors in the near future. The first such standard is to be finalized by May 26, 2012, cutting the proposed three year deferral period down to potentially less than one year. While RFA believes that EPA should similarly exempt biogenic CO₂ emissions from regulation under section 111 of the Act based on a lack of endangerment to public health or the environment from these emissions,¹³ EPA’s proposed regulatory language appears not to actually defer the inclusion of biogenic CO₂ emissions for three years if EPA treats biogenic CO₂ emissions the same as those emissions from fossil fuels in its rulemakings for stationary sources as it did in the final Tailoring Rule.

While RFA understands that EPA may believe that the revision to the definition of “subject to regulation” is required for the purpose of avoiding the need for States to revise their

¹³ Indeed, EPA has regulated *fossil fuel* fired power plants, not those fired with biomass. 40 C.F.R. §60.40da.

state implementation plans to incorporate EPA's regulatory revisions to the NSR program, an unintended consequence of revising the rules in this way is that it does not address the effects of EPA issuing an NSPS for GHGs.

This is further evidence that EPA must defer inclusion of GHG emissions in the PSD program altogether to give EPA time to ensure consistent treatment across stationary source programs, and to avoid NSPS triggering PSD and Title V requirements for biogenic CO₂ emissions prematurely and have States revise their implementation plans to reflect this additional change. Otherwise, EPA's proposed deferral would be meaningless.

EPA should make at least two changes to its "subject to regulation" definition as shown below:

- The term tpy CO₂ equivalent emissions (CO₂e) shall represent an amount of GHGs emitted, and shall be computed by multiplying the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to subpart A of part 98 of this chapter—Global Warming Potentials, and summing the resultant value for each to compute a tpy CO₂e. For purposes of this paragraph, prior to [DATE 3 YEARS AFTER THE EFFECTIVE DATE OF THE FINAL DEFERRAL RULE], the mass amount of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, by-products, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of nonfossilized and biodegradable organic material) and from combustion of liquid biofuels. Notwithstanding Section 52.21(b)(50)(ii) [use corresponding provision in part 51], the emissions identified in the preceding sentence shall not be included in any determination of applicability under this section prior to [DATE 3 YEARS AFTER THE EFFECTIVE DATE OF THE FINAL DEFERRAL RULE].

The first change, adding the word "amount" after "mass," is a conforming change to match the preceding sentence in the definition. The additional sentence at the end of the definition is intended to ensure that if a NSPS is issued for utilities or refineries before the end of the deferral that regulates carbon dioxide emissions, the emissions being deferred will not be included in applicability determinations for purposes of the PSD program generally, not just under the pollutants "otherwise subject to regulation" category.

C. EPA Must Provide Relief in SIP-Approved States that Either Do Not Use the “Subject to Regulation” Language in Their PSD Rules or That Must Conduct Rulemaking to Adopt the Revision Deferring Inclusion of Biogenic CO₂ Emissions.

RFA is also concerned that some States will not be able to revise or adopt EPA’s deferral of inclusion of biogenic CO₂ emissions in time. As EPA learned in response to the final Tailoring Rule, numerous States, including some using the phrase “subject to regulation,” still required legislation and/or rulemaking to incorporate the EPA’s new definitions in the Tailoring Rule. Most states that required legislation/rulemaking have undertaken expedited or emergency laws or rulemakings in order to adopt EPA’s thresholds and definition of “subject to regulation.” EPA has approved some, but not all, of the state implementation plan revisions. Presumably, these same states will require the same legislative or rulemaking actions to adopt EPA’s new deferral into their “subject to regulation” definition. There is no practical way that the deferral can be accomplished before July 1, 2011.

Even then, however, if EPA issues a utility or refinery NSPS, additional rulemaking will be required by both EPA and the states to address the inclusion of any NSPS pollutant as a regulated NSR pollutant under EPA’s regulations. Thus, EPA must defer regulation of biogenic CO₂ emissions in a way that will effectuate the full three years of the deferral and that can be adopted into state implementation plans quickly and efficiently. States also should not be overly burdened with serial rulemaking processes and state implementation plan revisions. Neither should industry be subject to this ongoing rollercoaster ride based on EPA’s constant change in policy as it strives to make its regulation of GHG emissions effective, consistent and practical. As previously noted, sources of bioenergy are of vital importance to this nation’s environmental, economic, energy and national security policies. EPA must bring closure to this process in order to bring certainty back to the industry that Congress sought to promote where the targeted emissions (biogenic CO₂ emissions) simply do not present the danger or risk contemplated by the PSD program.¹⁴

¹⁴ In 2007, EPA revised its NSR regulations to clarify that ethanol facilities are not “chemical process plants” subject to the 100 tons per year threshold for major sources for purposes of PSD permitting. 72 Fed. Reg. 24,060 (May 1, 2007). EPA properly did so on numerous legal and policy grounds, which are undermined by EPA’s decision to include biogenic CO₂ emissions in PSD permitting. Among them, EPA found that “supporting our nation’s efforts toward energy independence is an important national goal, and that this consideration is appropriate in deciding how to balance our nations economic growth with environmental protection.” *Id.* at 24,062; *see also* 42 U.S.C. §§ 7401(b)(1), 7470(3). EPA found: “It is clear that continued growth of the ethanol industry will play a vital role in achieving our nation’s energy and environmental objectives.” 72 Fed. Reg. at 24,062. These important goals then must be considered by EPA in exercising its discretion to define the pollutants subject to regulation under the PSD program.

IV. TREATMENT OF BIOGENIC CO₂ EMISSIONS NEEDS TO BE CLEARLY DEFINED AND IMPLEMENTABLE.

In its section of the preamble entitled, appropriately, “Complexity in Developing Accounting Methodology,” EPA outlines four potential accounting methods of the biogenic CO₂ emissions: (a) case-by-case analysis; (b) categorical exclusion; (c) categorical exclusion with contingency, *e.g.*, as long as forest land in the U.S. remains a net carbon sink, such that sequestration remains greater than emissions at the national scale; (d) a feedstock-based approach. 76 Fed. Reg. at 15,259. Determining applicability for purposes of the PSD program is already extraordinarily complex. It currently includes detailed requirements for calculating baseline emissions, projecting future emissions, documenting such calculations, and tracking emissions after a change. If EPA determines that accounting for biogenic CO₂ emissions is necessary, any such accounting system should be as simple as possible and should establish categorical exclusions. EPA can justify such exclusions based on a general analysis, such that there is no reason for any particular facility to justify that its particular biogenic CO₂ emissions should be excluded.

A. EPA Should Adopt a Categorical Exemption for All Biogenic CO₂ Emissions.

RFA is most supportive of a categorical exemption for all biomass sources based on their carbon neutrality. As further described in RFA’s Comments in response to the Call for Information, changes in carbon stocks due to land use change does not in any way obfuscate or change the carbon neutrality of the actual biomass itself. As further described above, EPA has ample authority to provide for a categorical exemption for all biogenic CO₂ emissions.

B. EPA Should, at a Minimum, Adopt the Feedstock-Based Approach, Which Should Result in an Exemption for Biomass from Planted Agricultural Crops.

Alternative to a categorical exemption for all biogenic CO₂ emissions regardless of their source, EPA should consider the feedstock-based approach it had identified as an option. 76 Fed. Reg. at 15,259. While RFA does not comment on whether EPA should or how to categorize different types of woody biomass and forestry feedstocks, it does believe that the rapid carbon cycle of planted agricultural crops can be distinguished from several types of woody biomass and forestry feedstocks.

As noted above, the carbon cycle associated with annual crops is rapid and continuous. The concerns identified by EPA with respect to the timing of the carbon cycle for other types of feedstocks simply is not present for planted agricultural crops. In fact, EPA stated that it “has sufficient information to conclude that at least some biomass feedstocks that may be utilized to produce energy have a negligible impact on the net carbon cycle. . .” 76 Fed. Reg. at 15,261. Although EPA does not reference annual crops as an example of biomass feedstocks that “have a negligible impact on the net carbon cycle,” it references feedstocks that have a ten to fifteen year carbon cycle. EPA found that “[g]iven this negligible impact on the carbon cycle, the gain from regulating emissions from combustion of this feedstock for bioenergy could be considered to be trivial.” *Id.* If this is true for feedstocks with a 10- to 15-year carbon cycle, then it is

absolutely the case for feedstocks with an annual or even triennial (*e.g.*, switchgrass) carbon cycle. Thus, there is more than ample support to provide an exemption for planted crops, such as corn.

C. The Contingent Exclusion Approach is Inappropriate and Unworkable.

EPA discusses a “contingent exclusion” option in which biogenic emissions would only become subject to PSD and Title V program requirements if forestland became a net carbon source rather than sink. It is unclear how this approach might apply to annual agricultural bioenergy crops, such as corn for ethanol. Moreover, the agricultural crops used for bioenergy do not drive land use changes, which involve numerous calculations and subject to numerous pushes and pulls. Indeed, it would be impossible for EPA to determine whether a particular facility resulted in such changes, and whether these changes are affecting climate change in any non-negligible way. While agricultural lands have been on the decline in the United States for decades, EPA cannot attribute national changes to agricultural lands to the bioenergy or biofuel industry.

Contingent categorical exclusions are also problematic because they could create enforcement implications for past actions of sources if EPA trips the contingency. Thus, any such approach would have to implement the “contingency” on a prospective basis only.

D. EPA Must Not Utilize a Case-by-Case Analysis.

RFA is strongly opposed to a case-by-case analysis, which would require a facility-specific assessment of the net atmospheric impact of the intended biomass fuels. “This would require facility-level accounting for the emissions associated with the full chain of fuel production and use.” 76 Fed. Reg. at 15,259. Contrary to the purported comments cited by EPA, this approach would NOT be the most scientifically sound approach for assessing the net carbon cycle impact of specific biomass fuels. There is no recognized, scientific model for such an approach. Further, such an approach implies that facilities would be accountable for upstream emissions unrelated to their use of biomass at the actual facility.

EPA has recognized that difficulty in undergoing this kind of analysis in its GHG Reporting Rule:

With respect to emissions and sequestration from agricultural sources and other land uses, the rule does not require reporting of emissions or sequestration associated with deforestation, carbon storage in living biomass or harvested wood products. These categories were excluded because currently available, practical reporting methods to calculate facility-level emissions for these sources can be difficult to implement and can yield uncertain results. Currently, there are no direct GHG emission measurement methods available except for research methods that are very expensive and require sophisticated equipment.

Limited modeling-based methods have been developed for voluntary GHG reporting protocols which use general emission factors, and large-scale models have been developed to produce comprehensive national-level emissions estimates, such as those reported in the U.S. GHG Inventory report. To calculate emissions or sequestration using emission factor or carbon stock exchange approaches, it would be necessary for landowners to report on management practices and a variety of data inputs. The activity data collection and emission factor development necessary for emissions calculations at the scale of individual reporters can be complex and costly. Due to the current lack of reasonably accurate facility-level emissions/stock change factors and the ability to accurately measure all facility-level calculation variables at a reasonable cost to reporters, the reporting of emissions and sequestration associated with deforestation and carbon sequestration from forestry practices was excluded as a source category.

74 Fed. Reg. 56,260, 56,271 (Oct. 30, 2009). As noted above, the calculations a facility must conduct are already complex and burdensome. As described by EPA itself, a facility approach to biogenic carbon accounting would be even more costly and difficult. Moreover, it would impose an onerous administrative burden for the industry with no additional benefit. Full supply chain accounting is impractical and unfeasible for fungible bioenergy feedstocks like corn (*i.e.*, biofuel producer cannot verify farmer's practices/feedstock origin).

In addition, a "bottoms-up" approach to estimating the net atmospheric impact of biogenic GHG emissions from stationary sources likely would not reconcile with a "top down" (aggregate) assessment for a number of reasons. It is highly unlikely that case-by-case analyses could or would be conducted consistently at each facility given the uncertainty associated with such analysis, different measurement methods, and different understandings of the analytical boundaries for such measurements. Therefore, certain biogenic emissions sources *and* sinks might not be captured adequately in a case-by-case analysis, leading to misrepresentations of both sectoral net atmospheric impacts and a particular facility's net atmospheric impacts.

EPA indicates that it will be considering the "predictability, practicality, and scientific soundness" of proposed accounting approaches. A case-by-case approach is neither predictable nor practical and, to date, has no scientifically sound methodology. EPA must adhere to using these three principles in evaluating approaches. In so doing, it is clear that the case-by-case approach must be rejected.

V. TO THE EXTENT EPA DOES MOVE FORWARD WITH ITS CONSIDERATION OF POSSIBLE ACCOUNTING METHODS FOR BIOGENIC EMISSIONS, EPA'S CONSIDERATION MUST BE TRANSPARENT AND OBJECTIVE.

A. EPA Must Seek Stakeholder Input and Public Participation.

In the Proposed Rule, EPA states that it will be conducting a detailed examination of the science associated with biogenic CO₂ emissions from stationary sources, including convening an "independent scientific panel." *See, e.g.*, 76 Fed. Reg. at 15,259. RFA requests that EPA make this process transparent and open to the public. In particular, stakeholders should be allowed to suggest panel members, which should be considered objectively and not excluded solely because they may have worked for or represent industry, and should be able to review and comment on the charge questions to the panel.

Despite this Administration's repeated commitment to openness in government, transparency, and scientific integrity,¹⁵ EPA's peer review process in other rulemakings has simply not met these requirements. They have included panel members that substantially skewed the points of view of the panels.¹⁶ Moreover, EPA has declined to allow the public to comment on the charge questions or to adequately present information to the panel members. But, "[m]ore rigorous peer review is necessary for information that is based on novel methods or presents complex challenges for interpretation [and] the need for rigorous peer review is greater when the information contains precedent-setting methods or models, presents conclusions that are likely to change prevailing practices, or is likely to affect policy decisions that have a significant impact." Office of Management and Budget, Final Information Quality Bulletin for Peer Review, at 12 (Dec. 16, 2004), *available at* <http://www.whitehouse.gov/omb/memoranda/fy2005/m05-03.pdf>. "Regardless of the peer

¹⁵ *See, e.g.*, Jackson Opening Mem. to EPA Employees, Jan. 23, 2009, <http://blog.epa.gov/administrator/2009/01/26/opening-memo-to-epa-employees/>; Jackson Mem. to EPA Employees: Transparency in EPA's Operations, Apr. 18, 2009, <http://blog.epa.gov/administrator/2009/04/24/memo-to-epa-employees-transparency-in-epas-operations/>; Jackson Memo to EPA Employees: Scientific Integrity, May 9, 2009, <http://blog.epa.gov/administrator/2009/05/12/memo-to-epa-employees-scientific-integrity/>; 76 Fed. Reg. 3821 (Jan. 21, 2011).

¹⁶ For example, in the peer review panels for the Renewable Fuel Standard's lifecycle analysis, the author of a much criticized paper, who was not a scientist and most assuredly not objective, was included on the panel. *See* Robert Zubrin, The Irrationality of Indirect Analysis, Roll Call, June 3, 2009, *available at* <http://www.rollcall.com/news/35481-1.html> (The Searchinger "approach has been criticized by scientists who pointed out that the putative indirect link between the U.S. corn ethanol program and deforestation elsewhere is not measurable or falsifiable, and thus simply not a scientific assertion."); *see also* Adas UK, Ltd., Critique of Searchinger (2008) & related papers assessing indirect effects of biofuels on land-use change, at 6 (June 12, 2008), *available at* http://www.dft.gov.uk/rfa/_db/_documents/ADAS_Seachinger_critique.pdf.

review mechanism chosen, agencies should strive to ensure that their peer review practices are characterized by both scientific integrity and process integrity.” *Id.* at 13. Here, EPA is considering whether to move away from a well-established and well-accepted accounting method for biogenic CO₂ emissions. This requires openness, objectivity, and a commitment to *science*, not policy.

EPA should not close this process to the public as has been done in the past. For example, OMB guidance provides that “[a]gencies shall consider requesting that the public, including scientific and professional societies, nominate potential reviewers.”¹⁷ OMB Guidance at 17. Public participation can take a variety of forms, including opportunities to provide oral comments before a peer review panel or requests to provide written comments to the peer reviewers. *Id.* at 21. EPA’s guidance indicates that it may ask for stakeholder input on the charge to peer reviewers, but should not limit input to one stakeholder or one side of a controversial issue. EPA Peer Review Handbook, EPA/100/B-06/002, at 58 (3d ed. 2006). It also provides that, if feasible and appropriate, EPA should sponsor a public meeting where oral presentations on scientific issues can be made to the peer reviewers by interested members of the public. *Id.* at 59. It also states, when employing a public comment process as part of the peer review, EPA should provide the reviewers access to the public’s comments that address scientific or technical issues. *Id.* Finally, EPA guidance indicates the following should be made available to the public in the administrative record: (a) the draft work product submitted for peer review; (b) materials and information given to the peer reviewers; (c) the peer review report, which summarizes the peer review findings and contains information about the peer reviewers; (d) logistical information about the conduct of the peer review; (e) a memorandum, or other record, responding to the peer review comments; and (f) the final work product. *Id.* at 50. RFA urges EPA to follow this guidance in this case.

OMB guidance also provides that reviewers should be selected to represent a diversity of scientific perspectives relevant to the subject. OMB Bulletin at 17. EPA’s guidance provides that it also looks at appearance of lack of impartiality, which concerns issues that are financial

¹⁷ On April 27, 2011, EPA indicated that the “independent scientific panel” will be an SAB Expert Panel, and the Science Advisory Board Office Staff solicited nominations for the panel from the public. 76 Fed. Reg. 23,587 (Apr. 27, 2011). RFA appreciates EPA’s allowing the public to nominate panel members, and also to comment on the “Short List” of candidates. It continues to caution EPA to ensure an objective panel that represents a wide range of interests. RFA also encourages EPA to comply with its statement, which is consistent with its peer review guidance, that: “The public will have opportunities to provide comments for SAB consideration.” 76 Fed. Reg. at 23,587. As EPA notes, the SAB is subject to the Federal Advisory Committee Act, which “provides for public involvement in committee activities, primarily by means of open access to meetings and records and by providing the public the opportunity to submit comments to the committee.” Science Advisory Board Staff Office, *Advisory Committee Meetings and Report Development: Process for Public Involvement*, at 3 (2004), available at [http://yosemite.epa.gov/sab/SABPRODUCT.NSF/WEBSABSO/part-mtg-reports/\\$File/sabso_04_001.pdf](http://yosemite.epa.gov/sab/SABPRODUCT.NSF/WEBSABSO/part-mtg-reports/$File/sabso_04_001.pdf).

or not financial in nature. In peer review panels related to EPA action on biofuels, no panel member appeared to represent industry or the agricultural community. EPA's guidance on impartiality should not be used as a sword to keep those most affected by EPA's actions out of the process. Indeed, conflicts and lack of impartiality may not prohibit persons from serving as a peer reviewer. It only requires that such conflicts be disclosed. Thus, EPA should seek recommendations from all perspectives to better ensure an objective review.

B. EPA's Consideration of Accounting Methods Must Ensure they Are Based on Science, Not Policy.

The Information Quality Act (IQA) (Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001) requires that EPA present scientific information objectively and ensure that such information is transparent and reproducible. As OMB and EPA have recognized, influential scientific, financial or statistical information "shall include a high degree of transparency about data and methods to facilitate the reproducibility of such information by qualified third parties." 67 Fed. Reg. 8452, 8460 (Feb. 22, 2002). *See also* EPA, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by EPA*, EPA/260R-02-008, at 19-21 (Oct. 2002) ("EPA IQA Guidelines"). OMB recognized the importance of transparency to meet the goal of objectivity under the IQA. *Id.* at 8459. Particularly in this case, the credibility of the models used by EPA depend on their transparency and ensuring the models reflect the latest knowledge about agricultural and food systems. Bruce A. Babcock, *Measuring Unmeasurable Land-Use Changes from Biofuels*, Iowa Ag Review, at 6 (Summer 2009), available at http://www.card.iastate.edu/iowa_ag_review/summer_09/IAR.pdf. RFA urges EPA to also abide by the requirements of the IQA and ensure that the methodology adopted is based on objective and transparent science, not policy.

C. EPA Should Only Focus on the Carbon Cycle of the Feedstock Considered, Not on Indirect Impacts.

EPA states: "Establishing an accounting system for the net atmospheric impact of biogenic CO₂ emissions from stationary sources is complex. . . . Multiple factors need to be considered to accurately assess the net atmospheric impacts of the use of a particular type of fuel by a stationary source over a specified time period, that extends into the future: Net emissions to the atmosphere (emissions from the facility and sequestration elsewhere) of carbon from the biomass used for bioenergy; the time scale against which net emissions should be measured; delineation of geographic areas for measurement; *and leakage.*" 76 Fed. Reg. at 15,258. Before EPA attempts to identify a method to calculate "the net atmospheric impact ... from a stationary source," EPA must consider whether the carbon neutrality presumption is valid to support a "permanent exemption ... for at least some and perhaps all types of feedstocks." 76 Fed. Reg. at 15,260. In so doing, EPA must focus on the carbon cycle of the particular feedstock being used.

RFA also takes issue with EPA's reference to "leakage." This is wholly inappropriate for consideration in this case. Considering the notion of a feedstock's direct carbon cycle does not

give EPA license to consider indirect effects of biogenic CO₂ emissions, as those are not *from* the facility and are beyond the control of that facility. Indeed, EPA has not required, nor does it indicate it would require, other sources of energy to consider indirect impacts. Thus, EPA must clarify that it is not considering indirect impacts associated with use of biomass or biofuel.

D. EPA Should Correct Various Statements in the Proposal and Should Clarify That Any Review Would Relate Solely to Stationary Sources and Does Not Affect EPA's Treatment of Biofuels Under Title II of the Clean Air Act and the Renewable Fuel Standard.

EPA's proposed deferral relates to the regulation of *stationary sources*. Although this implicates producers of biofuels, and biofuels may be used as energy for stationary sources, any actions considered by EPA here should remain separate from its actions with respect to regulation of fuels under Title II of the Clean Air Act.

EPA makes vague reference to the fact that "various motor vehicle fuels are derived from plant material," referencing EPA's lifecycle analysis under the Renewable Fuel Standard. 76 Fed. Reg. at 15,259 n.18. In its Renewable Fuel Standard rule ("RFS2 Rule"), EPA found: "For renewable fuels, tailpipe emissions only include non-CO₂ gases, because the carbon emitted as a result of fuel combustion is offset by the uptake of biogenic carbon during feedstock production." 75 Fed. Reg. 14,670, 14,787 (Mar. 26, 2010); *see also* 74 Fed. Reg. 24,904, 25,039 (May 26, 2009) ("Therefore, CO₂ emissions from biomass combustion as a process fuel source are not included in the lifecycle GHG inventory of the ethanol plant."); EPA, Renewable Fuel Standard Program (RFS2) Regulatory Impact Analysis, EPA-420-R-10-006, §2.4.9 (Feb. 2010). The RFS2 program determines the lifecycle emissions of fuels and, therefore, any changes to the carbon neutrality assumption utilized would result in double counting of emissions. EPA, therefore, should make clear that it is not reassessing the concept of carbon neutrality in all cases.

In addition, EPA makes reference to forest-to-agriculture land use change and the possibility of additional emissions above business as usual (BAU) resulting from "...market demand for a bioenergy crop." 76 Fed. Reg. at 15,259. As RFA explained in its comments on the proposed RFS2 Rule, there is no empirical evidence that ethanol expansion has caused conversion of forest to agriculture in the U.S. or abroad.¹⁸ To date, EPA, and the critics of ethanol, have failed to provide any evidence to the contrary, relying solely on uncertain and speculative modeling based on overly conservative assumptions that have no place in regulation. This purported market demand should not be a consideration in EPA's analysis and, moreover, has not proven to be the case.

Research by the Department of Energy's Oak Ridge National Laboratory (Oladosu & Kline, 2010) found "...minimal to zero indirect land use change was induced by use of corn for ethanol over the last decade." The Oak Ridge findings are based on a rigorous examination of

¹⁸ EPA-HQ-OAR-2005-0161-2329; *see also* Geoff Cooper, *Understanding Land Use Change and U.S. Ethanol Expansion*, (Nov. 2008).

empirical data from the 2001-2008 time period, a span in which U.S. ethanol production more than quadrupled. The researchers found that “Empirical evidence does not support significant effects on U.S. commodity exports [and] other crops or cropland expansion in the U.S.”¹⁹

Increased crop productivity (growing more on the same amount of land) has primarily provided the growth in production necessary to meet heightened demand for crop-based feed, food, and fuel. Moving forward, more pronounced gains in productivity promise to mitigate the need for large amounts of new agricultural lands. In 2009/10, just 1 percent of the world’s major cropland was needed (on a gross basis) to meet the grain requirements of the U.S. ethanol industry. Moreover, the feed co-products (commonly known as distillers’ grains) generated by ethanol biorefineries play an important role in mitigating impacts on land use change. Only a portion of every hectare of grain “dedicated” to ethanol production is actually used for biofuel production. The remaining portion of the hectare is more accurately characterized as producing livestock feed. When the ethanol industry’s production of feed co-products are factored in, the net use of global cropland for U.S. ethanol production was 0.7 percent. Although U.S. ethanol production is expected to grow in the years ahead, the amount of land needed to support U.S. ethanol demand will continue to be small compared to world agricultural land use.²⁰

In addition, EPA correctly found in the RFS2 Rule that there is a downward trend in the total amount of agricultural land in the United States. 75 Fed. Reg. at 14,701. Meanwhile, the United States has experienced a net *increase* in forested area. Further, it is only certain “existing agricultural land” -- that is, agricultural land cleared or cultivated prior to December 19, 2007 and non-forested -- from which planted crops used as feedstock for renewable fuel may be used. 42 U.S.C. § 7545(o)(1)(I). Thus, there are significant safeguards in the RFS2 that protect against land conversion to agriculture.

¹⁹ Oladosu, D. and Kline, K. 2010. Empirical Data and Decomposition Analysis of U.S. Corn Use for Ethanol Production from 2001-2008. Presentation to California Air Resources Board LCFS Expert Work Group.

²⁰ Projections from Informa Economics suggest the land required to produce 15 billion gallons of grain ethanol in the United States in 2015 amounts to less than 1 percent of world cropland. See Informa Economics, *Analysis of the Proposed Rulemaking for the Expansion of the U.S. Renewable Fuels Standard* (Sept. 2009). Despite increases in the amount of coarse grains used for ethanol, the amount of land dedicated to coarse grains (corn, grain sorghum, barley, oats, rye, and millet) globally has decreased over the past 30 years. Global area for coarse grains has decreased 8 percent since 1980, while world grain ethanol production has increased dramatically. Despite a reduction in land dedicated to coarse grains, annual world coarse grain production has increased nearly 50 percent since 1980.

VI. CONCLUSION

CO₂ emissions from bioenergy and other biogenic sources should not be included in determining the PSD and Title V programs consistent with the Agency's longstanding policy of treating biogenic CO₂ emissions as carbon neutral for such programs. To the extent that EPA does not automatically adopt a categorical exclusion, RFA supports the proposed 3-year deferral subject to the foregoing comments.