

Clean Air Task Force * Environmental Working Group * Friends of the Earth
Greenpeace * National Wildlife Federation * Natural Resources Defense Council
Partnership for Policy Integrity * Southern Environmental Law Center
The Wilderness Society * Union of Concerned Scientists

October 18, 2011

Holly Stallworth
Designated Federal Officer
SAB Biogenic Carbon Emissions Panel
US Environmental Protection Agency

Re: EPA's "Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources" (September 2011)

Dear Dr. Stallworth:

The undersigned organizations are pleased to provide the following comments on the "Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources," which EPA submitted to the Science Advisory Board for review by the newly assembled Biogenic Carbon Emissions Panel.¹

The carbon dioxide emitted by biomass-fired stationary sources has often been ignored in regulatory contexts, usually on the assumption that the facilities were merely returning CO₂ that had been temporarily removed from the atmosphere by growing plants. That assumption is more than just misguided: according to a growing number of authorities including, most recently, the European Environment Agency Scientific Committee, it "results in a form of double-counting, as it ignores the fact that using land to produce plants for energy typically means that this land *is not producing plants for other purposes*, including carbon otherwise sequestered."² The result is regulations that could distort the marketplace towards greater use of unsustainable sources of biomass, with

¹ The Natural Resources Defense Council (NRDC) is a petitioner in consolidated cases filed in the D.C. Circuit that challenge EPA's decision to defer biogenic carbon accounting for purposes of the Prevention of Significant Deterioration stationary source permitting program (decision published in the Federal Register at 76 Fed. Reg. 43,490 et seq. (July 20, 2011)). The Clean Air Task Force (CATF) and Southern Environmental Law Center (SELC) represent other petitioners in those consolidated cases. The comments by NRDC, CATF, and SELC provided here on the scientific bases for EPA's accounting framework should not be construed as taking a position on the legal permissibility of any aspect of the EPA's action, or in any other way prejudicing or limiting the claims that they or their clients will raise in the consolidated cases.

² Opinion of the EEA Scientific Committee on Greenhouse Gas Accounting in Relation to Bioenergy (2011), at 1. (See <http://www.eea.europa.eu/about-us/governance/scientific-committee/sc-opinions/opinions-on-scientific-issues/sc-opinion-on-greenhouse-gas>)

potentially significant risks to our climate, forests and the valuable ecosystem services they provide and we rely on. Consequently, the undersigned organizations strongly support EPA's effort to develop a methodology for properly quantifying biogenic carbon emissions from stationary sources. By moving beyond the assumption that bioenergy is inherently carbon-neutral, EPA has taken a critically important first step.

However, we have very serious reservations about the accounting methodology that EPA has submitted to the Biogenic Carbon Emission Panel. The proposed Accounting Framework disregards widely accepted criteria for effective emissions accounting, including several criteria that EPA identified in the document itself.³ The undersigned organizations urge EPA to fix the following main problems in the proposed Accounting Framework.

- *Baseline type.* EPA's choice of a reference point baseline is arbitrary and will not "accurately reflect the carbon outcome" of bioenergy production, one of EPA's stated goals in undertaking this effort. A single point reference is not useful in understanding what will happen to carbon stocks on the land or atmospheric concentrations of carbon because it ignores the critical question of what would happen to either absent bioenergy. By ignoring alternative biomass growth or utilization scenarios, EPA's approach fails to account for foregone carbon sequestration (*i.e.* the amount of carbon that would have been sequestered by biomass, had that biomass not been harvested to produce energy) and would allow stationary sources to take credit for carbon sequestration (in the form of biomass growth) that would have occurred anyway. As a result, EPA's proposal commits the basic accounting error of failing to ensure that claimed GHG reductions from new biomass energy are in fact *additional*. Only carbon reductions above and beyond what would have happened anyway should be credited in any biogenic carbon accounting framework.
- *Spatial scale.* EPA proposes setting baselines based on land-based carbon stocks at the regional level, creating a significant problem of "free-riding". Under this approach, the extent to which a stationary source is held accountable for its biogenic CO₂ emissions is primarily determined by factors outside its control, from weather to the economy to the land use decisions of scores of independent entities throughout a given region. A power plant that burns trees from a given region would have *zero* "net biogenic emissions" as long as total tree harvest within the region does not exceed annual forest growth. In other words, biomass-based energy production could substantially reduce a region's forest carbon sink and still be considered carbon-free by EPA. This is despite the fact that the elimination of a carbon sink has the *same impact* as the creation of an equivalent-sized carbon source from the standpoint of atmospheric carbon levels. To make matters worse, EPA does not make the critical distinction between land types, and so does not exclude restricted and non-managed lands from its baseline. While EPA

³ EPA, "Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources" (September 2011) at 3 (providing a list of evaluation criteria "the framework is designed to meet," beginning with, "Accurately reflects the carbon outcome").

raises this issue in their discussion, the agency does nothing to appropriately address it in their case studies. Consequently, EPA's proposed Accounting Framework would do little to incentivize bioenergy producers to utilize more climate-beneficial feedstocks (such as wood from carefully conducted harvests that accelerate forest growth rates, and certain wastes and residues that would otherwise decompose), to improve their conversion efficiency, or adopt other GHG-reducing practices.

- *Leakage.* EPA acknowledges that direct or indirect land-use change emissions from leakage could occur, but the Accounting Framework fails to include a methodology for calculating and attributing these emissions. Recent models provide a framework for guidance on how to account for such leakage.
- *Carbon pools.* EPA's proposed Accounting Framework assumes that harvesting agricultural residues for bioenergy will not cause changes in land use patterns or losses in soil carbon. If too much stover or other residue is removed, however, soil carbon levels may fall and yields will decline, potentially increasing the amount of land needed for agricultural production. Accounting methodologies need to account for the impact of bioenergy across all carbon pools, not just above-ground biomass.

Each of our organizations is eager to work with EPA and the SAB Biogenic Carbon Emissions Panel to develop the best, most accurate methodology for determining a stationary source's net emissions of biogenic carbon. Accordingly, we urge EPA to address the problems identified above as quickly as possible, so that the Panel can review and comment on an accounting approach that can accurately assess biogenic emissions and effectively incentivize the use of only sustainable sources of biomass in the marketplace.

Respectfully,

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