



October 18, 2011

Dr. Holly Stallworth  
Designated Federal Officer (DFO)  
SAB Staff Office  
United States Environmental Protection Agency

**Re: AF&PA Comments for the Science Advisory Board on EPA's Accounting Framework for Biogenic CO<sub>2</sub> Emissions from Stationary Sources**

Dear Dr. Stallworth:

The American Forest & Paper Association (AF&PA) appreciates the opportunity to comment on the EPA's recent draft "Accounting Framework for Biogenic Carbon Dioxide (CO<sub>2</sub>) Emissions From Stationary Sources." We have welcomed the opportunity to engage with EPA and others on accounting for biogenic emissions, and we are attaching the comments that we submitted to EPA last year in response to its Call for Information as a practical and scientifically valid approach. Given the major economic and environmental implications of EPA's draft accounting framework, we greatly appreciate the careful review by the Science Advisory Board. It is critically important that the framework be scientifically rigorous and economically and operationally efficient.

AF&PA is the national trade association of the forest products industry, representing pulp, paper, packaging and wood products manufacturers, and forest landowners. Our companies make products essential for everyday life from renewable and recyclable resources that sustain the environment. The forest products industry accounts for approximately 5 percent of the total U.S. manufacturing GDP. Industry companies produce about \$175 billion in products annually and employ nearly 900,000 men and women, exceeding employment levels in the automotive, chemicals and plastics industries. The industry meets a payroll of approximately \$50 billion annually and is among the top 10 manufacturing sector employers in 47 states.

AF&PA recently established a new initiative called "*Better Practices, Better Planet 2020*" that sets specific, challenging goals for increasing recovery of paper for recycling, increasing our energy efficiency, reducing our greenhouse gas emissions and promoting sustainable forestry practices, while continuing to strive for the safest workplaces possible for our employees. We are committed to holding ourselves accountable for achieving these goals by transparently reporting on our progress through the AF&PA biennial Sustainability Report.

To place the development of biogenic accounting factors in perspective, it is important to point out that U.S. forests have a 1.7 growth-to-drain ratio, and they sequester over 800 million metric tons a CO<sub>2</sub> per year.<sup>1</sup> Moreover, research demonstrates that strong demand for forest products provides incentives to keep forestland forested.<sup>2</sup>

AF&PA cautiously agrees with the report's general treatment of the use of biomass residuals in forest products manufacturing. Regarding the manufacturing of pulp and paper, the report correctly points out that pulpwood is primarily harvested for the purpose of making paper and, hence, biogenic CO<sub>2</sub> emissions associated with logging residues and pulping byproducts (e.g., bark, black liquor, pulping residuals) are regarded as "anyway emissions." The biomass residuals would decay anyway if they were not used by the pulp mill to generate energy. The steam and electricity generated by the burning of these byproducts reduces the mills' use of fossil fuels. Wood products facilities such as sawmills and panel mills also derive large portions of their energy from biomass residuals such as bark, sawdust and peeler shavings, which otherwise would decay.

In reference to forest and mill residues, the EPA report states:

The process of harvesting timber and processing roundwood at mills involves a substantial amount of byproducts (DOE, 2004). Forest residues are biomass derived from "residue, including treetops, non-merchantable sections of the stem, branches, and bark, left on the ground after logging or accumulating as a result of a storm, fire, delimiting, or other similar disturbance" (EPA, 2009b). This material is often left on site after a harvesting operation and eventually will be burned or will decompose, releasing carbon into the atmosphere and into organic matter on the forest floor and soil (Evans and Ducey, 2010). These residues can be assumed to be a byproduct in most cases (i.e., a biomass market did not trigger the harvest operation in the first case).

Mill residues are secondary forest-derived biomass procured from a wood processing facility such as a saw- or pulp mill. Sources from sawmills typically include peeler shavings, sawdust, and bark, while product streams from pulp mills also include lignin and other wood components, black liquor, or liquid fuels such as cellulosic ethanol. Most of this material is currently burned for energy or heat at the facilities; some may be sold for mulch or for processing into pulp (Johnson, 2001). (p. 30)

Regarding waste materials, the report states:

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<sup>1</sup> "Greenhouse Gas Emissions and Sinks" (EPA 430-R-11-005), page ES-13.

<sup>2</sup> U.S. Forest Service, "Southern Forest Futures Project: Summary Report" (May 12, 2011), page 30.

Given that the treatment of waste itself does not drive the management of the growth and harvesting of biomass, it is more difficult to quantify a connection between the consumption of waste at stationary sources and the positive or negative CO<sub>2</sub> impact on the atmosphere.

Therefore, for this accounting framework, BAF is considered to equal 0 for biogenic CO<sub>2</sub> released from waste decay at waste management systems, waste combustion at waste incinerators, or combustion of captured waste-derived CH<sub>4</sub>. (p. 74)

In reference to residues that a pulp mill obtains from a wood products plant, the report observes:

Because residues are a secondary forest-derived biomass from other wood processing mills, the assumption is that if not burned for energy at this plant, the feedstock would have been burned or decayed elsewhere, with or without energy productions, resulting in the same level of emissions.

Thus, burning it for energy is avoiding the same emissions elsewhere, and LAR for the residue feedstock equals 1. (p. 99)

The EPA report contains a case study of a pulp and paper mill in Washington State. Unfortunately, the report does not work through the emissions calculations relating to the burning of black liquor and bark for energy because the mill is located in a region with a forest growth/drain ratio that is significantly above one and therefore, the wood it uses is automatically deemed carbon neutral.

However, it is AF&PA's understanding based on our review of the report and conversations with EPA staff that all pulp and paper mill residuals will be considered "anyway emissions" because these are manufacturing residues and if not burned for energy or treated as waste, they would have returned to the atmosphere anyway, resulting in the same level of emissions (or more if some are reduced to methane).

Reid Miner, Vice President-Sustainable Manufacturing for the National Council for Air and Stream Improvement (NCASI), has re-worked the EPA Case Study of a pulp and paper mill to show that even if the regional forest growth/drain ratio had been below one, the burning of black liquor and bark and the landfilling of wastewater treatment residuals are inherent parts of the pulping process and, therefore, must be considered "anyway emissions." AF&PA endorses Mr. Miner's calculations and for the Case Study.

The findings of the final report should confirm that CO<sub>2</sub> emissions associated with forest residues generated by logging or the mill residues associated with the processing of

wood into products (bark, black liquor, sawdust, shavings, etc.) are an intrinsic byproducts of making pulp, paper and wood products and therefore should be treated as “anyway emissions,” whether or not the region has a growth/drain ratio above or below one.

Finally, any accounting framework should be practical and efficient. For example, AF&PA supports EPA’s choice of a reference point baseline wherein the amount of carbon stored on a given land base at the end of an assessment period is compared with the carbon stored at the beginning of the period. This approach, in our view, is much more workable for the task at hand and is more transparent than the alternatives. The framework also should be operationally efficient for all participants in the supply chain. For example, small landowners are a critical part of the wood supply chain, and significant additional costs and red tape could drive them from the market, increasing the likelihood that they would no longer keep their land forested.

Thank you for considering our comments. If you have any questions, please contact me at (202) 463-2700 or [Paul.No@afandpa.org](mailto:Paul.No@afandpa.org)

Best regards,

Paul R. Noe  
Vice President for Public Policy

Attachment