



Georgia-Pacific LLC
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March 15, 2012

Via Electronic Mail to: stallworth.holly@epa.gov

Dr. Holly Stallworth
United States Environmental Protection Agency
Mailcode: 1400R
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Written Statement for March 20, 2012 Teleconference of the Scientific Advisory Board Biogenic Carbon Emissions Panel

Dear Dr. Stallworth:

Enclosed are the comments of Georgia-Pacific, LLC (GP) to the Scientific Advisory Board (SAB) Biogenic Carbon Emissions Panel on the SAB's draft responses to charge questions on the United States Environmental Protection Agency's (U.S. EPA) draft *Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources* (September 2011). GP appreciates the opportunity to comment to the SAB Biogenic Carbon Emissions Panel and the U.S. EPA during the important process of considering the scientific and technical issues associated with accounting for emissions of biogenic carbon dioxide (CO₂) from stationary sources, and development of an appropriate framework to account for those emissions.

As one of the world's leading manufacturers and marketers of forest products including building products, tissue, packaging, paper, and cellulose with more than 150 manufacturing facilities across the United States (many of which burn biomass to produce energy), GP has a significant interest in this process. GP is a member of the American Forest and Paper Association (AF&PA) and generally endorses the comments being made by that organization.

If you have any questions or need clarification, please contact Dr. Sergio F. Galeano (404-652-4654) or me.

Sincerely,

Signature not included due to SAB policy

Traylor Champion
Vice President, Environmental Affairs



**COMMENTS TO THE SCIENTIFIC ADVISORY BOARD BIOGENIC CARBON EMISSIONS
PANEL ON DRAFT RESPONSES TO CHARGE QUESTIONS ON THE U.S. EPA'S DRAFT
Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources
(September 2011)**

INTRODUCTION

Georgia-Pacific LLC (GP) is a major producer of forest products, using virgin wood and reclaimed paper fiber as feedstocks for our product manufacturing facilities. The use of biomass as a fuel for energy generation in the forest products industry is integral and/or incidental to the manufacture of these products that consumers demand and society values. Biomass residues in this sector are generated from the harvesting and manufacturing processes in the form of forest and manufacturing residues, intermediates, and co-products. Utilizing the heating value of such biomass residues to generate thermal energy and combined heat and power is sustainable and environmentally sound. As a result, CO₂ emissions from the combustion of the biomass residue fuels generated from forest product manufacturing processes should be exempt from any stationary source permitting regardless of any analysis of the growth and harvest of carbon feedstocks in the region of biomass fuel sourcing. These biomass residues are incidental and integral to and cannot be separated from the product manufacturing processes in a sustainable manner.

DEFINITION OF BIOMASS RESIDUES

CO₂ emissions from the combustion of biomass residues should be granted an exemption from stationary source permitting because they are incidental and/or integral to the manufacturing operations, and utilizing the heating value of such biomass residues to generate thermal energy and combined heat and power is sustainable and environmentally sound. Biomass residues should include all justifiable residues, intermediates, and co-products from sustainable forest management and forest products manufacturing facilities. A proper definition of biomass residues is presented below:

Biomass residues are defined as agricultural, forestry, manufacturing, and construction residues, intermediates, and co-products that come from organic materials (not derived from fossil fuels). These include:

- Agricultural residues;
- Used pallets; crates; dunnage; manufacturing and construction wood residues; landscape trimmings; mill residues; bio-solids; and sludge derived from organic matter;

- Forestry wood residues, which consists of pre-commercial thinnings (including stands in areas with no markets for small diameter trees); logging debris from commercial harvests (limbs, tops and bark); small diameter trees (less than 4 inches diameter breast height [DBH]) and other non-merchantable trees; trees made un-merchantable from insects, disease, storms and fire; and municipal woody organic material such as construction debris and right-of-way trimmings;
- Intermediates and co-products, meaning secondary or incidental residues and other products derived from a manufacturing process or chemical reactions, marketable or not, and comprising black liquor solids of the Kraft, soda or semi-chemical pulping methods; woody oils such as turpentine and tall oil; trimmings and wood residues from solid wood manufacturing processes;
- Excluded from the definition of “residues” are the following organic materials: merchantable roundwood, pulpwood, logs, longwood, wood chips, and pellets.

ACCOUNTING METHOD

For nonexempt biomass fuels, GP supports a “landscape” approach and reference-point baseline as the proven accounting method that is based on historical evidence. Only accounting based on robust statistical analysis should be utilized. Other approaches like the “debt” hypotheses for stands or woodsheds based on a comparative approach lack the certainty and reliability of the landscape approach. The temporal cumulative radiative forcing models, as presented by Cherubini *et al.*¹ and advanced by the SAB in its draft responses, are also plot or stand-based methods that lack historical evidence and the statistical robustness needed for decision making.

The “landscape” approach should be applied at a regional level for nonexempt CO₂ emissions from biomass fuels where an analysis of the growth and harvest of carbon feedstocks in the region of biomass fuel sourcing is conducted using readily available data compiled by the Forest Inventory and Analysis (FIA) program of the United States Department of Agriculture (USDA) Forest Service. Where growth exceeds harvest, carbon stocks are shown to be steady or increasing and the use of biogenic feedstocks does not have a net impact on the atmosphere. Since the accumulated evidence demonstrates that forest carbon stocks in the U.S. are increasing, there is every reason to conclude that the forest carbon cycle in the U.S., which includes both the uptake of atmospheric CO₂ in the forest and the return of biomass carbon to the atmosphere, is in fact accomplishing net removals of CO₂ from the atmosphere and validating existing accounting methods and the neutrality of biomass CO₂ emissions. A reduction in the rate of increase of carbon stocks, even in locations where the growth to harvest ratio remains greater than 1.0, is a concern to the forest products industry, but is not necessarily equivalent to an increase in biogenic CO₂ emissions. When a significantly declining rate of increase of carbon stocks is observed over a period of time, such as at least five years, authorized agencies could consider implementing precautionary or preventive measures to reverse the decline.

¹ Cherubini, Francesco, Glen Peters, Terje Berntsen, Anders Stromman, and Edgar and Hertwich. "CO₂ Emissions from Biomass Combustion for Bioenergy: Atmospheric Decay and Contribution to Global Warming." Global Change Biology Bioenergy, 2011: 413 - 426.

MARGINAL APPROACH FOR NEW USERS OF BIOMASS

For nonexempt biomass feedstocks, GP favors a “marginal” approach for the permitting of CO₂ emissions from biomass fuel combustion from other new or additional sourcing of biomass fuels with the following caveats:

- Additional CO₂ emissions from biomass residue combustion in exempted manufacturing facilities of the forest industry sector will not be subjected to marginality requirements;
- CO₂ emissions from new sources of biomass fuel combustion will not be subjected to marginality requirements if compliant with the following general requirements:
 - The growth to harvest ratio in the region of biomass fuel sourcing is greater than 1.0; and
 - Any precautionary or preventive measure instituted by an authorized agency due to a significantly declining growth to harvest ratio that is observed for more than five years.

SUSTAINABLE FORESTRY

GP is committed to sustainable forestry as demonstrated through ongoing resource evaluations, adherence to forest Best Management Practices (BMP), third party certifications and controlled wood risk assessments, protection of endangered forests, and conservation of forest biodiversity. In addition, GP engages in various outreach efforts including logger education, wildlife and habitat restoration projects, and involvement in forestry at the state level. Any final regulation on carbon neutrality should recognize the good forestry practices that already exist on forest lands regardless of if such lands and procurement programs are certified by recognized programs such as the Sustainable Forestry Initiative (SFI), Forest Stewardship Council (FSC), etc.