



NATIONAL COUNCIL FOR AIR AND STREAM IMPROVEMENT, INC.
P.O. Box 13318, Research Triangle Park, NC 27709-3318
Phone (919) 941-6400 Fax (919) 941-6401

Reid A. Miner
Vice President -
Sustainable Manufacturing
Phone (919) 600-1022
e-mail RMiner@ncasi.org

Caroline Gaudreault, Ph.D.
Program Manager –
Life Cycle Assessment
Phone (514) 286-1182
e-mail CGaudreault@ncasi.org

September 9, 2015

Dr. Holly Stallworth
EPA Designated Federal Officer
EPA SAB Panel - Carbon Dioxide Accounting for Emissions from Biogenic Sources
Sent via email: Stallworth.Holly@epa.gov

Dear Dr. Stallworth:

Thank you for the opportunity to provide comments on the September 27, 2015 draft report of the SAB Panel regarding its review of EPA's 2014 draft Framework for Assessing Biogenic CO₂ Emissions from Stationary Sources.

We would like to highlight four specific areas where we feel the text in the most recent draft report needs to be changed or elaborated.

First, the report still indicates (page B-10 lines 14 and 15) that "...wood waste carbon is generally not subject to loss via methane...". This is incorrect and should be modified. The literature is clear that while the amounts of methane are small compared to the amounts generated by municipal solid waste, woody materials decomposing under anaerobic conditions do release methane (e.g. see Wang et al. 2007¹). We would also observe that in addition to "wood waste", there are a range of manufacturing residuals from pulp, paper and wood product manufacturing (e.g. waste water treatment residuals and recycling residuals, bark) that may be landfilled and which have been demonstrated to generate methane when contained under anaerobic conditions.

Second, the report states in several places that "the appropriate time scale for considering climate impacts from biogenic feedstocks is the time period over which all terrestrial effects on the stock of carbon on the land occur..." The report should also state that at the point where an impact has been fully accounted for by applying a non-zero BAF to biomass produced by a system, the BAF applied to feedstock from that system thereafter should not carry the burden of the impact reflected in the BAF: i.e. it should revert to zero unless there are additional impacts. This can be addressed several ways depending on how the framework is applied. If the BAF is calculated at relatively small scales in an attempt to anticipate how a woodshed will respond to a discrete increase in demand, after the system reaches the end of the response period and reaches a pseudo steady state, the BAF for feedstock produced thereafter should be zero (unless, of course, there are new impacts that need to be accounted for). If the framework is applied in a way that involves updating the BAF on a regular basis, after the system has re-equilibrated following the

¹ Wang, X., Padgett, J.M., De la Cruz, F.B. and Barlaz, M.A. 2011. Wood biodegradation in laboratory-scale landfills. *Environmental Science & Technology* 45(16):6864-6871. <http://dx.doi.org/10.1021/es201241g>

introduction of a new demand, the new system conditions become the business-as-usual baseline and unless additional changes occur, the anticipated future baseline will be the same as the business as usual baseline and biomass produced will carry a BAF of zero. In this case, if new (or diminished) demand occurs, it will be reflected in the new anticipated future baseline. Ultimately, the important point is that the framework should be applied in a way that does not result in the use of BAFs that reflect, in whole or in part, carbon impacts that have already been accounted for. This is not well understood and warrants highlighting as it will be important to implementing policies on biogenic carbon.

Third, the report implies (page 6 lines 7 and 8) that in the case of MSW landfill gas, the calculations should account for the benefits of electricity generation that displaces fossil fuel-based electricity. This is inconsistent with the boundary conditions used for other feedstocks. Either the text should be clarified to indicate that avoided electricity generation is not part of the BAF calculation for landfill gas or BAF calculations for all feedstocks should include avoided GHG emissions from displaced fossil fuel-based electricity production.

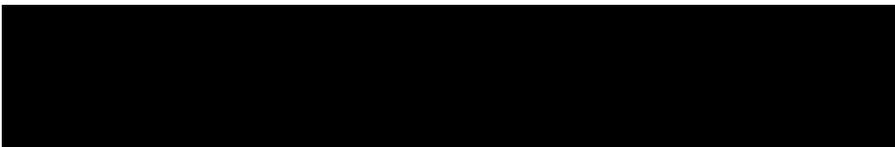
Fourth, in responding to the charge question on joint production functions (page 19 lines 27 to 37), additional discussion of allocation is needed. The report should, at a minimum, alert the reader to the need for attention to methods for allocating impacts among the products of systems having joint production functions. Better yet would be a discussion of the allocation options available and some guidance on how they might be applied in calculating BAFs.

We appreciate the opportunity to provide these comments.

Sincerely,



Reid Miner



Caroline Gaudreault