

Action items not addressed in June Draft

Doering, Otto C

to:

Angela Nugent, jng, Viney Aneja, Kenneth G Cassman, theist, wcherz
07/05/2009 11:21 AM

Cc:

"Doering, Otto C"

Show Details

All,

From Angela's July 4th e-mail on things that need to be done:

Number 9 on the list of action items, Otto's response to Melillo's comments re page 51 and 52 (biofuels) of the May meeting draft:

I have attached the revised text, revised references, and the revised Finding #4 for this section. (I went ahead and converted the acres to hectares in the second paragraph. I had not done this in this text that I sent to you May 25th and June 15th.) so it should be 100% OK. Ken approved my change to finding 4 to emphasize the biofuels and not the N/corn price ratio - and I left his point in there on animal diets from biofuel by-products. (This piece of text should finally be put to bed!)

Re action item 11 - the reference to the resolution by state Departments of Agriculture - this came from Bill Herz, I do not have a reference here as I indicated to Viney June 8th.

With luck, we are closing in on this.

Best, Otto

From a later email

The section to be revised, 2.2.3.4, in the May text is now numbered 2.2.3.5 in the June text. So that is where the text attached to my e-mail this morning goes. The new text replaces from line 30 page 48 to line 32 page 49 in the June text. The new text I sent is 2 paragraphs replacing 3 paragraphs in the old text.

(I think this is right.)

Otto

-----Original Message-----

From: Nugent.Angela@epamail.epa.gov

[mailto:Nugent.Angela@epamail.epa.gov]

Sent: Saturday, July 04, 2009 3:35 PM

To: undisclosed-recipients

Subject: Agenda, call-in information, and materials for SAB INC Public Teleconferences, July 8 12-3 pm Eastern Time

Note to Members of the SAB Integrated Nitrogen Committee

Happy 4th of July! Jim has given me the go-ahead to send out the agenda for the July 8th teleconference; the July 9th agenda will be posted later next week.

The call in number is:866-299-3188, access code 343-9981 and press the # sign.

Attached are files with the:

- 1.draft agenda for the teleconference call. (See attached file: Agenda-INC- 07-08-09.pdf)
- 2.draft list of action Items from the May 2009 INC meeting not addressed by June INC Draft report (See attached file: May action item gaps.pdf)
- 3.comments received from Don Hey on a working draft of the Executive Summary; comments received too late to be addressed in the June draft (See attached file: Hey comments-06-19-09.pdf)
4. as FYI - response received this week from EPA Staff member Andy Manale to answer questions about EPA Nitrogen Backgrounder posed by INC members at the May 2009 INC meeting(See attached file: sab response - cd.pdf)

Please note that the size of the current draft INC report (which will be the focus of the teleconference) in pdf form is 3 gigabytes, a size too large to send through many of your email systems. The draft report is posted on the SAB Web site below.

All the material for the teleconference, plus the latest INC draft report, are posted on the SAB Web site (www.epa.gov/sab) on the Web page dedicated to the July 8th teleconference. That page can be accessed by using the "Calendar" link on the blue navigation bar to access the teleconference dates for July 8th h, or by accessing the direct link below:

<http://yosemite.epa.gov/sab/sabproduct.nsf/a84bfee16cc358ad85256ccd006b0b4b/8a44c6d355a01c9f852575be004c45cb!OpenDocument&Date=2009-07-08>

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Suggested new text for section 2.2.3.4 which includes lines 13 on page 51 through line 7 on page 52 of the May 11th text. Finding 4 is also revised in this block of text. One reference from the old text (#6 in the first paragraph) is omitted and 3 new references are added to the text and given below for the references section of the report.

2.2.3.4. Impact of biofuel production capacity on Nr flux in agriculture

The enormous use of liquid fuels in the US, the rising demand for petroleum based liquid fuels from countries like China and India, and the decline in petroleum discovery all contributed to the recent record high petroleum prices. In addition most of the world's petroleum reserves are located in politically unstable areas. This has provided strong motivation for policies promoting investment in biofuels made from corn, oil crops, and ultimately from cellulosic materials. In the US, ethanol production capacity from corn in 2006 has more than doubled to over 47 billion liters/year (January 2009). The renewable fuels standard in the 2007 Energy Independence and Security Act (EISA) will support another 9.5 billion liters/year of corn based ethanol by 2015. An additional 79.5 billion liters is to come from cellulosic ethanol by 2022. Biodiesel from vegetable oils also is encouraged in EISA, but expansion has been slowed by the high food value of such oils. Brazil is rapidly expanding its production of relatively low cost sugarcane ethanol and US policies continue to be aimed at bringing about increased future biofuel production in the US.

In 2007 and 2008 petroleum prices pushed ethanol prices high enough to draw corn from food and feed uses into ethanol production and contribute to the increased price of corn. Because of the increase in petroleum/ethanol prices and the government subsidy for ethanol production, 30% of the corn crop ended up going to ethanol in 2008 (Abbott, et. al. 2008). With the subsequent collapse in petroleum and ethanol prices, followed by corn prices, we have had unused capacity in the US ethanol industry as the corn/ethanol price ratio made ethanol production uneconomic for some firms. However, EISA is likely to lead to the production of cellulosic materials and even some expanded corn production for biofuels once the US gets beyond the current blending limit for ethanol (Doering & Tyner, 2008). The higher corn prices of 2007 and 2008 resulted in more land being planted to corn and higher N fertilizer requirements. Corn area went from 31.73 million hectares in 2006/7 to 37.88 million hectares in 2007/8. 4.86 million hectares of the expansion were from a reduction in soybeans, and the remaining new acres came primarily from reduced cotton acres and from hayland and pasture. This strong response to high demand for biofuel feedstock has led to concern about increased pressure on the environment from biofuels. One important factor is the increased N necessary for growing corn and cellulosic materials (Robertson, et. al. 2008). Expansion of corn or cellulosic materials production into marginal lands can be even more problematic with respect to nutrient leaching and soil erosion. Changes in N fertilizer prices add uncertainty to the additional amounts of N that may ultimately be used in biofuel feedstock production. Production of large amounts of distillers grains co-product is also changing the way that livestock feed rations are formulated,

which in turn could have an influence on the cycling of N in cattle manure (Klopfenstein et al., 2008).

Finding 4

Rapid expansion of biofuel production has the potential to increase N fertilizer use through expanding N intensive corn production and extending cultivation for cellulosic materials that will also need N. Distillers grains are changing animal diets and affecting N recycling in livestock. Both have important consequences for the effective future management of N.

References:

Take out CAST, 2006

New References:

Abbott, P., C. Hurt, and W. Tyner, 2008. *What's Driving Food Prices?* Farm Foundation Issues Report. <http://farmfoundation.org>

Doering, O. and W. Tyner, 2008. *U.S. and International Policies Affecting Liquid Biofuels' Expansion and Profitability* Paper commissioned by the Woodrow Wilson Center for Scholars and presented at the Center's program Biofuels in the Midwest, Sept. 7, 2008, Chicago.

Robertson G., et. al. 2008. Sustainable Biofuels Redux. *Science* 322, 49-50.