

**U.S. Environmental Protection Agency**  
**Science Advisory Board**  
Integrated Nitrogen Committee  
December 10, 2008 INC Teleconference  
Final Minutes

**Date and Time:** December 10, 2008 from 2-5 p.m. (Eastern Time).

**Location:** by telephone only.

**Purpose:** As announced in Vol 73 Number 185 Pages 54803-54804 on September 23, 2008, the purpose of this teleconference is for the committee to discuss the first external review draft of its report.

**Materials Available:** Materials made available for the INC's earlier meetings and teleconferences are identified in the minutes for those meetings. Pauley Bradley sent written comments after the December 9 teleconference as did Charles Kovach of Florida DEP. Russ Dickerson forwarded comments from Wendy Wang after the December 10 teleconference. Joe Rudek of Environmental Defense Fund sent a second comment which was made available to the Committee after the December 10 call. These and other comments will be posted at the SAB's website; that location is [www.epa.gov/sab](http://www.epa.gov/sab)

**Attendees:** INC members Aneja, Boyer, Cowling, Dickerson, Doering, Galloway, Mosier, Stacey and Theis participated in the teleconference as did INC DFO Kathleen White. Randy Waite of EPA's Office of Air and Radiation was present as was Suzy Friedman of EDF and Janet Spencer of the California Air Resources Board.

**Summary:**

After the DFO called the roll, the Chair summarized the previous two days' calls saying that they had dealt with all the public comments they had received. The specific purpose of today's call, then, is to take any additional questions and comments from the public on the first external review draft. The DFO will send to the relevant co-leads the MSWord file on which the current PDF file is based. Boyer will provide some figures to Dickerson. The Committee discussed the appropriate level of detail needed to address the places they identified as control points, the numbers they used, and what they thought could be achieved.

**Details:** Randy Waite of EPA said that EPA scientists are still looking over the report and will have more input in a month or so. They look forward to the next draft. He thanks the INC for undertaking this effort. It is a great body of work with a lot of useful information that will certainly help EPA go forward with the NO<sub>x</sub> and SO<sub>x</sub> standards. The findings and recommendations are better written than they were in the White Paper released before the October 20-22 workshop meeting. There is more interest in the report than may be obvious from the number of people on the teleconferences. Galloway encouraged EPA and the public to provide their comments earlier rather than later.

Suzy Friedman of the Environmental Defense Fund had hoped for an overview of the document. Galloway explained that the INC had already gone through all of the sections of the report, reflected on it in its entirety, and addressed the public comments that have been provided.

Janet Spencer of the California Air Resources Board echoed Suzy's comments and said that she doesn't expect to provide comments.

Galloway said that some public comments have already been posted and the others will be.

INC has received the comment Andy Manale sent after the December 8 call. Arvin Mosier has already incorporated this into his revisions. A second emailed comment from Joe Rudek has not yet gone to the full Committee, so Tom Theis read the key portions on the call as noted below.

#### Committee Discussion

There was a brief discussion of the mechanics of revision the draft. The DFO will send to the relevant co-leads the MSWord file on which the current PDF file is based. Working Group Leads will decide what changes to make and ONE will make those using the track changes function and send to the DFO. Galloway will address Chapters 1 and 2 and Section 3.1.

Mosier noted that the co-leads have the specific public comments they are to address. The co-leads will note which comments they responded to and how (we agree and made the change, disagree and didn't, have some confusion and ask for clarification)

Dickerson discussed the draft with a soil scientist colleague and presented what he learned to the Committee.

Regarding Finding 3-4 on "soil quality", she said that direct application of inorganic nitrogen can actually degrade soil quality over the long term. Mosier noted that there are places where nitrogen losses are higher and comparisons of Chinese rice fields to American corn fields aren't really helpful. He thinks the context for the Finding is soil quality for crop production. Galloway asked Dickerson to ask his colleague to send her comments in writing which she did.

Boyer asked if the others still needed some figures from her and Dickerson said he did.

Theis read the emailed comment from Joe Rudek advocating a more detailed explanation of the derivation of the targets than the additional paragraphs the INC considered yesterday.

Thank you for addressing my comments in the call yesterday. I'd like to offer the following response on how the group decided to address my general comment regarding the

rationale for the numeric goals set in the paper. My understanding of the approach to be taken is that a paragraph describing what each work group did to come up with the goal would be added to the document. I think it would be far better and much more useful if the INC provided a more detailed presentation of how the goals were derived. This could be done in an appendix to facilitate incorporating it into the document.

I make this suggestion because the work has already been done by the various work groups within INC and the readers of this document would benefit from a more detailed write up of the calculations used as well as the logic behind the use of existing data sources. I also repeat the statement made in my original comments: In the inevitable debate which would accompany efforts to achieve the stated INC decreased Nr goals, a clear presentation of the process which led to selecting those goals would help avoid numerous debates about that process.

Theis thinks Rudek assumes the targets are based on more complexity than they really are.

On the other hand, if the basis is more complex, it could be concluded. Aneja and Cowling advocate a more complete description of the derivation of the targets.

Dickerson cautioned that this as a bottomless pit; once we go beyond a paragraph INC can spend days or weeks coming up with more comprehensive basis. He doesn't want to spend his time that way and is happy with the calculations that they did and the airing their thoughts got at the Workshop meeting. It would be disingenuous to suggest INC had done a detailed analysis.

Doering agrees with Dickerson. This is our best judgment estimate of what we think is attainable. If we push it too hard, people will fight over the details.

Aneja thinks they should find out more about what Rudek wants.

Boyer said the Rudek comment is not unique and others made similar questions at the Workshop meeting. She thinks it will take a few paragraphs each to address the places they identified as control points, the numbers they used, and what they thought could be achieved. She thinks they could even add based on the meeting in Washington; she would like to add something about storm water in the urban sector, for example. We should be careful to say that, by targeting low hanging fruit in several sectors with strategies which are within our reach at this time, we could have a beneficial effect. The analyses are based on the detailed numbers INC has access to and the breadth and width of expertise of the Committee.

Galloway thinks Boyer's approach and what Theis suggested yesterday are congruent. Cowling added best management practices to the low hanging fruit.

Galloway thinks he hears a range of views among those on the call about how detailed the support needs to be.

Stacey thinks that the problem is not so much that the justification is not in the report, but that the justification and the recommendations are separated in the text.

This suggests that, for the present, they proceed with the brief additions as discussed December 9. Like Dickerson, he is concerned that too much additional detail can create more problems. What INC did is perfectly justifiable, it just needs to be explained better. Any individual or organization might dislike the numbers INC comes up with, but if the basis for the targets is properly explained, they can't attack their credibility.

Dickerson fears people might be looking from INC for something like what is done in a SIP and the state of the science is not advanced enough to support that kind of analysis.

Galloway asked if there were any additional comments from INC or the public. There weren't and the call was adjourned at 2:45

Respectfully Submitted:

Certified as True:

/ s /

Ms. Kathleen E. White  
Designated Federal Official

/ s /

Dr. James N. Galloway, Chair  
SAB Integrated Nitrogen Committee