

From: Thomas Hebert
To: Edward Hanlon/DC/USEPA/US@EPA
Date: 08/20/2012 06:01 PM
Subject: Producer Groups' Questions/Comments Regarding "Processed-Based Models"

Hi Mr. Hanlon,

This email is on behalf of United Egg Producers, National Pork Producers Council, and the US Poultry and Egg Association. We were principal participants in the creation of the entire Air Consent Agreement process and funders of the subsequent NAEMS data collection effort on which the entire EEM development process depends.

We listened to August 13 discussions of the SAB on AFO EEMs, and have followed the subsequent trade press reports and felt it important to draw a matter to your and the SAB's attention. We ask for your assistance in bringing this to the SAB's attention and for your thoughts as to how this matter may be best addressed.

We noted that during the August 13 teleconference there was considerable discussion of the possible use of a "process-based model" approach to developing the EEMs, and some were saying that they believed there is enough data now from NAEMS and other credible sources to do a good enough job of this. While we are quite skeptical that there are enough data from the NAEMS study itself to do a good job of process-based modeling, we know that this science is evolving, other appropriate and sound data may be available, and that certain processed-based applications may in fact be possible. As a result we are very interested in learning more about the thinking behind the SAB statements about processed-based modeling.

We do have a very fundamental concern about this discussion, though. That is...what is meant by the term "processed-based modeling?" In our experience "process-based modeling" is a term that gets thrown around without in conversations where there is no shared understanding of the term's meaning. For example, we asked one of the original NRC authors who supported the NRC finding that more process-based modeling should be used for these EEMs what he meant by that term. He responded, "In my mind we were not referring to a full blown process-based modeling effort – the data is not there for that. In my mind, I was more interested in not only what happens in the animal houses with the manure but also to when it is used in crop production." Unfortunately, the NRC themselves never defined this term adequately. We know that some researchers think a process-based model for EEMs has to be focused on a highly specified and detailed depiction of the feed ration of the animals and the chemistry and biology of that, with less emphasis on the biophysical properties of the manure and ventilation systems. Others are more focused on the biophysical properties of the manure, which has to reflect the feed ration content of course, but do not use highly specified models of the feed ration. Some want to combine both areas of focus.

We suspect and worry that the SAB members, industry and EPA have a very different understanding of what is meant by the term "process-based model." If so, this is an enormous problem. If the SAB members do not have a shared understanding of what this term means they will certainly be talking past each other. Just as important, their advice to EPA Office of Air in

this regard will be highly counterproductive since there will be no way for the Air Office to do anything with the recommendation. It will also not be possible for stakeholders such as ourselves to comment meaningfully on the recommendations.

Therefore, we strongly encourage the SAB, before it spends more time discussing process-based models, to fully develop a shared understanding of what is meant by a process based model. If the SAB recommends a process based model approach for an EEM then this model must be explained in detail to EPA and the stakeholder community. SAB must explain, at least conceptually, how such a model would be specified and the kinds of variables it would include, and how they would be used in the model to generate the EEMs.

A number of fundamental and critical concerns about the draft EEMs were included in the comments the livestock and poultry groups submitted to EPA this spring. All of those bear full consideration by the SAB. One core consideration, though, is relevant to this question of processed-based modeling. The NAEMS data that EPA has before it can be used to develop sound, straightforward, practical look-up tables for the predominate animal production systems in use today, in the dominant climactic regions, for some of the top air pollutants of concern. Such tools, while basic, would be of enormous value to farmers while providing sound and consistent guidance to the EPA and state regulators under the air emissions statutory provisions applicable to agriculture today. That was the entire point for the thousands of farmers who entered into the legally-binding Air Consent Agreements with EPA in the first place. EPA must not miss the chance to create such tools, which could easily occur if it is instead focused on highly complicated, complex and less-farmer-useful models, particularly if EPA must process, analyze and incorporate large quantities of other data in order to make such more complicated models possible.

Thanks for your attention to this request. Please let us know if you have any questions.

Tom Hebert
On behalf of UEP, NPPC, USPEA