

**Minutes of the  
U.S. Environmental Protection Agency  
Hypoxia Advisory Panel  
Public Meeting  
February 28 – March 2, 2007**

Committee Members:

Dr. Virginia Dale, Chair  
Dr. Judy Meyer  
Dr. Hans Paerl  
Dr. Bill Crumpton  
Dr. Mark David  
Dr. Daniel Conley  
Dr. Richard Lowrance  
Dr. Denis Gilbert  
Dr. Walter Boynton  
Dr. Andrew Sharpley  
Dr. Don Wright  
Dr. James Opaluch  
Dr. Kyle Mankin  
Dr. Tom Simpson  
Dr. Ken Reckhow  
Dr. Bob Howarth  
Dr. James Sanders  
Dr. Cathy Kling

Date and Time:

February 28 – March 2, 2007

Purpose:

The Hypoxia Advisory Panel will discuss how to respond to the Agency's charge.

SAB Staff:

Dr. Holly Stallworth, Designated Federal Officer  
Dr. Thomas Armitage, Designated Federal Officer  
Dr. Anthony Maciorowski, Associate Director for Science  
Dr. Vanessa Vu, Director  
Dr. Mary Belefski

Other EPA Staff:

Katie Flahive, Tom Barnwell, Barry Korb

Other:

David Kidwell, National Oceanic and Atmospheric Administration (NOAA)  
Libby Jennett, NOAA  
Sheryl Kunickis, U.S. Department of Agriculture, Natural

## Resources and Conservation Service

### Attachments:

- Attachment A: Agenda
- Attachment B: Dr. Meyer's presentation of 2-28-07
- Attachment C: Dr. Kling's presentation of 2-28-07
- Attachment D: HAP Report Issues, 2-28-07
- Attachment E: Dr. Sanders presentation, 3-1-07
- Attachment F: Modeling Guidance, 3-1-07

### **Meeting Summary**

The discussion followed the issues and general timing as presented in the meeting agenda shown in Attachment A. Dr. Stallworth convened the meeting and explained the Hypoxia Advisory Panel (HAP) will operate under the Federal Advisory Committee Act. Dr. Dale reviewed the agenda.

Dr. Judy Meyer presented a summary of the contributions of members of Subgroup 2 on the "Characterization of Nutrient Fate, Transport and Sources." Dr. Meyer's presentation is shown as Attachment B. Dr. Cathy Kling presented the contributions of members of Subgroup 3 on "Goals and Management Options" as shown in Attachment C. Dr. Sanders also presented the findings of Subgroup 1 on "Characterization of the Causes of Hypoxia."

Following the presentations of the 3 Subgroup leaders (Dr. Meyer, Dr. Kling and Dr. Sanders), Dr. Dale directed panelists to organize their thoughts in terms of discrepancies, gaps, overlap, and contentious issues. As listed in Attachment D -- HAP Report Issues, panelists offered their thoughts associated with these four categories of issues.

Following a lunch break, break-out sessions were held to discuss potential conclusions and recommendations in the report. Panelists in Subgroups 2 and 3 met collectively in a break-out session while panelists in Subgroup 1 met separately. Members of Subgroups 2 and 3 focused on the relative effectiveness of various management options as well as the panoply of "co-benefits" of reducing nitrogen and phosphorus runoff on the Mississippi Atchafalaya River Basin. Members of Subgroup 1 focused on oceanographic issues.

On the morning of March 1, 2007, members discussed their particular conclusions and recommendations with the entire panel. Dr. Sanders presented his break-out group's conclusions as summarized in Attachment E. Panelists also discussed the possibility of sending out their advisory report for peer review prior to finalization. Dr. Vanessa Vu, Director of the Science Advisory Board Staff Office, asked members to forward names of possible peer reviewers for her consideration. In terms of the agenda, Dr. Dale suggested 4 break-out groups for the afternoon sessions: co-benefits, goals and load reductions, modeling and ethanol. Dr. Dale also asked that the report writing follow the general format that after stating scientific facts, an explanation of their importance should follow.

Members discussed a host of hypoxia-related issues, including its effects of living resources, the role of organic carbon in hypoxia formation, problems with the point source estimates for N and P in the Mississippi Atchafalaya River Basin and ethanol.

On the afternoon of March 1, 2007, members held discussions in one or more of the 4 groups suggested earlier: co-benefits/tradeoffs, goals and load reductions, modeling and ethanol. A summary of the results of the discussion in the modeling group is shown in Attachment F.

The full Panel reconvened on the afternoon of March 1 and discussed the upcoming schedule of homework, deadlines, teleconferences and the next face-to-face meeting. The general timeline for the panel is shown below.

*March 9:* Some panelists will need to submit text to another panelists for review.

*March 16:* All revisions to DFO.

*March 20 at 11am:* Chair/Subgroup Leader/SAB Staff office phone call.

*April 2 at 9:00am:* Subgroup 1 teleconference

*April 16 at 1:00pm:* Subgroups 2 – 3 teleconference

*May 7 at 1:00 pm:* HAP teleconference

*End of May:* Public draft document posted on website.

*June 13-15, 2007:* Face-to-Face meeting in New Orleans

On the morning of March 2, 2007, panelists focused more intently on the most important recommendations that should go in the Executive Summary. Percentage reductions in nitrogen and phosphorus were the source of much discussion. Acting Chair Dr. Meyer led the group in a discussion of the key findings and encouraged members to produce action-oriented recommendations as well as research recommendations.

On Behalf of the Panel,  
Respectfully Submitted,

Holly Stallworth, Ph.D. /s/  
Designated Federal Officer

Certified as True:

Virginia Dale, Ph.D. /s/  
Chair, Hypoxia Advisory Panel

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by Committee member during the course of deliberations within the meeting. Such ideas, suggestions and deliberations do not necessarily reflect consensus

advice from the panel members. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters or reports prepared and transmitted to the EPA Administrator following the public meetings.