

**U.S. Environmental Protection Agency
Clean Air Scientific Advisory Committee (CASAC)
Secondary NAAQS Review Panel for Oxides of Nitrogen and Sulfur
Public Meeting
Hilton Durham Hotel Near Duke University
3800 Hillsborough Road
Durham, North Carolina, 27705**

AGENDA

Purpose: The CASAC Secondary NAAQS Review Panel for Oxides of Nitrogen and Sulfur will peer review: (1) EPA’s *Integrated Science Assessment for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter – Ecological Criteria (Second External Review Draft)*, and (2) *Review of the Secondary Standards for Ecological Effects of Oxides of Nitrogen, Oxides of Sulfur and Particulate Matter: Risk and Exposure Assessment Planning Document*.

Wednesday, September 5, 2018

9:00 - 9:15 a.m.	Convene Meeting	Dr. Thomas Armitage Designated Federal Officer
	Welcoming Remarks	Mr. Thomas Brennan, Acting Director, EPA Science Advisory Board Staff Office
	Purpose of the Meeting and Review of Agenda	Dr. Ivan Fernandez, Chair
9:15 - 10:00 a.m.	EPA Presentation on the Second External Review Draft of the Integrated Science Assessment (ISA)	Dr. John Vandenberg Dr. Tara Greaver EPA National Center for Environmental Assessment
10:00 - 10:20 a.m.	Public Comments	Registered Speakers
10:20 - 10:30 a.m.	Break	
10:30 - 10:50 a.m.	Review of the ISA Charge Questions	Dr. Fernandez and Panel Members

10:50 a.m. - 12:15 p.m. **Discussion of the Panel's Responses to the ISA Charge Questions**

Chapter 1.3 (Emissions and Atmospheric Chemistry)

Lead Discussants: Drs. Donna Kenski¹, Praveen Amar, Daven Henze

Chapter 1.4 (Gas-phase direct phytotoxic effects)

Lead Discussants: Drs. Edith Allen, Mark Fenn, Frank Gilliam

Chapter 1.5 (Terrestrial nitrogen enrichment and acidification)

Lead Discussants: Drs. Mark Fenn, Edith Allen, Ivan Fernandez

12:15 - 1:30 p.m.

Lunch

1:30 - 3:30 p.m.

Discussion of the Panel's Responses to the ISA Charge Questions (continued)

Chapter 1.6 (Freshwater nitrogen enrichment and acidification)

Lead Discussants: Drs. Douglas Burns, Elizabeth Boyer, William McDowell

Chapter 1.7 (Estuarine and near-coastal nitrogen enrichment and nitrogen-driven acidification)

Lead Discussants: Drs. Hans Paerl, Elizabeth Boyer, William McDowell

Chapter 1.8 (Wetland ecosystem nitrogen enrichment)

Lead Discussants: Drs. Frank Gilliam, Douglas Burns, Hans Paerl

Chapter 1.9 (Freshwater and wetland ecosystem sulfur enrichment)

Lead Discussants: Drs. William McDowell, Elizabeth Boyer, Douglas Burns

Chapter 1.10 (Ecological effects of particulate matter other than nitrogen and sulfur deposition)

Lead Discussants: Drs. Praveen Amar, Donna Kenski, Richard Poirot

3:30 - 3:45 p.m.

Break

¹ Lead writers are underlined.

3:45 - 5:00 p.m.	Discussion of the Panel’s Responses to the ISA Charge Questions (continued)	
	Chapter 1.11, 1.12, 1.13, and 1.14 (Recovery, Climate modification, key scientific uncertainties, and ecosystem services)	Lead Discussants: Drs. <u>Daven Henze</u> , James Boyd*, Lauraine Chestnut, Erik Nelson*
	Executive Summary and Chapter 1.2 (Connections Concepts, and Changes)	Lead Discussants: Drs. <u>Richard Poirot</u> , Praveen Amar, James Boyd*, Lauraine Chestnut, Donna Kenski, Erik Nelson*
5:00 - 5:15 p.m.	Brief Clarifying Comments from Members of the Public	
5:15 p.m.	Recess for the Day	
<u>Thursday, September 6, 2018</u>		
8:00 a.m.	Reconvene	
8:05 - 8:35 a.m.	EPA Presentation on Risk Exposure Assessment Planning Document	Dr. Erika Sasser Ms. Karen Wesson Dr. Rob Pinder Dr. Travis Smith EPA Office of Air Quality Planning and Standards
8:35 - 8:50 a.m.	Public Comments	Registered Speakers
8:50 - 9:15 a.m.	Review of the REA Planning Document Charge Questions	Dr. Fernandez and Panel Members
9:15 a.m. - 10:15 a.m.	Discussion of the Panel’s Responses to the REA Planning Document Charge Questions	
	Overall Analytical Approach	Lead Discussants: Drs. Elizabeth Boyer, Douglas Burns, Lauraine Chestnut, Ivan Fernandez, Erik Nelson*, Richard Poirot
10:15 - 10:30 a.m.	Break	

*participating via teleconference

10:30 a.m. - 12:00 p.m.	Discussion of the Panel’s Responses to the REA Planning Document Charge Questions (continued)	Lead Discussants: Drs. Praveen Amar, Daven Henze, Donna Kenski
	Ambient Air Quality Analyses	
12:00 - 1:00 p.m.	Lunch	
1:00 - 2:00 p.m.	Discussion of the Panel’s Responses to the REA Planning Document Charge Questions (continued)	
	Ecological Risk Assessment	Lead Discussants: Drs. Edith Allen, Mark Fenn, Frank Gilliam, William McDowell, Hans Paerl
2:00 - 2:15 p.m.	Brief Clarifying Comments from Members of the Public	
2:15 - 3:15 p.m.	Summary of Major Findings and Recommendations on the ISA	
	Executive Summary and Chapter 1.2 (Connections Concepts, and Changes)	Mr. Poirot
	Chapter 1.3 (Emissions and Atmospheric Chemistry)	Dr. Kenski
	Chapter 1.4 (Gas-phase direct phytotoxic effects)	Dr. Allen
	Chapter 1.5 (Terrestrial nitrogen enrichment and acidification)	Dr. Fenn
	Chapter 1.6 (Freshwater nitrogen enrichment and acidification)	Dr. Burns
	Chapter 1.7 (Estuarine and near-coastal nitrogen enrichment and nitrogen-driven acidification)	Dr. Paerl
	Chapter 1.8 (Wetland ecosystem nitrogen enrichment)	Dr. Gilliam
	Chapter 1.9 (Freshwater and wetland ecosystem sulfur enrichment)	Dr. McDowell
	Chapter 1.10 (Ecological effects of particulate matter other than nitrogen and sulfur deposition)	Dr. Amar

Chapter 1.11, 1.12, 1.13, and 1.14 (Recovery,
Climate modification, key scientific uncertainties,
and ecosystem services)

Dr. Henze

3:15 - 3:30 p.m.

Summary and Next Steps

Dr. Fernandez

3:30 p.m.

Adjourn

Dr. Armitage