

**Summary Minutes of the
U.S. Environmental Protection Agency
Clean Air Scientific Advisory Committee (CASAC)
Public Teleconference
January 27, 2012
10:00 am – 12:00 pm, Eastern Time**

CASAC Members: Dr. Jon Samet, Chair
Dr. Ted Russell
Dr. Christopher Frey
Dr. Helen Suh
Dr. Kathie Weathers
Dr. Ana Diez Roux
Mr. George Allen

Purpose: CASAC amended and approved a draft letter on EPA's *Draft Near-Road Nitrogen Dioxide Monitoring Technical Assistance Document (August 2011)*.

Designated Federal Officer: Dr. Holly Stallworth, Designated Federal Officer

Other EPA Staff: Neelson Watkins (Office of Air Quality Planning and Standards), Ed Hanlon (SAB Staff Office)

Public: Will Ollison (American Petroleum Institute), Cathe Kalisz (American Petroleum Institute), Wig Zamore (Somerville Transportation Equity Partnership), Doug Brugge (Tufts Medical School), Jon Heuss (Air Improvement Resource, Inc.), Rayna Broadway (Missouri Department of Natural Resources); William Wetherell (Missouri Department of Natural Resources), Chris Wood (Missouri Department of Natural Resources), Jerry Downs (Missouri Department of Natural Resources), Steve Hall (Missouri Department of Natural Resources), Celeste Koon (Missouri Department of Natural Resources), Josh Vander Veen (Missouri Department of Natural Resources), Mike Ragan (Washington State Department of Ecology), Carl Selnick (San Diego County Air Pollution Control District), Jacqueline Baylon (Inside EPA), Joette Steger (North Carolina Division of Air Quality), Jenette Kwong (California Air Resources Board)

Meeting URL: The agenda, draft letter of 12/23/11 and a written public comment (from the Alliance of Automobile Manufacturers) may be found on the meeting webpage at: <http://yosemite.epa.gov/sab/sabproduct.nsf/bf498bd32a1c7fdf85257242006dd6cb/4008db09be88a66085257926004f105b!OpenDocument&Date=2012-01-27>.

FRIDAY, JANUARY 27, 2012

Meeting Summary

The discussion followed the issues and general timing as presented in the meeting agenda.

Opening of Public Meeting

Dr. Stallworth convened the meeting and explained that CASAC operates under the Federal Advisory Committee Act. Mr. Neilson Watkins of EPA's Office of Air Quality Planning and Standards (OAQPS) thanked the Air Monitoring and Methods Subcommittee for its review of the *Draft Near-Road Nitrogen Dioxide Monitoring Technical Assistance Document (August 2011, TAD)*. Mr. Watkins stated that the TAD had already been revised to address CASAC's feedback. Specifically the updated TAD, released 12-21-11, clearly defines the objectives of the Near-Road NO₂ network, and expounds on the relationship of the near-road network to the NO₂ NAAQS revision and EPA's goal of limiting high short-term peak concentrations expected to occur on or near roadways. The revised TAD includes a "quick-start guide" for users, increased discussion on near-road safety concepts, and a discussion on selecting a second near-road site. Moreover, the revised TAD provides improvements on the discussion of using EPA MOVES and AERMOD to model roadway segments, and more information on key decision points related to state and local roadway decisions and offered priorities for states on multi-pollutant monitoring.

Dr. Samet noted that the letter should acknowledge these improvements even though the Air Monitoring and Methods Subcommittee (AMMS) had not reviewed the revised TAD.

During the public comment period, Mr. Wig Zamore of the Somerville Transportation Equity Partnership reminded listeners of the importance of modeling the dynamics of near-road environments. He also urged EPA and CASAC to elevate particle size and composition in its priorities and discussed recent scientific work showing the rapid translocation of nanoparticles to the lung. Dr. Doug Brugge of Tufts Medical School echoed Mr. Zamore's remarks by emphasizing the importance of ultra fine particles and particle number count. Dr. Brugge suggested ultra fine particles were driving the adverse health outcomes seen near highways and asked that particle number counts be a part of multi-pollutant monitoring. Dr. Brugge also noted that EPA should be aware of and consider the results of various ongoing studies that were assessing monitoring results from near-highway environments. One such study includes an ongoing effort at Tufts University.

Mr. Jon Heuss, on behalf of the Alliance of Automobile Manufacturers, said that roadway monitoring should be focused on locations where there are the highest population exposures. Mr. Heuss also asked that the result of the pilot study be included in any final TAD and emphasized the limitations of AERMOD for modeling near-road environments. Mr. Heuss noted that the ramifications of the new 1-hour standard and Near-Road monitoring go well beyond roadway emissions, and also stated that EPA's draft guidance for modeling Near-Road NO₂ is deficient. Mr. Heuss concluded by asking EPA to use a phased approach to development of the near-road monitoring network.

In discussing the letter, members suggested various minor edits, specifically: adding language to clarify what is meant by “clearly define the objectives,” more clearly stating concerns regarding the importance of considering population exposure when using monitors, strengthening the language recommending that population oriented monitors be maintained and broadening the reference to “stakeholders.”

In discussing the responses to charge questions, a request was made to simplify the discussion of the relationship between the probe’s horizontal and vertical placement. CASAC members raised questions about why other models besides AERMOD were not mentioned in discussing dispersion modeling, and agreed to include reference to at least one available model that could be considered.

Dr. Russell, Chair of AMMS, and Mr. Hanlon, Designated Federal Officer for AMMS, said they would revise the draft letter to incorporate comments made on the teleconference. CASAC members indicated the letter could go forward to the Administrator without further review.

On Behalf of the Committee,
Respectfully Submitted,

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

Certified as Accurate:

Jonathan Samet, M.D. /s/
Chair, Clean Air Scientific Advisory Committee
Sulfur Oxides Primary NAAQS Review Panel

NOTE AND DISCLAIMER: The minutes of this public meeting reflect diverse ideas and suggestions offered by committee members during the course of deliberations within the meeting. Such ideas, suggestions, and deliberations do not necessarily reflect definitive consensus advice from the panel members. The reader is cautioned to not rely on the minutes 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.