



October 3, 2008

MEMORANDUM

SUBJECT: CASAC Review of the Draft Exposure Chapter and Related Appendix for the Risk and Exposure Assessment to Support the Review of the NO₂ Primary National Ambient Air Quality Standard

FROM: Lydia Wegman, Director
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Office of Air Quality Planning and Standards

TO: Angela Nugent
Designated Federal Officer
Clean Air Scientific Advisory Committee
EPA Science Advisory Board Staff Office

On August 14, 2008 I sent to you a memorandum conveying a partial draft document, *Risk and Exposure Assessment to Support the Review of the NO₂ Primary National Ambient Air Quality Standard: Second Draft* (henceforth referred to as the draft risk and exposure assessment document) along with proposed charge questions. As was discussed at the September 9-10, 2008 meeting of the Clean Air Scientific Advisory Committee (CASAC) Oxides of Nitrogen Primary NAAQS Review Panel (hereafter, the Panel), we agreed to provide the exposure analysis chapter and its related appendix to the Panel for review. Consequently, attached to this memo are two additional sections of the draft risk and exposure assessment document, Chapter 8 and a revised Appendix B, which are to be the focus of that review. The purpose of these sections is to convey the approach taken to characterize NO₂ exposures, to convey the approach taken to characterize health risks associated with those exposures, and to present the results of those analyses.

These additional sections have been prepared by the Environmental Protection Agency's (EPA) Office of Air Quality Planning and Standards (OAQPS) staff as part of EPA's ongoing review of the primary national ambient air quality standard (NAAQS) for nitrogen dioxide (NO₂). These additional sections of the draft risk and exposure assessment document will be the focus of a review by the Panel, which has scheduled a public teleconference to be held on October 22, 2008. I am requesting that you forward this memo, and the attached electronic files containing the additional sections of the draft risk and exposure assessment document, to the Panel to prepare for that review.

Document for Review

We will send printed copies of the following sections of the risk and exposure assessment document to members of the Panel who have not expressed a preference for electronic copies only. These additional sections of the document are also available on the EPA website: http://www.epa.gov/ttn/naaqs/standards/nox/s_nox_cr_rea.html

- **Attachment:** Draft Chapter 8 and Appendix B of *Risk and Exposure Assessment to Support the Review of the NO₂ Primary National Ambient Air Quality Standard: Second Draft*

The draft Chapter 8 and related Appendix B of the risk and exposure assessment document are the focus of the scheduled review with the Panel, to be guided by the charge questions listed below. Chapter 8 presents the approach and results of the exposure assessment as well as the approach and results of the risk characterization that is based on the exposure assessment.

Charge to the CASAC NO_x/SO_x Primary Review Panel

We ask the Panel to address the following, taking into consideration changes and additions since the first draft:

Characterization of Exposure and Health Risks Associated with Exposure (Chapter 8 and Appendix B):

1. To what extent is the assessment, interpretation, and presentation of the results of the exposure analysis technically sound, clearly communicated, and appropriately characterized?
2. The draft risk and exposure assessment document evaluates exposures in Atlanta. What are the views of the Panel on the approach taken and on the interpretation of the results of this analysis?
3. What are the views of the Panel regarding the adequacy of the assessment of uncertainty and variability with respect to characterization of exposures and health risks associated with those exposures?
4. To what extent is the assessment, interpretation, and presentation of health risk characterization included in Chapter 8 technically sound, clearly communicated, and appropriately characterized?

We look forward to discussing these issues with the Panel at our upcoming meeting. Should you have any questions regarding these sections of the draft risk and exposure assessment document, please contact: Dr. Stephen E. Graham (919-541-4344; email graham.stephen@epa.gov), or Dr. Scott M. Jenkins (919-541-1167; email jenkins.scott@epa.gov).

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