

07-20-11 Preliminary Draft Comments from Clean Air Scientific Advisory Committee (CASAC) Lead Review Panel. These preliminary pre-meeting comments are from individual members of the Panel and do not represent CASAC consensus comments nor EPA policy. Do not cite or quote.

Comments from Dr. Philip Goodrum

Comments on EPA's Review of the National Ambient Air Quality Standards for Lead: Risk and Exposure Assessment Planning Document (June 2011)

1. The overview of the previous health risk assessment and presentation of results from the last review of the lead NAAQS.

Overall, the REA is well written and easy to follow. Reliance on the previous health risk assessment is logical given that the All Ages Lead Model has not yet been completed. Once the AALM is available, additional data available for age groups older than 7 years can be incorporated more directly in the assessment.

2. The staff evaluation of elements of the risk assessment that were considered in determining the need for an updated quantitative risk assessment (e.g., advances in methods for modeling exposure including the estimation of air-related pathways of exposure, prediction of blood Pb, updated/refined concentration-response functions for IQ loss).

The presentation of new research findings and information on exposure and alternative risk metrics since 2006 was well organized and clearly described.

3. The decision to rely on the quantitative health risk assessment from the previous review, interpreted within the context of newly available evidence and information.

The decision to substantially rely on scenarios that were previously explored appears well justified. For the GSD term, although NHANES and other recent monitoring data are available from which to explore how the dispersion in the lognormal distribution may have changed since IEUBK was developed with a recommended default of GSD=1.6, the calculations would need to control for variability in exposure conditions. With the GSD term, we are primarily interested in the interindividual variability in PbBs under the condition that a population is exposed to the same environmental concentrations of lead in all exposure media. In the development and implementation of the AALM, the effort required to conduct the appropriate model verification using various community-level monitoring data will be warranted. These statements may be useful to add to the REA.