

## CEQ Comments on the Final Interagency Review Draft Dioxin Reassessment – December 5, 2011

The Council on Environmental Quality appreciates the opportunity to review and comment on *EPA's Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments, Volume 1* and the draft IRIS Summary. These documents provide a detailed and sophisticated hazard identification and dose response assessment for 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD), and by extension other dioxins and dioxin-like compounds. We did not identify any substantive issues which would interfere with EPA's plans to release this assessment in the near future.

The Dioxin Reanalysis has been under way for more than a decade. The lack of formal toxicity values for this important chemical is a potential obstacle to adequate protection of environmental and public health. The decision to issue the Reanalysis in two volumes is reasonable and appropriate. This approach will provide EPA with additional time to refine their cancer assessment while and allow them to immediately finalize a non-cancer reference dose (RfD), which can be used to address long-standing issues of environmental contamination.

The following comments are provided as suggestions to improve the readability of the document:

**Title** – The document title, *EPA's Reanalysis of Key Issues Related Dioxin Toxicity and Response to NAS Comments, Volume 1*, may cause some confusion because it seems to suggest that it is only a partial reanalysis of some key issues, and that the reader may still need to refer to the 2003 Reanalysis. However, it appears that this document, in conjunction with the volume 2, will constitute the final (post external review) Reanalysis. It is understandably important to note that this document was developed in response to comments from the NAS, and the Science Advisory Board, but some modification of the title might reduce confusion for readers who are not familiar with the complex history associated with this particular assessment.

**Exposure Assessment** – The Reanalysis references the 2009 article by Lorber, Patterson, Huwe and Kahn: *Evaluation of background exposures of Americans to dioxin-like compounds in the 1990s and the 2000s*. This publication is an update of exposure information originally presented in the 2003 Reanalysis. It provides valuable information about estimated exposures to the American public and provides a context for the RfD. Given the importance of this government funded research it seems that the information should be made publicly available. The HERO database has greatly improved the public's access to information about support data, including abstracts. In this case, however, it seems that the public should have access to the complete study. Because of copyright issues it may not be possible to make the journal article available, but perhaps the analysis could be put into an appendix.

**Units** – The assessment provides estimates of dioxin toxicity, intake and exposure in various units, including mg/kg-day, ng/kg-day, and pg/kg-day (or pg/day). There are valid reasons for use of these different units and it is relatively straightforward to convert between them. However, it might help the public if one standard set of units (e.g., mg/kg-d) was generally presented along with any alternatives, which should ideally be in units that do not require exponents.

**Interagency Review** – The Reanalysis and IRIS Summary lists the interagency reviewers as other federal agencies and White House Offices. We believe that this description is inaccurate and could lead to some confusion. Preferable alternatives would be: other federal agencies; other federal agencies and the Executive Office of the President; a list of all participating agencies (including those within the EOP).

**Quantitative Uncertainty Analysis** – The quantitative uncertainty analysis is an important addition and directly responsive to the NAS. However, this new text is not very accessible and additional efforts to improve readability should be considered. The figures are helpful, but they should explain any units and abbreviations (i.e., W and P in Fig 4.6).

**Appendices** – Appendices B – I were bundled into one file. This is a considerable amount of material (more than 1500 pages) and it would be helpful if this document was divided up or contained additional pdf bookmarks to help readers find specific sections.

**Editorial Comments** – Minor comments on specific sections of text are provided as sticky notes in the accompanying pdf files for the IRIS Summary, Front Matter, and Sections 1, 2 and 4.