

## **Expert Elicitation White Paper – External Review Draft Charge Questions to the Peer Review Panel**

In April 2005, EPA’s Science Policy Council formed the cross-Agency Expert Elicitation (EE) Task Force (EETF) to initiate a dialogue within the Agency about the conduct and use of EE and to develop an EE White Paper. This dialogue was intended to facilitate future development and appropriate use of EE methods by EPA and in submissions to EPA from outside parties. This EE White Paper presents the views of the EETF; it does not represent Agency guidance or policy.

The EE White Paper discusses the utility of EE for EPA regulatory and non-regulatory analyses and decision making, shares good practices based on a review of the literature and experience within EPA and other federal agencies and describes steps for possible broader application across EPA. This White Paper provides background explaining the increased interest in this approach and summarizes prior experiences and applications within EPA, throughout the federal government, and elsewhere. The White Paper defines EE and considers its advantages and disadvantages as one of many tools to characterize uncertainty. In addition, a number of factors are described that may help determine when EE is appropriate. The White Paper explains the process for conducting a credible EE and illustrates approaches for presenting results. It provides the Agency’s Science Policy Council with recommendations for further development and use of EE within EPA or by outside parties submitting EE assessments to EPA for consideration.

EPA seeks feedback regarding the White Paper’s characterization of the potential usefulness of EE, how to strengthen the scientific basis for its use, the implications for possible implementation of EE at EPA. As noted above, this EE White Paper does not represent official EPA guidance or policy. However, it recommends the development of such guidance or policy and can be used to facilitate that development.

EPA would appreciate the SAB’s responses to the following charge questions:

- A.** Does the White Paper provide a comprehensive accounting of the potential strengths, limitations, and uses of EE? Please provide comments that would help to further elucidate these potential strengths, limitations, and uses. Please identify others (especially EPA uses), that merit discussion.
- B.** Transparency is important for analyses that support Agency scientific assessments and for characterization of uncertainties that inform Agency decision making. Please comment on whether the White Paper presents adequate mechanisms for ensuring transparency when 1) considering the use of EE (chapter 4), 2) selecting experts (chapter 5); and 3) and presenting and using EE results (chapter 6). Please identify any additional strategies that could improve transparency.
- C.** Please comment on the technical issues below and any other technical issues that are presented in the White Paper.
  - 1)** Section 5.2 considers the process of selecting of experts.

- a) Although it is agreed that this process should seek a balanced group of experts who possess all appropriate expertise, there are multiple criteria that can be used to achieve these objectives. Does this White Paper adequately address the different criteria and strategies that may be used for nominating and selecting experts?
      - b) Are there additional technical aspects about this topic that should be included?
  - 2) Sections 5.4 and 6.7 present multi-expert aggregation.
    - a) Among prominent EE practitioners there are varied opinions on the validity and approaches to aggregating the judgments obtained from multiple experts. Does this White Paper capture sufficiently the range of important views on this topic?
    - b) Are there additional technical aspects about this topic that should be included?
  - 3) Section 5.2.2 discusses how the problem of an EE assessment is structured and decomposed using an “aggregated” or “disaggregated” approach.
    - a) The preferred approach may be influenced by the experts available and the analyst’s judgment. Does this discussion address the appropriate factors to consider when developing the structure for questions to be used in an EE assessment?
    - b) Are there additional technical aspects about this topic that should be included?
  - 4) Sections 7.1 and 7.2, presents the Task Force’s findings and recommendations regarding: 1) selecting EE as a method of analysis, 2) planning and conducting EE, and 3) presenting and using results of an EE assessment. Are these findings and recommendations supported by the document?
  - 5) Please identify any additional findings and recommendations that should be considered.
- D.** As EPA considers the future development of guidance beyond this White Paper, what additional specific technical areas should be addressed? What potential implications of having such guidance should be considered? Do the topics and suggestions covered in the White Paper regarding selection, conduct, and use of this technique provide a constructive foundation for developing “best practices” for EE methods?