

MEMORANDUM

To: Shaunta Hill-Hammond, DFO
Science Advisory Board Staff Office

From: Al McGartland, Director
National Center for Environmental Economics

Date: April 3, 2020

Subject: Charge Questions for SAB Economic Guidelines Review Panel (SAB-EGRP)

The purpose of this memorandum is to transmit charge questions for consideration by the SAB-EGRP during the upcoming review of the revised *Guidelines for Preparing Economic Analyses*.

The *Guidelines* were first released in 2000 with a second edition released in 2010. The SAB provided peer review prior to each release, leading to improved documents in both occasions. This will be the third update of the *Guidelines* since their inception. Our goal is to replicate the same caliber of peer review as prior iterations.

We look forward to working with you and the SAB-EGRP in the upcoming review and appreciate your support in improving our *Guidelines*.

Please contact me if you have any questions about the attached charge.

Attachment

Cc: Alex Marten
Nathalie Simon

Guidelines for Preparing Economic Analysis:
Charge to the SAB-EGRP for Upcoming Peer Review

Background:

The EPA's *Guidelines for Preparing Economic Analyses* establish a sound scientific framework for performing economic analyses of environmental regulations and policies for Agency analysts. The *Guidelines* provide guidance on estimating the overall benefits, costs, and impacts of EPA actions, including assessing their distribution among various segments of the population, to meet analytic requirements under various executive orders and statutes. In so doing, they serve several important functions: (1) they assist policy makers in developing regulations that achieve the highest environmental quality and human health standards at the lowest costs; (2) provide analysts with information needed to prepare high quality economic analyses; (3) develop an overarching framework for economic analyses throughout the Agency; and (4) ensure that important subjects such as uncertainty, timing, and valuation of costs and benefits, are treated consistently in all economic analyses across EPA.

Because it is the EPA's goal to incorporate recent advances in theoretical and applied work in the field of environmental economics into Agency analyses of its regulations and policies, the *Guidelines* have been updated over time. The first edition of the *Guidelines* was issued in 2000, with the second edition following ten years later in 2010. This third edition captures the literature that has emerged since 2010 and provides additional guidance on common analytic challenges faced in Agency economic analyses. While most chapters have been revised, the chapters described below have undergone more extensive revisions:

- Chapter 1, *Introduction*, now provides a summary of overarching best practices and identifies where they are discussed in the *Guidelines* in lieu of simply providing a list of the chapters and their topics.
- Chapter 3, *Need for Regulatory Action and Evaluation of Policy Options*, provides expanded guidance on identifying and describing the market failure the action seeks to address (typically an externality), providing the justification for federal action to address the identified market failures, and on identifying appropriate policy options to evaluate.
- Chapter 5, titled *Setting the Foundation: Scope, Baseline and Other Analytic Design Considerations*, includes new sections to guide analysts in defining the scope of an economic analysis and incorporating uncertainty. It also clarifies guidance for determining an appropriate baseline; accounting for related rules; properly apportioning benefits and costs across multiple rules; and determining the time frame of analysis.
- Chapter 8, *Analyzing Costs*, has been revised to include expanded discussion of practical issues and challenges that arise in estimating costs, compliance cost estimation as a building block for other types of cost analyses, and recommendations regarding the use of computable general equilibrium and other analytic approaches.
- Chapter 9, *Economic Impacts*, has been revised to better guide analysts in conducting economic impact analysis. It provides several frameworks for understanding the distributional effects of compliance costs and connects them to economic impact analysis. The chapter also includes revised discussion of individual impact categories, especially impacts on labor, new discussions of evaluating economy-wide impacts, and differential impacts of environmental and health benefits.

Several chapters, including Chapter 11 on *Presentation of Analysis and Results*, Appendix A on *Economic Theory*, and Appendix B on *Mortality Risk Valuation Estimates*, remain largely unchanged.

Charge: We ask the EGRP to provide advice to the Agency on its *Guidelines* in response to charge questions. Throughout, the *Guidelines* refer to methods and practices that are widely accepted in the environmental economics profession. The goal is to provide EPA analysts with a reasonably concise but thorough summary of mainstream thinking on important technical issues that arise in the conduct of economic analysis.

The *Guidelines* must also account for some of the practical limitations on time and resources that EPA analysts contend with when preparing economic analyses. It also is shaped by administrative and statutory requirements that direct the Agency to develop specific types of economic information in the formulation of regulations (e.g., evaluations of economic achievability). Some of the language in the *Guidelines* has been chosen for the express purpose of balancing best practice with flexibility in order to allow analysts to customize the analysis as necessary to reflect the policy, legal and administrative context. The *Guidelines* also emphasize the need for analysts to ensure that their analytic efforts are commensurate with the value the information will provide to the public and to the EPA's and government's regulatory and policymaking process.

The *Guidelines* covers many principles and practices that virtually all EPA economic analyses should follow, and it is these items to which the Panel is asked to devote the greatest attention in its review. In general, we believe the *Guidelines* should reflect mainstream economic science and methods that are well demonstrated and relatively straightforward to apply to environmental issues. While the *Guidelines* do not intend to preclude new or path-breaking forms of analysis, they should reflect best practices in economics prior to inclusion. Ideally, recommended methods and approaches should be general enough that EPA program analysts can leverage them consistently across analyses in all of the EPA's programs. The Panel's views about whether there are any important omissions or oversimplifications is critical.

The review questions to the Panel for each revised chapter are as follows:

1. Are the statements and analytic recommendations made in the chapter consistent with the theoretical and empirical peer-reviewed economics literature?
2. Does the chapter contain an objective, balanced, and reasonable presentation and interpretation of the peer-reviewed theoretical and empirical economics literature, as well as any analytic methods described?
3. Are there topics that warrant more discussion or elaboration in the chapter?
4. Are there any inconsistencies in the way an issue or topic is discussed either within or across chapters?
5. Are the definitions provided in the glossary accurate? Please identify any in need of revision.

The EPA requests that the Panel provide written review and documentation, when applicable, to support recommended changes to the guidance document.