

Summary Minutes of the  
U.S. Environmental Protection Agency (EPA)  
Advisory Council on Clean Air Compliance Analysis  
Public Meeting  
March 15-16, 2007

- Committee Members: Dr. Jim Hammitt, Chair  
Dr. David Allen  
Dr. Dallas Burtraw  
Dr. Wayne Gray  
Dr. Reed Johnson  
Dr. Virginia McConnell  
Dr. Shelby Gerking  
Dr. Chris Walcek
- Date and Time: March 15, 2007 from 8:30am – 5:00pm  
March 16, 2007 from 8:30am – 12:00pm
- Purpose: The Advisory Council on Clean Air Compliance Analysis (Council) received updates from EPA’s Office of Air and Radiation on the “Benefits and Costs of the Clean Air Act 1990 – 2020,” a periodic study initiated with Section 812 of the Clean Air Act Amendments (812 Study). The Council also reviewed two components of this study, direct costs and uncertainty.
- SAB Staff: Dr. Holly Stallworth, Designated Federal Officer
- Other EPA Staff: Jim Democker, Brian Heninger, Erika Wilson, Rob Brenner, Colleen Haney, Art Rios, Al McGartland, Lisa Conner, Neal Fann
- Other: Jim Newmann, Industrial Economics  
Jayson Price, Industrial Economics  
Frank Divita, Pechan and Associates  
Avery Palmer, Inside EPA  
Henry Roman, Industrial Economics  
James Wilson, Pechan and Associates  
Martin Ross, Research Triangle Institute
- Attachments: Agenda  
Overview Briefing, Jim Democker  
Direct Cost Presentation, Jason Price and Jim Wilson  
Uncertainty Plan Update, Henry Roman  
Revised Emissions Results, James Neumann  
EMPAX CGE Model, Arturo Rios  
HAP Case Study, Henry Roman  
BenMAP Demonstration, Neal Fann

## Meeting Summary

The discussion followed the issues and general timing as presented in the meeting agenda.

### **THURSDAY, MARCH 15, 2007**

#### Opening of Public Meeting

Dr. Stallworth, Designated Federal Officer (DFO), opened the meeting with a statement that the Advisory Council on Clean Air Compliance Analysis is a federal advisory committee whose meetings and deliberations meet the requirements of the Federal Advisory Committee Act.

Dr. Hammitt reviewed the agenda and discussed the purpose of the meeting. Dr. Vu welcomed Council members.

Mr. Rob Brenner, Director of the Office of Policy Analysis and Review in EPA's Office of Air and Radiation, discussed the utility of analyses like the 812 report for demonstrating the costs and benefits of air quality regulations. Along with Mr. Brenner, Council members discussed the role of the Council in past and future regulatory analyses.

Mr. Jim Democker presented an overview of the 812 report as shown in the attached slides entitled "Overview and Key Updates for The Second Prospective Section 812 Benefit-Cost Analysis of the Clean Air Act." Mr. Democker answered questions from members on the status of various components of the 812 report and discussed potential Council involvement. Mr. Jason Price and Mr. Jim Wilson presented a summary of the direct costs component of the overall 812 report as shown in the attachment entitled "Second Prospective Section 812 Benefit-Cost Analysis of the Clean Air Act: Presentation of Draft Cost Report." This was followed by Henry Roman's presentation attached and entitled "Uncertainty Analysis Plan for the Second Section 812 Prospective Study of Benefits and Costs of the Clean Air Act."

Dr. Burtraw led Council members in a discussion of general cost issues as reflected in charge question 1. Among the topics discussed was the role of CGE modeling in estimating costs, the role of sunk costs, patentable versus non-patentable innovations, property taxes, forecasting energy efficiencies and the difference between ex ante estimates and ex post observations.

Dr. Chris Walcek led Council members in a discussion of charge question 2a on unidentified measures. Council members discussed the difficulty of speculating on unidentified measures and what assumptions would be appropriate in this context. Members also discussed the relative merits of analyzing partial attainment versus full attainment of standards when projecting in the future.

Dr. David Allen led Council members in a discussion of charge question 2b on learning effects. Council members discussed the role of analysts' judgment and whether the 812 report needed to

embrace the full complexity of differentiating learning effects across different sectors.

Mr. Jim Neumann presented the attached “Second Section 812 Prospective Analysis Emissions Estimation” in order to give Council members a sense of how emissions estimates have changed since receiving advice from the Air Quality Modeling Subcommittee. Mr. Art Rios presented the attached “Presentation of EMPAX-CGE Model” slides, discussed how EMPAX could be used as post-processor to the 812 analysis and answered questions from members. Mr. Henry Roman presented the attached “Section 812 Benzene Case Study” slides and answered questions from members.

**FRIDAY, MARCH 16, 2007**

Dr. Gerking led members in a discussion of charge question 2c, the appropriate discount rate for direct costs. Members had questions about the role of the Office of Management and Budget guidance on EPA’s choice of discount rate. Dr. Gray led members in a discussion of charge question 2d on the treatment of manufacturing profits. Dr. McConnell led members in a discussion of charge question 3a on uncertainty about data, and Dr. Johnson led members in a discussion of charge question 3b on uncertainty about methods.

Dr. Hammitt engaged members in a discussion about next steps for the Council. It was decided that lead discussants would draft responses to their particular charge questions by Friday, March 23. Dr. Hammitt planned to take individual submissions and turn them into a single document that responds to the charge questions on direct costs and uncertainty. This document would be made available to Council members via e-mail for their review and comment.

Finally, Council members discussed the possibility of sending a separate letter to the Administrator discussing the “big picture” of EPA analysis of air pollution regulations and suggesting future strategic directions for the Council.

Respectfully Submitted:

**/Signed/ Holly Stallworth, Ph.D.**  
Designated Federal Officer

Certified as True:

**/Signed/ James K. Hammitt, Ph.D.**  
Chair

**NOTE AND DISCLAIMER:** The minutes of this public meeting reflect diverse ideas and suggestions offered by Committee member during the course of deliberations within the meeting.

Such ideas, suggestions and deliberations do not necessarily reflect consensus advice from the panel members. The reader is cautioned to not rely on the minutes to represent final, approved, consensus advice and recommendations offered to the Agency. Such advice and recommendations may be found in the final advisories, commentaries, letters or reports prepared and transmitted to the EPA Administrator following the public meetings.