

September 28, 1995

EPA-SAB-CAACAC-ADV-95-001

Ms. Carol Browner
Administrator
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Subject: Clean Air Act Compliance Analysis Council
(CAACAC) Advisory on Issues Associated with the
Section 812 Retrospective Study

Dear Ms. Browner:

On June 12-13, 1995, the Clean Air Act Compliance Analysis Council (CAACAC, or the Council) of the Science Advisory Board (SAB) met at the Courtyard Marriott Hotel in Crystal City, Virginia to address a number of issues associated with the "Section 812 Retrospective Study", as described in the Clean Air Act Amendments of 1990. [This meeting included discussion of issues that were the subject of a May 18, 1995 meeting of its Physical Effects Review Subcommittee]. The goal of the "Study" is to determine the costs and benefits which have accrued as a result of the original Clean Air Act from 1970 through 1990. In a subsequent effort, the Agency will estimate the future costs and benefits that are expected from the implementation of the 1990 amendments (i.e, the "Prospective Study").

Because this meeting was held at an ongoing stage in the development of the Study, the Council has prepared this Advisory which summarizes the Council's views of certain aspects of the "Study." An Advisory responds to the Agency's need for advice on whether an effort is on the right track and whether alternatives need to be considered at a critical stage, rather than at the end of a developmental effort. The scope of an Advisory is intended to be narrowly drawn. This minimizes the potential impact of providing early Council advice on an issue or program that will later be reviewed by the Council as a final product.

Therefore, at the suggestion of the Physical Effects Review Subcommittee (hereafter, the Subcommittee), the Agency provided its incomplete drafts of the costs

and benefits of ecological and welfare effects, which were the basis for discussion at the Subcommittee meeting on May 18, 1995. Because written documents existed, the Council's activity could not be called a "consultation" per se. Because the documents were not final and no formal charge had been agreed to, the exercise was not covered by the rubric "review"; hence, we are transmitting an Advisory to you.

The Subcommittee has been reviewing the methods and results of the Agency's analyses of the costs and benefits associated with health, ecological, and welfare effects that will appear in the Retrospective Study. Under separate cover, the CAACAC is submitting the Subcommittee's review of the exposure-response relationships associated with health effects of criteria pollutants alone (EPA-SAB-CAACAC-095-022, September 1995).

During the course of the review of the health effects of criteria pollutants, the Subcommittee urged the Agency to come forward with the admittedly incomplete analysis of the costs and benefits associated with ecological and welfare effects and the health effects of air toxics. The intent was to provide in progress advice that could be utilized immediately in preparing the documents for formal review by the Council. The partial review of the health effects suggested to the Subcommittee that important issues in the ecological and welfare effects analyses likely needed to be addressed as soon as possible in order for the Agency to successfully complete its ecological and welfare assessments. The Subcommittee also noted that there may be benefits that are difficult to monetize and as a consequence, benefits may be underestimated. Additionally, the Subcommittee observed that the methodology for conducting the retrospective analysis for ecological and/or welfare effects has not been adequately developed and prepared, so that the procedure by which welfare consequences will be evaluated is unknown.

In short, the Subcommittee identified a number of issues during the public meeting that would benefit from additional consideration by the Agency. Given the early draft stage of the Agency documents, it does not seem fruitful or appropriate for us to document all of our concerns/suggestions in this advisory. In general, the discussion focused on a number of issues including the following:


- a) The need to review, evaluate, and incorporate much more of the recent years' literature

- b) The need to broadly address terrestrial (including agricultural and urban areas) ecological impacts other than in forests
- c) The need to more thoroughly address known effects, even when they cannot now be monetized.
- d) The need to address impacts of episodic peak loadings on ecosystems in addition to cumulative loadings.

During the course of the meeting, the specifics of these concerns/suggestions were conveyed clearly and forcefully to Agency personnel. We believe that our remarks were well-received and appreciated. However, we wish to stress that during our discussion (and the earlier physical effects review), it was obvious that there is a pressing need for the allocation of more resources if the Agency is to properly meet the demands of this Congressionally mandated study.

We trust that this advisory and particularly the exchange that took place at the meeting will result in a tighter, more technically sound document for CAACAC review in the coming months. We appreciate the openness with which the Agency personnel participated in the exchange and look forward to a formal indication of their intent to use this information and to arrange for a formal review by the Council at a later date.

Sincerely,


Dr. Morton Lippmann, Chair
Physical Effects Review Subcommittee,
Clean Air Act Compliance
Analysis Council


Dr. Richard Schmalensee, Chair
Clean Air Act Compliance
Analysis Council