

September 17, 1998

EPA-SAB-RSAC-COM-98-002

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

Subject:           Commentary on the Process for Science Advisory Board Review  
                          of the ORD Presidential Budget Request

Dear Ms. Browner:

For more than a decade, the Research Strategies Advisory Committee (RSAC) of the Science Advisory Board (SAB) has reviewed and provided advice to the Agency on the annual Presidential Budget Request for the Office of Research and Development (ORD). Over the years this advice has been generated in a number of ways, including a brief review of the ORD budget materials by the RSAC Chair, individually by several members of the Committee, or when adequate time is available, via a formal public review meeting by the full Committee. The full Committee approach is the usual and clearly preferred mode of review. Regardless of the approach used by RSAC, the purpose of these reviews is to provide the Agency and the Congress with advice and insights on the adequacy of the budget to implement a research program of high scientific quality and one that is responsive to the needs of the Agency.

Although important and highly visible, the ORD budget review is often characterized by uncertainty regarding the form and availability of materials and the scheduling of the review meeting (which usually occurs in February). In addition, the desire of the Congress to have timely input from the Committee prior to the Congressional budget hearings (an event that normally takes place in March) necessitates the swift completion of the Committee's written report, often within a week or two of the meeting. From our perspective, this combination of last minute preparations followed by a rapidly written report reduces the quality and value of the service that we can provide to the Agency.

The purpose of this Commentary is to identify areas where we believe that future improvements can be made in the coordination, timing and presentation of the budget materials to the Committee. Some of these concerns were also raised by the Committee in our February 26-27, 1998 review of the FY1999 Presidential ORD Budget Request. (See associated SAB report: EPA SAB-RSAC-98-006, April 28, 1998.) In addition, some concerns were also discussed with Deputy Administrator Fred Hansen at the SAB's Executive Committee meeting on April 15, 1998. As a result of that discussion, Mr. Hansen asked the Agency and SAB Staff to identify means whereby the SAB could provide early advice and insights on all of the

science-related aspects of the emerging FY2000 budget. He also suggested that we examine ways to establish formal coordination and schedule a Committee meeting to discuss the issues as early as possible. The first planning and coordination meeting occurred as a Consultation between the SAB, ORD, OCFO (Office of the Chief Financial Officer) Staff and key program office personnel on July 31, 1998 and another meeting is scheduled for the spring of next year.

While this early coordination meeting will improve our understanding of the budget process and increase our awareness regarding the science-related aspects of the budget, it does not offer the Committee an opportunity to review and comment on the actual budget figures and how they impact individual components of the Agency's research programs. The actual release of the budget figures to the Committee cannot take place until after the President releases his budget, generally in February and is influenced by several factors, none of which is under the control of the Committee. This situation is further complicated by the fact that the provisions of the Federal Advisory Committee Act call for the Committee to announce its meetings in the Federal Register, a requirement that necessitates that the meeting date be scheduled about a month in advance to accommodate public participation. As a result, the meeting may be scheduled before release of the budget figures.

The RSAC also raised the concern regarding the adequate recognition and accounting for the key research, science and technology activities being conducted by EPA outside of EPA's ORD. The Committee concluded that there are key activities ongoing in other parts of the Agency that are not captured in the ORD budget or in the Science and Technology budget numbers. A Science and Technology budget was presented to RSAC in July which combined the ORD budget with selected science and technology areas. However, this Science and Technology budget does not account for the program office activities that are directed at regulatory development. The Committee is aware of the existence of "science for compliance" in program offices which also needs to be counted in a true measure of the Agency's Science and Technology budget.

In spite of these problems, the Committee believes that the review of the annual Presidential Budget Request for ORD continues to be a very useful event, for the Agency, for the SAB, and for Congress and the public. There is also clear evidence that Agency staff are improving the process with each iteration. For example, the Committee felt that Agency documentation and presentations which supported the February 1998 review of the FY1999 Budget Request were a significant improvement over previous years. As we noted in our findings from that review: *The overall form of the budget and the manner of its presentation were clear and well-organized; the budget follows EPA and ORD Strategic Plans; and the budget is goal-based and incorporates the intent of GPRA. The Committee was pleased to see the Agency change the budget presentation this year away from the media-specific format of previous years.*

The following are some of our suggestions for improving the overall review process in a manner that would help the Committee provide the best advice to the Agency:

### **1. Expand Review to Include all Science Related Budget**

As the Agency moves to implement activities consistent with Government Performance and Reporting Act (GPRA) it must strive to ensure the full integration of all of its science and technology-related activities in order to achieve the strategic goals the Agency has established. For this reason it is critically important to examine all of those parts of the Agency budget involving Science-related activities and to assess the integration of the various components that involve science and technology. The RSAC recommends that the Agency move towards expanding the SAB review to include all activities related to science and technology in the Agency in a single annual budget review. In the long term, RSAC suggests that a review be conducted on the integrated science and technology budget in a manner similar to that which is now conducted annually for the ORD budget. In order to be able to appreciate the full scope of science in the Agency, all research and development and science and technology activities in other Agency divisions and laboratories outside of ORD (e.g., regional labs, program offices) should be included in the SAB review. The presentation should show the relationship of these other Agency science-related activities to fulfilling the Agency and ORD strategic plans; i.e., by including all of the science and technology activities/budgets of the Agency Offices in categories related to the ORD and Agency-wide strategic science goals. The Agency briefed the committee on the Agency-wide science and technology budget at the July 31st meeting. Based upon this briefing, the RSAC is planning to provide additional commentary to the Agency on how such Science-related budget reviews could be undertaken. In particular, RSAC concluded that the current breakdown of funding in the Science and Technology budget does not well represent all of the science-related activities of the agency. For this reason, RSAC will suggest the development of clear definitions for science and technology activities that can be used to evaluate the full breadth of science-related activities.

### **2. Add Content of Budget Reviews**

- a) Include a historic perspective and illustrative figures of the ORD budget and full time equivalent (FTE) employee levels as compared to the Agency wide budget and FTE. This perspective should include an analysis of the ORD budget relative to the changing Agency needs and how this has impacted the budget request.
- b) Include information relative to travel funds and full-time equivalent (FTE) support devoted to coordination with environmental research and science occurring outside of the Agency at other Federal, state and industrial organizations. Such information would help the Committee to better evaluate the adequacy of the funding for coordination with organizations outside of EPA.
- c) Include an evaluation process for determining program effectiveness. The

evaluation would help justify budget decisions and help identify where changes are needed. It would be much easier for RSAC to critique programs if there were a set of criteria that had been developed and implemented in order to establish a set of metrics against which the effectiveness of existing programs could be judged.

- d) Provide more detail on how the budget is allocated to individual objectives and research programs and how this year's budget fits into the contemplated budgets over the planning horizon of the Strategic Plan (i.e., five years) and even over the longer term (10-15 years). In addition, future ORD budget requests should reflect not only the single year but the budget projected to meet each goal in the out-years. The overview should address how the present year fits into the flow of the research program funding by providing an indication of what the past year's funding was for each goal and the anticipated direction of funding (more, less, the same) for at least the next three years (and beyond to five or ten years or more, if possible). Since most environmental problems are complex, it will take time to develop a sound scientific basis for solutions. The continuity or lack thereof of funding for long-term programs from year-to-year is an area that RSAC should comment on and thus, the Committee needs the data on which to base its review.
- e) Improve the descriptions of how each program is expected to enhance the quality of environmental decision-making over the long-term. The decision analysis concept of the value of information may be useful in this respect. The primary issue, of course, is when should the Agency shift its resources from gathering information to making its decision. At some point, the cost of a proposed research program will exceed the expected payoff in making a better decision with the results of the research. If you spend more on additional information than you are likely to gain in making a better decision, then you should proceed with the decision rather than getting the information. The price of information at which its cost just balances the expected return of an improved decision is "the value of information".

### **3. Timing and Presentation of Budget Material**

- a) Have ORD provide a budget briefing at a meeting several months prior to the meeting at which we do the actual budget review. This was done in the fall of 1997 in anticipation of the release of the FY1999 budget figures in early 1998. We recommend that similar meetings be held on an annual basis. No dollar figures would need to be presented, but the RSAC would be brought up to speed about the budgeting categories and, to the extent possible, the research programs that fit into each. At this meeting it would also be important to discuss the EPA and ORD strategic plans and how they have changed from the previous year. Finally, the budgeting and planning decision process should be presented and

discussed.

- b) Ensure timely delivery of materials. RSAC needs to have the relevant background materials, including figures sufficiently in advance of the February meeting so that the Committee has adequate time to react and prepare for discussions.
- c) Focus the briefings on how the total budget compares with previous years' budgets and how resources are distributed among the budget categories. The material should provide sufficient detail for RSAC to understand budget chunks of approximately \$5 million. The objective is not to just showcase the most promising programs under a budget category, but also to highlight those that absorb the most resources.
- d) Provide time-lines for multi-year programs, showing past budget trends and future projections. This will be meaningful only at a level of detail where the nature of the work to be done is reasonably clear.
- e) Describe the “close-out” procedures that are used to terminate R&D and S&T activities that have been completed or that are no longer high priority in the ORD and Program Office Strategic Plans. Provide a list of those activities that have been closed out in the previous year and will no longer be receiving funding support.
- f) Provide some perspective on contingency planning concerning how budget cuts would be made if the proposed budget is not approved and has to be revised downward.

It may not be possible to carry out all of these suggestions in the review for the upcoming fiscal year. Nonetheless, the RSAC believes that it is important to continue the excellent progress shown in the last ORD budget review and address these issues over the course of the next few budget planning and review cycles.

We appreciate the opportunity to provide our commentary on the process whereby we review and provide advice to the Agency on ORD's annual Presidential Budget Requests. The Research Strategies Advisory Committee would be pleased to expand on any of the findings in this commentary, and we look forward to your response.

Sincerely,

Dr. William Randall Seeker, Chair

Dr. Joan M. Daisey, Chair

Research Strategies Advisory Committee  
Science Advisory Board

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