UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 24, 1994

OFFICE OF THE ADMINISTRATOR
SCIENCE ADVISORY BOARD

EPA-SAB-EEC-COM-94-004

Honorable Carol M. Browner
Administrator
U. S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Subject: Commentary on Strategic Research and Development Planning

Dear Ms. Browner:

EPA's program offices have often developed research and development "strategic plans," and presented these to the Science Advisory Board (SAB) for review and evaluation. The SAB has been supportive of the need for strategic research planning. However, the SAB has also often been critical of the plans due to a number of deficiencies, including lack of a vision statement, lack of definition of measures of success, failure to take into account critical factors essential to developing the strategic plans, and lack of priority setting mechanisms. In addition, the strategic research plans have been varied in format, content and approach. It must also be acknowledged that the SAB itself has provided inconsistent comments relative to what should be included in strategic plans during the evolution of the planning process at EPA.

It is important to recognize that strategic planning is an integral part of an overall management system with provisions for budgeting, prioritizing, planning, implementation and oversight of the research program. It is especially important because strategic planning provides the overall guidance for the other activities.

It is essential that the EPA develop strategic research and development plans in a number of critical core topic areas. In order to direct optimally EPA research and development toward the important high priority environmental issues of today and in the future, and to optimize the use of limited resources, EPA should adopt and implement a consistent, reliable and comprehensive approach to strategic research planning. Guided by this approach, EPA should develop research and development

strategic plans that provide both continuity with long-range research while being responsive to changing environmental issues.

In view of the apparent deficiencies noted in past reviews, and the importance of strategic R&D planning, the Environmental Engineering Committee (EEC) recommends that EPA adopt a defined approach for strategic R&D planning for the Agency that builds upon concepts now being used by industry and other government institutions. EPA's approach will need to be adaptable to changing needs of the Agency.

In the last several years, applied strategic planning models that incorporate new concepts, such as strategic intent and core competencies, have emerged as important aids for the development of strategic decisions using analytical processes (see for example, the programs underway at AT&T, Colgate-Palmolive, 3M, Eastman Kodak and Northrup). There are a number of schools of thought on the best process but the basic tenets are similar. These processes include not only what the plans should entail, but also how to involve the appropriate personnel in the process so that they are committed to deploying the plan after it has been formulated. The EPA should take advantage of these advances in modern management theory and employ the basic tenets of these processes for strategic planning.

EPA's Region I successfully used one of these models for developing a strategic plan for the region (U. S. Environmental Protection Agency Region I, *Building an Environmental Protection Ethic: A Strategic Plan*," Boston, Massachusetts, March 1991). This process involved the development of a vision statement, a definition of a mission, conducting an assessment of the region's strengths, weaknesses, external opportunities, and threats, defining strategic initiatives, and defining metrics of success. While we do not endorse this specific approach used by Region I as the only approach, it is one example of how to successfully conduct strategic planning. Whatever the approach selected, it must be adapted to the special needs of environmental research and development.

The Committee is aware of the fact that you have recently directed your staff to develop an Agency-wide strategic plan to be released this spring. We have not had the opportunity to review this process, but we applaud your leadership and vision in initiating strategic planning at the Agency level. We encourage you to implement this activity on a continuous basis throughout the Agency at all levels.

In summary, the EEC recommends that:

a) EPA adopt and implement a consistent, reliable and comprehensive approach to strategic planning for EPA research and development

b) EPA consider the several models presented earlier in this letter as it develops this comprehensive approach

c) There should be a particular locus for such strategic planning within EPA for successful ongoing implementation

We would be pleased to suggest ways that this could be accomplished or to review the Agency-wide strategic planning process in the future.

Sincerely yours,

Dr. Genevieve M Matanoski, Chair
Science Advisory Board

Dr. Wm. Randall Seeker, Chair
Strategic Research Subcommittee

Dr. Ishwar P. Murarka, Chair
Environmental Engineering Committee

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