2. Use of Sector Approaches by EPA and Government Co-Implementers

Sector programs are used throughout EPA and state, local, and tribal co-implementing organizations. The discussion below illustrates the diversity of sector programs in use at these organizations. A more complete description and examples of sector programs are included in the companion document entitled *Summary of Sector Activities: EPA and Government Co-Implementer Programs.* This information was helpful in providing a context and rationale for the actions outlined in Chapter 3.

Sector activities can vary along the following dimensions:

- *Environmental media.* Some activities focus on a single medium, such as air, water, or solid waste, while others are multi-media in scope.

- *Stakeholder involvement.* Some activities emphasize broad stakeholder involvement, while others include a narrow group of stakeholders or allow stakeholders a more limited role.

- *Regulatory vs. voluntary.* Some activities have regulatory components, others promote voluntary performance improvements, and some sector activities combine voluntary and regulatory components.

While sector programs may vary along each of the above dimensions, they tend to fall into three categories:

- The first category includes *single-medium regulations* that are developed for particular sectors. For example, EPA's Office of Air and Radiation and Office of Water use this approach for many of their regulations.

- The second category includes *comprehensive multi-media programs,* such as Sustainable Industry, that evaluate issues and opportunities across an entire industry and then develop sector-wide performance improvement programs.

- The third category consists of *focused voluntary programs* that address a limited number of issues related to a sector. Programs such as Design for the Environment provide assistance that is tailored to the needs of a particular industry.

Use of Sector Approaches in EPA Functions

Sector activities sponsored by EPA's program offices tend to focus on a single-medium and a specific regulation or problem. Multi-media activities generally are carried out by offices with cross-cutting responsibilities, such as the Office of Enforcement and Compliance Assurance (OECA), the Pollution Prevention Division of the Office of Pollution Prevention and Toxics (OPPT), and the Office of Policy, Economics, and Innovation (OPEI).

This section summarizes the current types of sector work ongoing at EPA.

Planning

EPA's planning and budgeting process includes the development of a Strategic Plan every three years as well as Annual Performance Plans and Performance Reports. These plans contain goals and objectives that describe the Agency's public commitments for environmental improvements. Among the Agency's strategic goals are clean air, clean and safe water, pollution prevention, better waste management, citizen right-to-know, and greater compliance with environmental laws and regulations.

Currently, sector programs are identified as a strategy to achieve *Goal 8: Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems.* Although sector approaches are used to help achieve the other goals, they are not explicitly mentioned as "means and strategies" to achieve those objectives.

Sector strategies also are evident in other Agency planning processes, such individual program office and regional work planning, development of memoranda of agreement and other management agreements between EPA headquarters and regional offices, and negotiation of Performance Partnership Agreements with state agencies.

Regulation Development

A narrowly defined single-medium sector approach is inherent in many rulemakings. Examples include the Office of Air and Radiation's MACT (Maximum Achievable Control Technology) standards and the Office of Water's effluent guidelines. The processes for conducting these types of rulemakings are well established. Occasionally there are opportunities for coordination among rulemakings for a specific sector, within a single program or among different programs, but these opportunities are rare due to scheduling and other constraints.

Permitting

Permits are written for individual facilities. As a result, permitting innovations to date have been tested on the facility level rather than on the sector level. EPA now is exploring ways to replicate permit innovations for entire sectors, working in cooperation with industry trade associations, state and local permitting authorities, and other stakeholders.

Enforcement and Compliance Assurance

EPA has an enforcement and compliance assurance process for identifying priority sectors for enhanced attention. EPA has found that using a sector approach is an effective way to address chronic non-compliance. The sectors denoted as priority sectors receive increased enforcement, opportunities to carry out self-audits and correct violations, and/or compliance assistance to help facilities understand and comply with the law.

Technical Assistance

EPA has found that sector-specific technical assistance can be particularly effective since it addresses technologies, processes, and environmental concerns that are unique to or tailored for a specific sector. Examples of sector-based technical assistance include guidance manuals, training, workshops, and internet-based compliance assistance and pollution prevention materials.

Multi-Media Performance Improvement Programs

These programs are characterized by the broad sector-wide, multi-media focus of their activities. EPA analyzes the needs and opportunities for an entire industry sector, covering the full range of performance: from the environmental leaders who consistently operate beyond compliance, to those firms that are in compliance and want to go further, to facilities that are consistent non-compliers. Voluntary in nature, these stakeholder-driven programs can lead to a tailored set of regulatory or non-regulatory incentives, tools, and actions to improve performance by a large number of facilities within a sector.

Voluntary Sector Programs

There are other voluntary sector programs that focus on one or a limited number of environmental issues and enlist companies or entire sectors to engage in pollution prevention or control. These programs have many of the same values and benefits as the multi-media performance improvement programs. They enable EPA to address issues or companies that are outside of the regulatory framework and encourage the regulated industry to go beyond compliance.

Research and Development

Much of the work of EPA's Office of Research and Development is basic scientific research, although the office also promotes the development of new technologies. Current sector research is directed to identification of best practices in a sector, assessment of a specific problem within a sector, and development of new technologies or pollution prevention methods to address a problem in a sector.

Regional Programs

There are varying levels of support for innovation and sector programs in EPA's regional offices. Some regions, such as Region 1, have very active sector programs that offer compliance and technical assistance, environmental recognition awards, and enforcement. Sectors chosen by EPA Headquarters for enforcement or voluntary programs may not be a high priority in a given region, making it difficult to assign staff and resources to these programs.

Performance Measurement

The Government Performance and Results Act (GPRA) requires EPA to measure the results of its programs. EPA must prepare annual reports that describe the environmental effects of its programs, based on the goals and objectives articulated in the Agency's Strategic Plan and Annual Performance Plans.

Currently performance measurement of sector programs is focused on "output" measures, such as the number of reports produced or workshops conducted, rather than "results" measures, such as reductions in emissions or discharge of pollutants. Without "results" measures it is difficult to assess and demonstrate the environmental value of sector programs.

Information and Coordination

Although there is a significant number of sector activities at EPA, there is limited coordination or sharing of information among them. Little information is available on the results of some sector programs, and the information that is available from various EPA activities is not being placed in a central repository. Current EPA databases demonstrate varying abilities to retrieve available information by sector. As a result, it can be difficult to obtain the data needed for sector programs.

Barriers to Sector Approaches at EPA

The types of sector work mentioned above indicate that there are successful and effective sector approaches in EPA programs. However, institutional barriers remain that can limit the effectiveness of sector-based activities. The culture change to fully integrate sector approaches into EPA's core functions is an ongoing effort – part of the Agency's own continuous improvement. Data gathering for this Plan highlighted several barriers of note:

- *Strategic planning:* EPA's structure, statutory mandates, and results-based planning architecture present challenges for multi-media programs and voluntary programs. Sector work is not yet well integrated into the Agency's strategic planning process under the Government Performance and Results Act (GPRA). Sector approaches may not receive necessary resource support because they are not directly linked to primary Agency goals.

- *Program planning:* There is inadequate information exchange, planning, and coordination among sector programs, and between voluntary and regulatory Agency programs. As a result, programs may find themselves working at cross-purposes, based on different program mandates. Opportunities for multi-media sector projects may be missed, or be acted upon without a foundation of cross-office support.

- *Measurement:* While sector approaches have the potential to achieve environmental results more effectively and efficiently, EPA lacks measurement tools to demonstrate the impact of the sector approach on the outcome achieved. This lack of sector program performance data makes it more difficult to make future planning decisions.

- *Resources:* Planning and measurement barriers make it more difficult to define resource needs and justify expenditures for sector approaches, especially multi-media sector programs. Yet innovative new sector approaches often have the greatest need for "seed" resources to support stakeholder dialogues, data gathering and analysis, pilot projects, and other start-up activities.

Use of Sector Approaches by Government Co-Implementers

State, local, and tribal government co-implementers are responsible for carrying out most environmental policies and regulations. Each state, local, or tribal co-implementer agency has its own set of specific authorities and roles. Some of them carry out policies handed down from higher levels of government and have limited discretion as to how to apply these policies to their local conditions. Others implement non-mandatory programs that allow discretion, but may be constrained by resource availability and regulatory barriers.

This section summarizes the different ways that government co-implementers commonly use sector approaches.

State and Local Co-Implementers

State and local environmental agencies commonly use sector approaches in rulemaking, technical assistance and pollution prevention activities. At the state level, use of sector approaches is closely related to the way state agencies perform their rulemaking, permitting, enforcement, and assistance activities. In larger municipalities and industrialized smaller municipalities, the sector approach is used with regulated industries concentrated in the community. Local water treatment authorities are important regulators of industrial sources.

Planning

Some state and local co-implementers consider sector approaches in their planning processes and evaluation of priorities. In the process of negotiating compliance and enforcement priorities via Memoranda of Agreement with EPA's Office of Enforcement and Compliance

Assurance, both states and EPA regions consider sectors in setting priorities. Sector approaches also can be incorporated in Performance Partnership Agreements (PPAs), which set joint priorities between EPA and individual states.

Regulation Development

Co-implementers often apply a single-medium sector approach similar to that used by EPA's program offices. A sector approach allows for a more substantive dialogue with state and local industry groups, and can provide opportunities for other stakeholder groups, including community organizations, to participate in regulation development in a more substantial, focused manner.

Permitting

In many states and large local agencies, permit engineers specialize in specific sectors, developing the expertise needed to carry out their responsibilities. A sector approach has been used on a limited basis in writing permits. An example of this is use of general permits under the National Pollutant Discharge Elimination System (NPDES) to permit Concentrated Animal Feeding Operation (CAFO) facilities.

Enforcement and Compliance Assurance

In larger state and local agencies, the compliance inspectors, like the permit engineers, often specialize in specific sectors to address concentrations of industry. Priority sectors are included in the MOAs between EPA and the state agencies; these priorities reflect EPA's national and regional priorities.

Technical Assistance

Technical assistance, including pollution prevention assistance, is often developed for use by entire sectors because facilities within a sector have similar processes, materials, rules, and business conditions. Also, sector-based technical assistance can be delivered effectively through trade associations. Co-implementers' assistance programs are particularly valuable for small business dominated sectors that may not be subject to federal regulation.

Multi-Media Performance Improvement Programs

Co-implementers may use a sector approach in their multi-media performance improvement programs. State and local environmental agencies also are essential partners for EPA to be able to design, create, and put its own multi-media performance improvement programs into place. EPA and its co-implementer partners face a challenge in linking these programs with regional, state, and local environmental priorities.

Tribal Co-Implementers

There are 560 tribal nations in the United States. Not much information is available on the use of sector approaches in Indian Country. However, one of the objectives of EPA's Indian Program is to complete Tribal and EPA Environmental Agreements (TEAs) with every tribe; 119 are currently in place. EPA is also assessing environmental conditions in Indian Country to provide information with which to set priorities and a baseline from which to measure progress; 219 assessments are scheduled to be completed by the end of FY 2001.

The Agency's American Indian Environmental Office provides multi-media coordination for Indian programs, so there is a mechanism in place to support sector approaches. Currently mining and forestry are sectors of concern to many tribes; others will be identified during the assessment process and development of TEAs.

Barriers to Sector Approaches by Government Co-Implementers

Government co-implementers have identified the following barriers to sector approaches in their jurisdictions.

- *Inconsistent priorities:* EPA sector priorities may be inconsistent with state and local sector priorities. Co-implementers suggest that they should have more input in federal priority-setting for sector opportunities, and that EPA sector programs should take into account regional and state differences in environmental issues.

- *Communication:* States perceive a lack of communication between different EPA programs, between EPA Headquarters and Regions, and among state agencies themselves. Poor communication can lead to poor coordination of the objectives of sector programs and missed opportunities to work together toward shared goals.

- *Lack of flexibility:* Co-implementers see a lack of flexibility in interpreting regulations as a barrier to further progress in sector work. This lack of flexibility can prevent them from addressing specific problems of industries in their states. They suggest that greater input from co-implementers during regulation development would help EPA identify opportunities for flexible implementation.

- *Lack of tools:* State and local government co-implementers often lack tools for working effectively with industry sectors – tools such as data sources, planning aids, measurement and tracking systems, and guidance on the use of new techniques like Environmental Management Systems.

- *Culture change:* Many government co-implementers of sector programs see a traditional command-and-control "mind set" that permeates EPA programs, as well as their own agencies, and limits the use of innovative sector approaches. The traditional perspective can affect all programs by limiting opportunities for