5193
1981

United States
Environmental Protection
Agency

Office of the
Administrator
Washington DC 20460

February 1980

2200017

EPA

Operating Year Guidance

1
19b
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
19P
1

EPA Operating Year Guidance

Operating Year Guidance for Fiscal Year 1981

February, 1980

Note on Preparation

During an evaluation of the Agency's annual guidance process and document last fall, both Regional and State officials requested that guidance for the operating year be issued no later than February. They indicated that they needed it this early for their negotiations on State/EPA agreements and grants, and for their planning for the coming year.

To respond to that request, we are issuing the document much earlier than we have in the past. However, to get it out this early meant that we had to circulate draft material to the Regions that contained information on the President's budget before it was officially released. As a result, while the Regions were encouraged to discuss with State environmental officials the priorities in the Guidance, they were unable to circulate the draft material to the States for their review and comment.

State agencies will have additional opportunities to influence priority activities for FY 1981 in their negotiations on priorities for State/EPA Agreements and grant conditions.

Contents

Statement of the Administrator and Deputy Administrator 1

Office of Air, Noise, and Radiation 5

Overview 5
Air 5
Noise 8
Radiation 9

Office of Water and Waste Management 11

Overview 11
Water Quality 13
Drinking Water 16
Solid Waste 18

Office of Pesticides and Toxic Substances 21

Overview 21
Toxic Substances 22
Pesticides 24

Office of Enforcement 27

Overview 27
Stationary Source Enforcement 30
Mobile Source Enforcement 31
NPDES Permits Issuance 31
Water Enforcement 31
Drinking Water Enforcement 31
Hazardous Waste Enforcement 32
Hazardous Waste Permit Issuance 32
Pesticides Enforcement 32
Noise Enforcement 32
Toxic Substances Enforcement 32

Office of Planning and Management 35

Overview 35
An Integrated, Decentralized Program 35
Analytic Services 37
Providing Responsive, Efficient Services 38
Region-Specific Guidance 39
Priorities for State/EPA Agreements 40

Office of Research and Development 41

Overview 41
Mobile Source 46
Gases and Particles 46
Oxidants 47
Hazardous Air Pollutants 47
Radiation 48
Chemical Testing and Assessment 49
Pesticides 49
Water Quality 50
Drinking Water 50
Industrial Wastewater 51
Municipal Wastewater and Spills 52
Solid Waste 52
Energy 52

Administrator's Guidance on FY 1981 State/EPA Agreements 55

Overview 55
Roles and Responsibilities 56
Organizational Models 56
SEA Development Process and Schedule 57
Public Involvement 60

Statement of the Administrator and Deputy Administrator

This Operating Year Guidance is intended to give EPA Headquarters and Regional Office managers a sense of the major Agency-wide and program-specific priorities that we and the Assistant Administrators (AAs) have agreed to focus on during the remainder of FY 1980 and in FY 1981.

This Guidance is the first step of an integrated and improved management system. Headquarters and Regional managers should use it as a framework for developing FY 1981 operating plans and performance standards and for revising FY 1980 plans and performance standards. We then will evaluate individual and program performance based on these plans and standards. The Guidance should also be the basis for negotiating State/EPA Agreements.

Our statement highlights the priorities that cut across the Agency, requiring several programs to coordinate and integrate their efforts. The Assistant Administrators' statements identify specific program activities they want Headquarters and Regional offices to focus on. Although these activities are identified as Assistant Administrators' priorities, they reflect our priorities as well. We have reviewed each Assistant Administrator's statement carefully and discussed each item before including it in this document.

Each Assistant Administrator has designated two types of priority activities. Level 1 priorities are those which Headquarters or Regional offices *must* do and for which we will make resources available. Level 2 priorities are activities that are important, but which Headquarters and Regional

staff may only be able to undertake on a limited basis because of limited resources.

Agency Goals

In FY 1981, the broad goals of the Agency continue to be protecting public health and preserving sensitive ecosystems. These goals should be the focus of both the cross-cutting initiatives we highlight and of the priority activities in each of the Assistant Administrators' overviews.

The activities we want to emphasize follow. Although we focus on new priorities, we also want to emphasize the need to continue our efforts to foster public participation in our regulations development process, to integrate research activities with the rest of the Agency, and to support the Administration's urban initiative.

Energy

The Administration this year is stressing expanded energy production. In carrying out our responsibility to ensure that energy projects are environmentally sound, we must make certain that these projects come on line as soon as possible. Accordingly, we must quickly develop regulations governing new energy technologies and expedite permits for new energy facilities. A Management Task Force is working now to develop a strategy to expedite permitting.

We should also continue to support and promote clean and inexpensive energy alternatives, such as conservation and unconventional gas.

Integrated Toxics Strategy

Led by OPTS, the Agency will develop an integrated strategy to control toxics substances effectively. Our aim is to coordinate the toxic-related planning, research, information collection, regulatory, and enforcement efforts of all EPA's program and staff offices to ensure that our resources are used most effectively.

Emergency Response

We must improve our ability to respond to emergencies caused by dangerous pollutants that threaten public health and the environment. In particular, we must improve coordination between EPA, other Federal agencies, and the States; broaden the range of emergencies to which we can respond; and ensure the safety of our emergency personnel.

Data Collection and Information Management

The Agency must ensure that the data we collect are available, accessible, accurate and useful for making decisions and evaluating programs.

We have asked a committee of Deputy Assistant Administrators to provide Agency-wide direction for collecting data and developing information systems. Further, beginning now, every office must develop programs to ensure the quality of its data and must make sure that its data provide information that is necessary and useful. Each laboratory also must evaluate its performance.

We would also like the Regional Administrators to ensure that the measurements of toxic chemicals in the environment collected by their offices are placed in the Agency's data storage systems.

Acid Rain

We are very concerned about our lack of understanding of acid rain and the problems it causes. We have asked the Office of Research and Development and the Office of Air, Noise, and Radiation to explore the relationship between fine particulates, sulfates, nitrates, atmospheric loading, and acid rain, and to recommend a strategy for solving the problem. We may need to develop legislative initiatives to enable us to better grapple with the problem over the long term. However, on a short-term basis, we will need to evaluate strengthening our efforts under current legislation.

Regulatory Reform

We strongly support the Administration's commitment to regulatory reform, and will continue to explore innovative approaches to enforcing our rules. Getting our environmental job done more surely at lower cost and with less "hassle", while encouraging innovation, is important.

In FY 1980 and FY 1981, we must fully implement reforms we have already adopted, particularly the bubble concept and trading, banking and brokerage of offsets. We must also give high priority to simplifying, consolidating, and streamlining permit processes; to implementing our non-

compliance penalty authority; and to developing and applying benefit measures and other analytic tools to further strengthen our regulatory decision making.

Legislative Initiatives

We will continue to work for passage of Superfund and the Integrated Environmental Assistance Act this year. The proposed Superfund would provide the resources we need to clean up hazardous waste sites and spills that are a threat to public health. The Integrated Environmental Assistance Act would allow State and local environmental agencies greater flexibility in using their grant funds to meet their environmental problems.

In addition, given the need to extend the Clean Air Act authorizations in 1981, we need to consider improvements which may be needed in the Act.

Building A Strong, Diverse Staff

In recruiting and developing staff we must continue our serious commitment to affirmative action. We have made significant strides in bringing minorities and women into top level management positions in the Agency. We must continue to press here in FY 1980 and FY 1981, but we must emphasize bringing minorities and women into middle level jobs as well.

Management Reform

Recent Civil Service reforms give government managers practical tools for defining clearly each employee's objectives, evaluating performance and rewarding superior work. We must finish implementing these reforms. Every Agency manager must take seriously the very substantial responsibility to implement this program.

This year we expect the Assistant Administrators to help strengthen our regulation development processes and products by directing their representatives on regulation work groups to explore alternatives, communicate important choices to senior managers, and build consensus. They should ensure that their Steering Committee member fully represents their views and contributes to the final regulatory decisions in every program area. We also expect the Regions to become more active participants in developing regulations, especially in considering the operational impacts on their resources of alternative regulatory approaches.

The need for close coordination among programs with overlapping interests is obvious, but we want to emphasize that we expect the AAs to set the tone for ensuring that their programs are, in fact, coordinating with others.

Program Evaluation

It is important that in setting priorities we later measure our effectiveness in implementing them. We have asked OPM to develop increased capability to conduct evaluations on specific issues or program areas. The current work on EPA delegations to the States and the pesticides program are examples of the approach we want OPM to take. We need to be the principal evaluators of our own programs. Therefore, we expect that the programs and OPM will tackle these evaluations aggressively and jointly—both in designing evaluations and in implementing recommendations.

Improve Relationships with State and Local Governments

In improving State and local relationships we will focus on bringing environmental programs closer together to ensure efficient management of scarce resources. Therefore we want the Regions to encourage all States, especially States with separate programs, to give high priority to consolidation of those programs through the State/EPA Agreements.

Headquarters and Regional managers should give high priority to encouraging and developing realistic State/EPA Agreements (SEAs) in which both EPA and the States commit to specific activities.

This joint planning process will improve State/EPA relations and help both parties do a better job. Each of the Assistant Administrators' overviews contains SEA priorities. In addition, a separate section conveying my guidance on SEAs is included at the end of this document.

The Agency also needs to encourage delegation of programs. We need to lay out more clearly EPA and State roles in delegated programs. Doing so will improve both accountability and performance.

* * * * *

We want to emphasize that we personally have spent a lot of time developing and reviewing this year's guidance. We urge you to carefully consider the priorities it sets forth and incorporate them into your State/EPA Agreements and grants with the States, your operating plans, and your performance standards. These are the priorities against which we will measure both individual and program performance.

Douglas M. Costle
Administrator

Barbara Blum
Deputy Administrator

Office of Air, Noise, and Radiation

David G. Hawkins
Assistant Administrator

Overview

In addition to the specific guidance for each of the Office of Air, Noise, and Radiation (OANR) programs, two areas are important for all OANR programs. The first area is public participation. We can learn things from the public. In addition, the public must be satisfied that its myriad views are heard, understood, and responded to by the Environmental Protection Agency (EPA). I am firmly committed to the EPA public participation policy as set forth by the Administrator. We should seek the broadest possible participation base in all of our regulatory decisions and provide financial support to the extent practicable to groups that need such support to present significant comments to the Agency. Similarly, where EPA provides financial support to State or local agencies, the program should include provisions for involvement of the public.

We should also pursue opportunities to strengthen our working relationships with the States, particularly in implementing new approaches. OANR's total environmental effort must be conceived of as a working partnership with State and local governments to achieve national environmental goals. An appropriate vehicle for cementing this partnership is the State/EPA Agreement. These agreements provide an opportunity for the States and EPA to plan programs jointly to address environmental problems and for EPA to be responsive to State concerns and priorities, just as we expect them to be responsive to ours.

The Air Program

In implementing the Clean Air Act our success record is mixed. State Implementation Plan (SIP)

revisions have been slow and uneven in quality, the regulation of hazardous pollutants has not progressed rapidly, air quality standard review is well behind schedule, and only limited action has been taken to implement the goals of the Clean Air Act regarding visibility and broader prevention of significant deterioration (PSD). However, we have made substantial progress in developing emission standards for both stationary and mobile sources and in establishing a framework for regulating airborne carcinogens, and have been partially successful in having States assume new source review responsibility. In addition, the States have or will soon have in place major expansions of their regulatory controls on existing sources. I think we have been particularly successful in overcoming inertia and opposition to the adoption of inspection and maintenance (I/M) authorizing legislation in most States where such action was required.

Given the need to extend the Clean Air Act authorizations in 1981, we should also identify and evaluate substantive revisions that we or others may ask Congress to adopt.

Fiscal Year 1981 will be a critical year for the Air program. Fifty States have submitted complete or partial implementation plans. In FY 1980 we will have completed appropriate rulemaking and followup on conditional approvals. In FY 1981, timely action on Inspection and Maintenance (I/M) and Transportation Control Measures (TCM) schedules, the submittal of additional regulations for hydrocarbon control, and the development of greatly improved data bases to support 1982 SIP revisions for many areas will be required. These actions are critical to achieving real improvements in air quality.

With respect to revised National Ambient Air Quality Standards, we have completed the required review and revision only for ozone. Action to propose and promulgate the revised carbon monoxide (CO) standard will be completed in 1980. Our task in this area is greatly complicated by less-than-adequate data from which to derive health effects assessments. Consequently, the review, and revision, if necessary, of other standards has been seriously delayed. Although final action on most other standards will probably not occur until the latter part of FY 1981, we must continue to work closely with EPA's Office of Research and Development to translate criteria document drafts into regulatory analyses and expedite the process as much as possible.

We have made major efforts to develop a workable PSD program within the framework of the law and court rulings. The PSD rules are complex. However, I believe that nearly all State Agencies are capable of implementing PSD programs effectively. The PSD program is EPA's major activity to manage the air quality impacts associated with economic development. I believe the program can make a major difference in the quality of life in the long term. We must make major efforts to get the States to become full partners in this important program.

The FY 1981 Budget provides for a limited increase in funds to support State and local air pollution control activities. No funding is being provided for Section 175 grants to metropolitan planning agencies. However, a second round of funding for these agencies from the $50 million appropriated in 1979 is being announced early in 1980; these funds will carry planning and evaluation activities related to transportation control measures into FY 1981. Any new funding requirements in FY 1981 must be sought, within established work program development procedures, from money appropriated to the Department of Transportation. I anticipate a reduction in the level of support for air quality management activities carried out in the Regional Offices, and in support for standard-setting actions in the mobile and stationary source areas.

Headquarters and Regional Objectives and Activities

First Level Priorities

- The first priority for Headquarters is to complete reviews and appropriate revision of all existing ambient air quality standards and identification of the relationships between fine particulates, visibility, and sulfates and acid rain so that appropriate legislative or regulatory action can be recommended for implementation. In developing a strategy to deal with acid rain, we must work closely with the Office of Research and Development to achieve a greater understanding of the relationship of various pollutant sources to acid rain.
- High priority should be given to listing and regulating pollutants under the Air Carcinogen Policy, including the development of a monitoring strategy for non-criteria pollutants. We should develop a better understanding of what constitutes "urban soup."

- The development of New Source Performance Standards for major stationary sources will continue to be a high priority.
- High priority activities in the Mobile Source program include completing the heavy duty vehicle diesel particulates rulemaking and the heavy duty vehicle gaseous emission standards for model year 1985. Attention should be given to hazardous pollutants from mobile sources, and the thrust of our current program to limit diesel emissions should be continued. Technical and public information support for I/M programs and effective fuel economy testing should also receive priority attention. Because of resource constraints, other activities will receive less attention.

First level priorities for the Regions include:

- completing rulemaking (review and promulgation) for State SIP submissions related to National Ambient Air Quality Standards.
- ensuring effective management of schedules and commitments for the development of I/M programs, including necessary coordination of interstate areas and review of proposed State regulations and procedures.
- implementing control agency planning and evaluation programs, including State/EPA agreements.
- delegating new source review responsibility to States, including rulemaking on SIP modification or delegation requests for PSD.
- assisting States to develop approved PSD plans.
- conducting major source reviews for PSD where States do not assume the program and expediting permitting of new energy facilities.
- coordinating development of the data base for 1982 attainment SIPs in Level I and II areas for ozone. Headquarters should give high priority to assisting the Regions in this effort.
- evaluating National Air Monitoring Stations (NAMS) and selected State and Local Air Monitoring Systems (SLAMS) and document their status; conduct annual design review and quality assurance system audit of SLAMS network; conduct performance audits of key NAMS monitors; and coordinate air quality data and data quality assessment submissions to EPA and validate NAMS data.
- providing policy direction and guidance for implementing quality "bubble" and "banking" programs. Headquarters should work closely with the Office of Planning and Management in providing overall policy direction to this effort, including assessing the additional resource requirements involved.

Second Level Priorities

- ensuring effective management of attainment SIPs within major urban non-attainment areas or interstate areas; overviewing State compliance with SIP schedules and commitments; evaluating progress in attaining standards; and coordinating to ensure consistent strategy development.
- providing guidance to States and metropolitan planning organizations in development of additional regulatory programs for key attainment strategies, including Transportation Control Measures and Volatile Organic Compounds.
- coordinating development of data base for 1982 attainment SIPs in Level III and IV areas for ozone.
- facilitating fuel conversions, with emphasis on compliance with applicable emissions-limiting regulations rather than SIP revisions.
- coordinating States' submission of emission data to EPA storage systems.
- managing contract efforts for preparation of Regional and National Profiles.
- conducting ambient network reviews and analyzing ambient data for critical new sources.
- validating SLAMS data.
- coordinating special purpose monitoring (health or SIP related).
- auditing larger local agency monitoring systems.

Region-Specific Objectives and Activities

- Special emphasis should be placed on the processing of coal conversions and the execution of Section 110(f) activities resulting from localized fuel shortages in affected Regions. Regions connected to the Ohio River Basin should upgrade their current efforts to work with the States to coordinate actions to reduce atmospheric loadings of sulfur compounds.
- Regions that contain areas where stationary sources are major contributors to high ambient lead levels should assign higher priority to lead SIP actions.
- Regions containing major sources subject to best available retrofit requirements of the visi-

bility regulations should work with the States to implement these controls.

- Regions affected by energy development should emphasize permitting of facilities and related analyses and development of mechanics to control surface mines.

Objectives for Regional Interaction with States

State/EPA Agreement Priorities

There are six areas which I urge Regional Administrators to include in their negotiations with Governors or heads of State Agencies during the FY 1981 State/EPA Agreement process. They are:

- State assumption and implementation of new source review programs, including PSD, through an approved SIP or acceptance of delegations.
- State implementation of I/M programs. Agreements should define areas where major EPA assistance and/or technical support for the development of the regulatory program will be necessary.
- submittal of fully approvable SIPs.
- commitments to provide quality data bases for making key decisions for the 1982 ozone SIP. Population projections should coincide with those developed in accordance with the construction grants program cost effectiveness guidelines.
- development and implementation of a fully effective NAMS network meeting all EPA regulatory requirements on instrumentation, monitor siting, and quality assurance.
- overview and coordination, including metropolitan planning organization liaison, of the development and necessary transportation control measures within the urban non-attainment areas for inclusion in the attainment SIPs.

State Grant Priorities

There are a number of important activities which Regions should consider in negotiating and establishing appropriate conditions for the annual Section 105 grant requests with State and local air pollution control agencies.

Regional offices must ensure that the decisions resulting from State/EPA Agreements are adequately provided for in grant applications and awards. Additional priorities that should be covered in the grants are:

- meeting the schedules and commitments contained in the 1979 attainment SIPs, including: development and implementation of I/M, enactment of Volatile Organic Compounds regulations, completion of assessment studies for specific Total Suspended Particulates (TSP) non-attainment areas, development of non-traditional controls, and completion of attainment demonstration analyses.
- implementing the requirements of the air monitoring regulations. These requirements include establishment, operation, and quality assurance of the SLAMS network; annual review of the SLAMS network; validation and timely reporting of SLAMS and National Emissions Data Systems data; review of source-operated ambient networks; daily reporting of air quality in urban areas; development of plans for the ambient lead network; and responding to air emergencies.

The Noise Program

The Quiet Communities Act of 1978 broadened EPA's role in assisting State and local community noise control programs. In so doing, the Act created an opportunity for a comprehensive and balanced national noise control effort. It made actions to define adverse health and welfare impacts of noise, and regulations to control noise from newly manufactured products, a Federal responsibility. Planning for noise abatement and the adoption and enforcement of specific noise control ordinances was made the responsibility of State and local governments. I think this balanced effort is particularly appropriate in noise control, where the impact of the problem is highly localized.

In 1979 we got off to a good start in accelerating State and local noise control efforts by developing cooperative agreements with State and local agencies and by establishing technical centers. Funding for State and local programs in FY 1980 and FY 1981 will be generally comparable with what was available in FY 1979, and we should continue the thrusts that we initiated in this area. The importance of noise control in urban areas was recognized by the President when, in his Environment Message of August 1979, he established a Noise Urban Initiative which mobilized Federal efforts.

Our accomplishments in regulating new products for noise, however, have not been as satisfactory. Federal noise requirements were extended only to cover trash compactors in FY 1979; we anticipate that we will extend coverage to buses and motorcycles, and broaden coverage of noise associated with railroad yard operations in FY

1980. I continue to be concerned about our slow rate of progress in the regulatory area.

In FY 1981 the Noise program overall will be supported by fewer full time equivalent (FTE) positions than in FY 1980. The bulk of this reduction will be applied to State assignees and to Headquarters support of State and local program development. Regional resources are being increased in FY 1980 in recognition of the assumption of greater responsibility for the negotiation and management of cooperative agreements.

Because the major objective of the noise program is to broaden the population base covered by effective noise control programs, it is important that continuing attention be given to State and local program development and to the provision of technical support through technical centers, Each Community Helps Others (ECHO) programs and demonstration programs. However, because the regulation of the design and manufacture of products which are major sources of noise is essential to lowering of overall noise levels, the writing of these regulations by EPA must continue to be an integral part of a balanced national noise control effort.

Headquarters and Regional Objectives and Activities

First Level Priorities

- development of updated long range plans and development of State and local programs in the interim with emphasis on State programs that will provide assistance to local communities.
- development and Regional management of mechanisms that are alternatives to direct EPA technical assistance, that is, State ECHO, Technical Assistance Centers, and EPA-run ECHO programs.
- promulgation of court-ordered revisions to Interstate Rail Carrier (property line standard) regulations.
- promulgation of additional regulations on the noise levels of products.
- non-auditory health and welfare effects studies.

Second Level Priorities

- other health and welfare effects studies.
- demonstration projects on abatement techniques.
- direct technical assistance by the Regions.
- public information and training materials.

Region-Specific Objectives and Activities

In FY 1981 two Quiet Community Programs (QCP) will be in operation (in Kansas City and Spokane). Regions VII and X should give continuing attention to the development of these programs. In addition, Region III should consider a followup evaluation that may be required for the first QCP, which was in Allentown, Pennsylvania.

Objectives for Regional Interaction with States

State/EPA Agreements Priorities

In the SEA the States will assume the responsibility for providing technical assistance to local programs, especially where EPA has provided financial assistance.

State Grant Priorities

In making Noise cooperative agreement awards, priority should be given to State programs over local programs where the State is willing to assume technical assistance responsibility. Cooperative agreements must include specific outputs.

The Radiation Program

During the past two years, the Radiation Program has undergone several significant changes including: new and expanded mandates through amendments to the Clean Air Act, the Uranium Mill Tailings Act, the Report of the Interagency Review Group on Nuclear Waste Management (IRG), EPA's increased involvement in Emergency Response Planning and the Agency's lead role on the Radiation Policy Council. Along with these expansions the Program has initiated an extensive extramural program where none existed before and increasingly shared environmental concerns with other EPA programs, such as Solid Waste, Drinking Water and Air.

Significant progress has been made in carrying out this expanded role. Radionuclides have been listed as hazardous pollutants under the Clean Air Act, and an assessment of CAA regulatory needs has begun; criteria for radioactive waste disposal have been proposed; standards for both high and low level waste are under development; standards for uranium mill waste from inactive sites will be completed in FY 1980; and problem assessments associated with naturally occurring and non-ionizing radiation are under way.

Given this broad base of concern, the establishment of program priorities and the comprehensive planning of program activities must receive great-

er attention. Priorities cannot be stated generically; actions must be evaluated individually and, in the context of institutional constraints, be justified on the basis of their individual merit in achieving risk reduction compared to the merits of other compelling priorities.

Headquarters and Regional Objectives and Activities

First Level Priorities

- promulgate High Level Waste Standard by the 3rd Quarter of FY 1981. (HQ)
- promulgate active site Uranium Mill Tailings Standard by the 2nd Quarter. (HQ)
- participate in review and testing of State Emergency Response Plans. (Regions)

Second Level Priorities

- provide support for the implementation of radiological Standards and Guides.
- provide support to the Environmental Radiation Ambient Monitoring System (ERAMS).
- review Environmental Impact Statements.

Region-Specific Objectives and Activities

Those Regions that have radioactive waste disposal sites within their boundaries should treat them as a national second level priority concern.

Objectives for Regional Interaction with States

The Radiation Program's primary objective for interaction with the States must be to review and test emergency response plans. Although review of emergency response plans is important, regular testing is essential to determine effectiveness of the plans in emergency situations. The State/EPA Agreement should address this need and detail the EPA role.

Office of Water and Waste Management

Eckardt C. Beck
Assistant Administrator

Overview

In the last several years the Environmental Protection Agency has come to recognize that in addition to the protection of sensitive ecological systems and the clean-up of the Nation's air and water, it is our mission to protect the public from exposure to dangerous pollutants. To date, the Office of Water and Waste Management (OWWM) and its Regional counterparts have addressed this mission principally through control of pollutants in the water. In FY 1981, while maintaining our efforts in that area, we must give priority to the implementation of a program to control hazardous wastes in all their guises.

The hazardous waste problem we face is enormous. Each year our society generates an estimated 54 million tons of hazardous wastes. Only 10 percent of these wastes is disposed of safely. Thousands of existing sites probably pose a hazard to health and environment. In 1979, for example, an EPA study found that 85-90 percent of all pits, ponds, and lagoons are leaching hazardous wastes into groundwater. In addition, they are a source of volatile hazardous chemicals that escape into the ambient air.

Operating under a schedule developed by the U.S District Court, OWWM expects to promulgate regulations for the control of hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act (RCRA) in April, 1980. The task of implementing this complex new program is staggering. Even during the limited initial phase of implementation, the Agency will be regulating roughly 400,000 generators, 10,000 transporters, and 30,000 treatment, storage, and dis-

posal sites as well as managing a mandatory "cradle to grave" tracking system for hazardous wastes. Carrying out this mission will require an extraordinary effort by both Headquarters and the Regions to recruit and train necessary personnel and to develop States' capability to manage effective hazardous waste programs.

The effort to implement these regulations will be complicated by the relative paucity of safe hazardous waste disposal facilities and sites. Siting is a difficult public policy issue that State and local governments and private industry are just beginning to consider. Successful implementation of the Subtitle C regulations will require that we articulate an Agency position on the Federal role in locating hazardous waste disposal sites or facilities and setting site criteria. Such policy development will be initiated shortly by a Deputy Assistant Administrator-level committee which will include Regional representation.

A legacy of society's failure to manage hazardous chemical wastes is the thousands of uncontrolled hazardous waste sites that have been and continue to be discovered. As in FY 1980, high priority should be given to implementing the interim strategy for uncontrolled hazardous waste sites issued by the Deputy Administrator in July, 1979. Pending enactment of Superfund legislation, we will continue to identify and evaluate these sites and move vigorously to initiate emergency assistance and containment wherever possible. Particular attention should be given to integrating investigation, enforcement, and emergency response activities to ensure that the appropriate response is used.

The emergency response and prevention program will be important in FY 1981 both because it must provide support and assistance to the uncontrolled hazardous waste site program and because the hazardous substances spills program is expected to be in a growth stage. Recent promulgation of regulations making the reporting of these spills mandatory dictates increased activity in this area. The new responsibilities related to hazardous waste sites and hazardous substance spills will require Regions to augment the capabilities, resources, and authority of on-scene coordinators and to improve Regional coordination and pre-planning activities.

In FY 1980, OWWM has initiated the development of two strategies—the groundwater strategy and the 1990 Construction Grants strategy. Both will influence future EPA management and program direction. The groundwater strategy will provide the framework for the development of a comprehensive groundwater protection policy that will define the Federal/State roles and responsibilities and provide an action plan to address groundwater management. The 1990 Construction Grants study will define program objectives for 1990 and provide the strategy for their achievement during this decade. States are already encouraged to coordinate groundwater policies and construction grants project impact through their State/EPA Agreements. These strategies will provide further guidance in that direction.

For all programs in FY 1981, a first level priority must be improved program management, both within the Agency and at the State level. At the Headquarters level, we must focus on the integration of water quality, drinking water, and solid waste programs. Headquarters and Regions must focus on improved management of program delegations and grant awards. The State/EPA Agreement (SEA) obviously provides the framework through which such improved management should be accomplished.

Improved management of program delegations must include the provision of assistance to States in developing their capability for operating effective environmental programs, as well as maintenance of adequate oversight to ensure that legislative goals are met. We must support State and local development of technical, financial, and problem solving skills. At the same time, we must develop and implement management information and evaluation systems in all Regions to track State performance and to determine the effectiveness of the State/EPA Agreement as a management tool.

States should be encouraged to be innovative in their use of grant funds. Categorical program funds can be used to solve broad priority environmental problems. For example, environmental monitoring conducted under various EPA programs is a potential area in which inefficient or duplicated services may be improved. One output of the State/EPA Agreement might be an integrated monitoring program with funding contributed by all of the various environmental programs and authorities.

Program evaluation should be a key tool in the management of OWWM's programs. Evaluations can provide an accurate assessment of the effectiveness of Headquarters, Regional and State management and can assist in identifying areas

for improved performance. During FY 1981, all program offices will give attention to the development of an evaluation process similar to the one used in the Drinking Water program and the Construction Grants program management performance monitoring system.

Regions, Headquarters, and States also need to improve their communication so that Regional and local needs can be reflected better in our policies. To facilitate this, I intend to set up a process that will have each Region take the lead in one or more policy areas and work with Headquarters to develop that policy or program direction. Guidelines and proposed assignments for this process will be forwarded to the Regions in the near future.

The Water Quality Program

In FY 1981, an important aspect of the Water Quality program's activities will be the continuation of all aspects of the program to control toxic pollutants. We will promulgate regulations that require primary industries to use Best Available Technology (BAT) and will complete the study of Publicly Owned Treatment Works (POTW) assessing the effectiveness of secondary treatment on toxic pollutants. Increased attention will be given to determining whether there are additional toxic compounds that should be addressed in effluent guidelines. Special "hot spot" studies (pollutant-by-pollutant and geographic) will determine the necessity of controls in addition to BAT.

Information and data generated by these toxics studies will be vital to other OWWM and EPA programs. Particular emphasis will be given to the exchange of data on toxic pollutants with the Drinking Water and Solid Waste programs and to integrating and coordinating development of rules for control of toxic pollutants in ambient waters, drinking water and in waste disposal.

As States increasingly assume day-to-day responsibility for the Construction Grants program under delegation, EPA must move rapidly toward program management and overall monitoring of State performance. Establishment of systems and procedures that bring stability and predictability to the program, delegation under Section 205(g) of the program to States, and meeting the treatment needs of the largest Standard Metropolitan Statistical Areas (SMSAs) will be major programmatic thrusts. Implementation of the National Municipal Policy and Strategy—which mandates a coordinated approach to grant making, permitting, and enforcement activities—is expected to improve the management and effectiveness of all of these programs.

A particular emphasis should be given to encouraging the construction of cost effective, high quality facilities which employ innovative and alternative technologies. To foster this development, new resources are being provided to the Technical Support Group in Cincinnati to promote innovative and alternative project design, particularly in the area of energy conservation. These resources are in addition to previous actions taken to promote an active program for innovative and alternative treatment within existing resources.

A major OWWM study on Construction Grants is currently under way to define the program directions in the 1980s, toward achieving legislative goals by 1990. This study will likely lead to major legislative and budget recommendations for FY 1982 and later. Among other factors, the need for adopting measures to improve Operation and Maintenance (O&M) performance will be considered.

As indicated in the overview, improved management of programs at the Agency and State levels must be considered a major priority. States are gradually assuming administrative responsibility for a variety of programs—construction grants, 208 programs, dredge and fill, clean lakes. If these programs are to be managed effectively by States, EPA must achieve better program integration in its rulemaking in such areas as water quality assessments, standards, permits, and nonpoint source controls. Where programs have been delegated, EPA must assist States by assessing State program management to identify strengths and weaknesses and then work with States to improve their stewardship. In this process, particular attention should be given to the implementation by States of a comprehensive quality assurance effort to provide for the generation, storage, and use of environmental data.

In 1981 the Environmental Emergency Response and Prevention program will place highest priority on two relatively new program areas: (a) the provision of emergency support and assistance to the uncontrolled hazardous waste site program, as discussed in the Solid Waste Media section, and (b) emergency response to hazardous substances spills, in response to the recent promulgation of regulations governing these substances. The new responsibilities related to hazardous

waste sites and hazardous spills will require Regions to augment the capabilities, resources, and authority of on-scene coordinators and improve Regional coordination and pre-planning activities.

Increased resources are requested for FY 1981 to expand implementation of activities called for under Section 404 of the Clean Water Act to protect sensitive wetland areas by ensuring adequate environmental review. Attention should be focused on the most environmentally sensitive projects, with emphasis on pre-permit application, planning, and analysis.

Although no additional resources are available, the Agency must direct attention to ensuring that monies for management of non-point sources of pollution are being spent effectively, and that we are improving water quality. Priorities for the non-point source program include urban runoff, agriculture, and groundwater management.

Headquarters and Regional Objectives and Activities

First Level Priorities

- continue development of a framework for toxic pollutant control.
  - —develop specific water quality criteria for toxic pollutants. (HQ)
  - —promote adoption of toxic criteria into State standards. (HQ)
  - —promulgate BAT (toxic) industrial point source limitations and pre-treatment standards. (HQ)
  - —complete POTW study and prepare guidance to Regions on treatability of toxic pollutants. (HQ)
  - —develop area-by-area "hot spot" analyses; continue pollutant-by-pollutant, exposure/risk studies; and, as required in Section 307(a)(1) of the Clean Water Act, revise the Agency's list of toxic pollutants (or combinations) for which an effluent standard will be established. (HQ)
  - —assist in the development of RCRA regulations by managing industry-by-industry studies of waste streams. (HQ)
  - —perform priority pollutant analyses to determine exposure/fate of pollutants and develop geographic control strategies. (Regions)
  - —provide technical assistance to Regional and State National Pollutant Discharge Elimination Strategy (NPDES) permit authorities for second round determinations. (HQ)
  - —propose Section 311 hazardous substances removal regulations. (HQ)
- respond to major environmental emergencies. (HQ)
  - —initiate on-scene response (direct Federal removal or monitoring) to major spills of oil and/or hazardous substances. On-scene response includes coordination of media coverage, enforcement, and technical assistance. (Regions)
  - —provide emergency assistance for the most critical uncontrolled hazardous waste sites under authority of Section 311 of the Clean Water Act, where applicable. (Regions)
  - —implement spill prevention compliance program for hazardous substances for NPDES permitted facilities, pursuant to regulations to be published during FY 1980. (Regions)
- continue to improve the management of the Construction Grants program in compliance with the Program Management Strategy guidance issued by the program office. (PRM 79-5)
  - —continue to delegate major management responsibilities for the Construction Grants program to the States as expeditiously as possible.
  - —fully implement the National Municipal Policy and Strategy, in accordance with more detailed guidance to be issued separately.
  - —encourage use of innovative and alternative technologies emphasizing energy conservation, cost effectiveness, and land treatment. (Regions)
  - —improve overall management of obligations, outlays, project completion, pre-construction lags, quality of priority lists, and quality of facility plans. (Regions)
  - —ensure pre-treatment program implementation and encourage assumption of program responsibilities by the States and localities, by greater use of construction grant incentives and pre-treatment system implementation deadlines. (Regions)
  - —keep States' implementation schedule in delegation agreements on course and ensure that proper evaluation and control procedures are established before State assumption of each activity is consummated. (Regions)
- build State water quality management capacity.
  - —ensure that States develop adequate toxics analytic capabilities, including adequate provision for purchase of laboratory equipment. (Regions)
  - —provide technical assistance for non-point source management in areas of financial, groundwater, agriculture, and urban runoff management.
  - —provide grant management oversight on 208 and 106 programs with particular emphasis

on improved integration, accountability, and attention to priorities. (Regions)
—ensure implementation of procedures consistent with Agency's Quality Assurance Policy. (Regions)
—with completed WQM needs assessment, analyze need for 106 priorities and initiate redesign of WQM program. (HQ)

- expand activities to protect sensitive ecosystems.
  —provide increased level of review for individual Section 404 permit cases, especially preapplication field investigations, joint processing, and enforcement. (Regions)
  —work actively to develop Section 404 programs in selected States. (Regions)
  —evaluate clean lakes restorative techniques on an economic/technical basis. (HQ)
  —in the ocean disposal program, place primary emphasis on developing and encouraging alternative methods for disposal of sewage sludge before the 1981 statutory deadline, through the Section 201 planning process.
- manage wasteload allocation/advanced wastewater treatment review process.
  —review technical adequacy of wasteload allocations in advanced wastewater treatment (AWT) and advanced secondary treatment project proposals. (HQ)
  —establish a program for wasteload allocations for States and Regions. (HQ)
  —manage/provide guidance for State wasteload allocation programs. (Regions)
  —review proposed AWT projects. (Regions)

Second Level Priorities

- in the Construction Grants program, allocate reduced levels of resources to lower priority activities defined in Management Option D of the 1981 Zero Based Budgeting issue paper and the program management strategy. (Regions)

  Lower relative priority should be given to the following:
  —review of infiltration/inflow analyses.
  —design conferences and reviews.
  —review of grant amendments.
  —review of engineering contracts.
  —mid-course facility planning meetings.
- monitor removal actions taken by dischargers of oil or hazardous substances where Federal on-scene response is not necessary.
- undertake lesser priority toxics control activities.
  —complete Best Control Technology (BCT) rulemaking for primary industries. (HQ)
  —finalize high priority surveys for industrial Best Management Practices (BMP) regulations. (HQ)
- assign adequate resources for State assistance, grants management, and evaluation of the Clean Lakes program. (Regions)
- provide technical review of proposed revisions to State water quality standards. (Regions)
- propose and develop regulations to establish limits of liability for all on-shore/off-shore facilities and develop reduced liability limits for small onshore hazardous substances storage facilities in accordance with Section 311 of the Clean Water Act. (HQ)
- review and redesign national monitoring networks as necessary. (HQ)
- guide and direct State monitoring programs. (Regions)

Region-Specific Objectives and Activities

- assist in the process for determining ocean discharge waivers (§ 301(h)), including the conduct of and participation in hearings. (Regions I, II, III, IX, X)
- approve stream use classification only in areas where downgradings have been thoroughly justified. (Regions III, V, VIII)
- develop a coordinated plan for management of the salinity in Colorado River. (Regions VI, VIII, IX)

Objectives for Regional Interaction with States

State/EPA Agreement Priorities

- Section 205(g) Delegation: Where States have already signed delegation agreements, ensure that the State/EPA Agreements (SEA) reference timetables established in the delegation agreements, Regional Office oversight functions, and State/EPA management and monitoring procedures for delegated responsibilities. For States expected to sign delegation agreements during FY 1981, SEAs should contain information on the scope of the delegation agreements as well as a schedule of negotiation and assumption. For States not expected to sign delegation agreements, the SEA should reference individual work programs that identify responsible Agencies, to avoid duplication of reviews between EPA and the States.
- Emergency Response: State should develop a contingency plan to deal with oil and chemical spills, as well as multi-media, multi-pollutant emergencies, and develop a spill prevention program.

- Pre-treatment: Identify municipalities requiring pre-treatment programs and identify steps to ensure that pre-treatment programs are developed in accordance with established timetables. Coordinate the pre-treatment program with the industrial sludge disposal program.
- Monitoring and Data Management: Work toward a full basic water monitoring program with special emphasis on toxics. Coordinate various assessment reports—SIA, open dump, etc. Perform water quality analyses as needed to develop geographic controls for toxic hot spots.
- Water Quality Standards: States should review and revise water quality standards as appropriate, with increased consideration of toxics criteria.
- Wasteload Allocation (WLAs): If Section 201 or 205(g) funds are to be used for WLAs, the SEA should include a priority list of needed wasteload allocation studies with highest priority assigned to projects that require further water quality analysis as a result of AWT reviews.
- Non-Point Sources: Ensure that States identify priority non-point source problems and approaches for solution. National priorities are urban runoff, agriculture, and groundwater. Non-point source planning should be coordinated with point source, clean lakes, groundwater projects and RCRA programs wherever possible.

Grant Priorities

Regional Offices should ensure that the decisions resulting from State/EPA Agreements are supported in grant applications and awards. Additionally, grant funds should be used as follows:

- Section 208 Funds: Direct monies toward implementable non-point source problems as identified in the Water Quality Management (WQM) plan. Paragraph 35.1533-3(b) of the Water Quality Management regulations, which denies award of Section 208 grants unless significant implementation of a Section 208 plan is under way, must be implemented. The project should include fiscal management analyses so that technical solutions can be financed and implemented.
- Section 106 Funds: Improve grant management through increased integration, accountability and attention to priorities. Identify funds released by Section 205(g) delegation.

Drinking Water Program

The Drinking Water Program will undertake four major priority efforts in FY 1981 to ensure the safety of the Nation's drinking water. The first is expansion of standards and the regulatory framework to control additional contaminants of concern, particularly carcinogens. Expansion of the regulatory framework encompasses the issuance of Revised Primary Drinking Water regulations, including uranium and other radionuclides; the identification of a methodology to control corrosive waters; and the promulgation of maximum contaminant levels for specific organics in groundwater.

The achievement of maximum compliance with existing standards is the second major priority effort. Since much of the non-compliance currently being identified is among small systems with limited resources, this will require a balance of technical assistance and enforcement. Where program delegation has occurred, we must evaluate the State programs and exercise management controls to improve performance.

Implementation of the Agency's groundwater strategy is the third major effort. In FY 1980, the Office of Drinking Water will take the lead in the development of this strategy which is designed to focus Agency attention on the protection of the Nation's groundwater resources. Particular emphasis will be given to developing a framework for policy development and program integration and to improve coordination among EPA groundwater protection programs, including the construction grants program.

The fourth priority effort is to maximize the number of States which accept delegation of the new underground injection control (UIC) program. Delegation of primary enforcement responsibilities requires that we ensure that the State program satisfies minimum requirements.

The budget submission for FY 1981 requests a modest increase in Regional resources for the implementation of the UIC program and an increase in underground *water source* protection grants to encourage State primacy and to defray State UIC program implementation costs. In addition, an increase in the Office of Research and Development program has been requested to expand current efforts to identify effective treatment technologies applicable to small systems.

Headquarters and Regional Objectives and Activities

First Level Priorities

- expand the regulatory framework for ensuring safe drinking water.
  - —develop national revised primary drinking water regulations, including uranium and other radionuclides. (HQ)
  - —promulgate maximum contaminant levels for specific organics in groundwater. (HQ)
  - —issue Suggested No Adverse Response Levels (SNARLs) for unregulated chemicals in drinking water. (HQ)
  - —develop information on the methods to control corrosive waters. (HQ)
  - —expand design of laboratory certification programs to cover analytic methods and other quality assurance practices to support new organics focus. (HQ)
  - —implement expanded laboratory certification program. (Regions)
- promote compliance with existing standards and regulations.
  - —evaluate State performance of PWS and UIC programs; identify major deficiencies; and ensure that required corrective actions are included in SEAs. Emphasize follow-up of non-compliance and groundwater protection activities. (Regions)
  - —implement the compliance and small systems strategy which is currently under development. (Regions)
- delegate primary enforcement responsibilities for the PWS and UIC programs to States and improve program management.
  - —provide technical assistance to States on developing UIC programs. (Regions)
  - —issue program guidance on implementation of the UIC program. (HQ)
  - —review State UIC primacy applications. (HQ/Regions)
  - —implement UIC/ADP systems being developed in FY 1980 to serve as part of a consolidated UIC, hazardous waste and consolidated permits system. (HQ/Regions)
  - —prepare for promulgation of UIC programs and review UIC permit applications in non-primacy States. (Regions)
- complete the development of the groundwater strategy in FY 1980 and implement in FY 1981.
  - —prepare guidance documents. (HQ)
  - —implement strategy (Regions)

Second Level Priorities

- implement UIC training and public awareness program. (HQ)
- implement the sole source aquifier program. (Regions)
- evaluate performance data on point-of-use water treatment devices. (HQ)
- implement UIC programs on Indian lands. (Regions)
- follow up on non-compliance for non-community systems. (Regions)
- initiate development of criteria and standards for Reuse of Wastewaters for Potable Purpose. (HQ)
- follow up on Surface Impoundments Assessment findings. (Regions)
- evaluate the Headquarters program. (Regions)

Region-Specific Goals and Objectives

- work with States to implement corrosion control of lead in the distribution system. Monitor mitigation measures necessary to protect the Wachusett Reservoir from the construction of Interstate 190 through the watershed. (Region I)
- focus on non-community systems in State evaluations. (Regions II, IV, V)
- work with Pennsylvania to achieve primacy for public water systems. (Region III)
- continue to implement an aggressive public water system program in Pennsylvania, Indiana, South Dakota and Wyoming. (Regions II, V, VIII)
- propose UIC program for Osage County and other Indian lands by the end of 1981. (Regions VI, VIII, IX)
- carry out a comprehensive public water system program in Oregon, including full implementation of the National Interim Public Drinking Water Regulations. The first priority is to ensure compliance with the regulations, taking enforcement action as necessary. Second priority activities include identification and correction of potential public health hazards. (Region X)
- complete State evaluations and emphasize non-compliance follow-up actions. (Region VII)

Objectives for Regional Interaction with States

State/EPA Agreement Priorities

- public water system program:
  - —provide for implementation of requirements of

regulations on trihalomethanes, uranium, and radionuclides, and amendments to the National Interim Public Drinking Water Regulations.
—include compliance activities in primacy States, particularly monitoring, reporting, public notification, and follow-up of non-compliance.
—provide for implementation of a small systems strategy.
—ensure that States' emergency response plans cover drinking water.
—develop a program to assist communities in locating potential Federal and State funding sources for public water systems.

- groundwater protection:
  —implement a coordinated groundwater strategy that fosters delegation of the UIC and hazardous waste (RCRA) programs and consolidation of UIC, NPDES, and hazardous waste permitting systems.
  —develop specific plans for assumption of primacy for the underground injection control program.
  —implement a management information system that includes reporting and recordkeeping requirements for the UIC program.

Grant Priorities

Regional Offices should ensure that the decisions resulting from State/EPA Agreements are supported in grant applications and awards. Additionally, grant funds should be used as follows:

- Public Water Supply: Encourage expansion of non-compliance follow-up activities and automation of compliance data (or other quality control mechanisms for data management).
- Groundwater Programs: Ensure that grant funds support only those activities directly related to assumption of primacy of the UIC program. Also ensure that activities are coordinated with groundwater-related programs such as RCRA and Section 208 programs.

The Solid Waste Program

During FY 1980, EPA expects to promulgate regulations for the control of hazardous wastes under Subtitle C of RCRA. Operating under a schedule developed by the U.S. District Court, the regulations under Sections 3001, 3002, 3003, 3004, 3005 and 3006 (as part of the Consolidated Permit Regulations) will be promulgated by April, 1980. With these regulations promulgated, the Regional Offices will begin the task of implementing Subtitle C by authorizing eligible States and by managing the program in States that fail to apply for or are denied authorization to run the program.

During FY 1980, Headquarters and Regional Offices will jointly develop an implementation strategy for hazardous waste management. This strategy will form the basis for Regional Office actions on Subtitle C during FY 1981. Very shortly, a Deputy Assistant Administrator-level Committee on which the Regions will also be represented will recommend an appropriate Agency policy on siting.

In order to ensure comprehensive waste management, it is EPA policy to complement the Subtitle C hazardous waste program with a program to manage all wastes not classified as hazardous under Subtitle D of the Act. In FY 1979, regulations were promulgated that establish the criteria for classifying land disposal sites. Also promulgated were guidelines for State solid waste management plans. Implementation of this program will begin in FY 1980 and continue in FY 1981. The States will receive grants to carry out the mandated inventory of open dumps, and to develop State solid waste management plans.

High priority will continue to be placed on the uncontrolled hazardous waste site program. Pending enactment of Superfund legislation, EPA will continue to implement the interim strategy and will move vigorously to initiate emergency assistance and containment actions at such sites whenever possible. Particular attention should be given to integrating Section 311(k) of the Clean Water Act, enforcement, and investigation program activities and making maximum use of EPA's emergency response capabilities for these sites. Draft priority-setting criteria developed by OWWM and the Enforcement Task Force should be the basis for Regional actions in this area. The interim strategy will only bridge the gap until Superfund is enacted and is not intended to be a major program of cleanup or containment in advance of funds and authorities that would become available under new legislation.

To try to support the requirements of this accelerating program, resources requested for the Subtitle C program are greatly expanded in FY 1981, both for Headquarters and the Regional offices. Headquarters contract resources would more than double from the FY 1980 President's budget. Permanent Regional positions would quadruple from the FY 1980 President's budget, primarily because of the heavy workload associated

with permit issuance. To supplement these positions, the Regional Offices would gain over 100 other-than-permanent workyears and access to a $4 million contract that would provide assistance to permit writers in both authorized States and EPA Regions. Grants to States for the development and management of hazardous waste programs would also expand significantly, from a base of $18.6 million in FY 1980 to $30 million in FY 1981.

Because of the inherent difficulties of rapid expansion of this demanding program, EPA will begin to advance hire for the Subtitle C program in each Region in FY 1980. A total of 200 positions may be filled in FY 1980, with another 91 to be filled in FY 1981.

Headquarters and Regional Objectives and Activities

First Level Priorities

The purposes of the Solid Waste program are

- assist States to develop and implement hazardous waste programs under Subtitle C with a goal of maximizing the number of States receiving authorization. (Regions)
- issue guidance for State implementation of the Subtitle C program. (HQ)
- process Part A permit applications, provide notices of interim status to all applicants, prioritize facilities, and begin to call for Part B permit applications on a prioritized basis. (Regions)
- issue guidance for selection of site priorities. (HQ)
- implement and closely monitor compliance with the manifest system for generators, transporters, treaters, storers, and disposers of hazardous wastes, including operation of a data processing system for exception reporting. (Regions)

The purposes of the Uncontrolled Hazardous Waste Sites program are

- prioritize provision of emergency assistance on uncontrolled hazardous waste sites, preparation of enforcement cases, and investigation. (Regions)
- investigate uncontrolled hazardous waste sites that pose the greatest threat to determine whether Section 311 and/or enforcement actions are necessary. (Regions)
- provide technical advice in the event of hazardous waste site emergencies or imminent hazards, including containment procedures to mitigate the problem; assistance in determining a permanent remedy; and follow up to ensure that the remedy is applied effectively. (Regions)

Second Level Priorities

The purposes of the Solid Waste Program are

- as part of effective management of Subtitle D grants, monitor and closely review State implementation of the land disposal site inventory mandated under Subtitle D of RCRA. (Regions)
- review and approve State solid waste management plans (due January 1981) ensuring the proper disposal of all solid waste, with special emphasis on considerations for siting hazardous waste facilities. (Regions)
- deliver funding and provide programmatic support to Urban Policy resource recovery grantees to ensure the maximum possible number of successful resource recovery implementations. (Regions)
- manage and provide technical assistance through the Technical Assistance Panels program, with emphasis on assistance in hazardous waste management facility siting. (Regions)

The purposes of the Uncontrolled Hazardous Waste Sites program are to complete *full* field investigations—engineering planning, cost analysis, and design—on uncontrolled hazardous waste sites to effect long-term remedial action. (Regions)

Objectives for Regional Interaction with States

State/EPA Agreement Priorities

- begin implementation of EPA interim authorized hazardous waste programs. Emphasize establishment and operation of a manifest system and establishment of permit priorities.
- ensure that States without interim authorization support the Federal program and begin development of State programs by refining statutory authority, providing increased resources, expanding surveillance and enforcement activities, and providing appropriate permit mechanisms.
- for their Subtitle D programs, States should evaluate disposal facilities for purposes of an open dump inventory and submit names of the dumps to EPA.
- States should implement Subtitle D Approved State Plans with emphasis on enforcement against open dumps, implementation of co-disposal or resource recovery strategies, and

planning for solid and hazardous wastes treatment, storage, and disposal facilities. A search for alternative funding sources, including a user fee system, should begin because Federal funding for these State programs will be phased out in FY 1984.

Grant Priorities

Regional offices should ensure that the decisions resulting from State/EPA Agreements are supported in grant applications. Additionally, grant funds should be used as follows:

- Hazardous Waste Grants:
  —for States that do not receive interim authorization in FY 1981, ensure that the State works toward having adequate legislative authority, adequate regulations in effect, control over a substantial majority of hazardous wastes, the capacity to monitor and inspect, enforcement capabilities, adequate resources, and the ability to permit facilities.
  —for States with interim authorization, ensure that they *operate* interim authorized programs and work toward full authorization. This system will include having a program that is equivalent to and consistent with the Federal program and has adequate enforcement for compliance with the Subtitle C requirements.

- Solid Waste Grants:
  —ensure that States continue to evaluate land disposal sites, and submit names to EPA for the open dump inventory. States should also begin to implement their solid waste plans in FY 1981.

Office of Pesticides and Toxic Substances

Steven D. Jellinek
Assistant Administrator

Overview

The past two years have seen important progress in the implementation of TSCA and FIFRA.

Under FIFRA we have focused on implementing the 1978 amendments to streamline the regulatory process, reduce the burdens on industry, and ensure public accessibility to basic health and safety studies.

Under TSCA we have acted under all major provisions of the law, including: controlling the unreasonable risks of PCBs and CFC aerosols; publishing the TSCA initial inventory of 47,000+ chemical substances in U.S. commerce; activating the premanufacture notification (PMN) program, one of TSCA's most important vehicles for preventing unreasonable chemical risks to our society; developing—through proposals under section 8—an adequate information base to support current and future regulatory actions; and laying the necessary groundwork for TSCA's chemical testing program.

In FY 1981 we will continue to improve our ability to deal effectively with chemicals under both acts. Some of the high priority objectives common to the two programs are:

- To proceed as quickly as possible to identify and control the highest risk chemicals. This will mean continued emphasis and speedier decisions on rebuttable presumption against registration (RPAR) pesticides. Under TSCA it will mean (for new chemicals) priority assessment

of problem chemicals and aggressive pursuit of appropriate control actions.

- To expand the efforts to integrate toxics-related activities across different EPA programs and the IRLG agencies. The goals of these efforts are to ensure that we are:
  —dealing with the most serious problems.
  —attacking these problems in the most effective manner.
  —avoiding unnecessary duplication of effort.
  —achieving the most protection of public health and the environment possible with the available resources.
- To improve the (1) quality and quantity of data and (2) the methods for storing, retrieving, and processing data used in support of OPTS and other agency actions. Obtaining the testing information needed to make better regulatory decisions and continuing to supply information to the Regions to support their enforcement efforts are particularly important. We will be evaluating our toxics data program at the Administrator's behest to ensure that other EPA programs and the Regions find that data useful and easy to access and manipulate.
- To develop regulatory and nonregulatory strategies which provide strong continuing incentives to the private sector to achieve the FIFRA and TSCA goals of protecting public health and the environment. These incentives should be designed to (1) stimulate industry to develop safer chemicals (without unduly affecting innovation), (2) to provide adequate information about the hazards associated with those substances, and (3) to take actions to protect against unnecessary risks.
- To develop and implement methods for evaluating the effectiveness of OPTS regulatory programs. Such evaluations will also include assessing the economic impact of OPTS actions.
- To continue to improve and integrate OPTS planning and management activities, particularly developing and refining systematic approaches to setting analytical and regulatory priorities.

The Headquarters Toxic Substances Program

In FY 1980, OTS will continue to place high priority on making the premanufacture notification program fully operational, including taking actions under sections 5(e) and 5(f), as appropriate, to stop the introduction of new chemicals into commerce and to follow up on other chemicals via "significant new use rules" or rules under section 8(a). We will also emphasize action which will establish an adequate information and assessment base upon which to regulate now and in the future. This will include the development of rules to obtain testing data and the development of reporting and recordkeeping rules. We expect to review over 400 new chemicals, require data submissions under section 8 on several thousand priority chemicals, initiate testing rules on several dozen chemicals for various health and ecological effects, initiate labelling controls on several thousand acutely toxic chemicals and more than one hundred carcinogens, and propose the banning of non-essential uses of asbestos and move toward control of a handful of other high risk chemicals under section 6.

Program Accomplishments

- published the inventory of commercial chemical substances providing information on over 47,000 unique chemicals.
- evaluated over 300 "substantial risk" notices under section 8(e) and took appropriate action.
- promulgated the first of many "submission of unpublished health and safety studies" rules under section 8(d).
  —sustained in court against Dow challenge.
  —80 companies submitted 685 studies on 5 individual chemicals and 5 chemical categories.
  —second 8(d) rule has been proposed covering 18 chemical categories and 39 individual substances; over 550 chemicals in total.
- established a procedure for export notices.
  —120 countries notified of EPA action on PCBs and CFCs.
- proposed regulation on premanufacturing notification; and established a system for screening and assessing notices.
  —over 50 notices received as of 1/25/80.
  —first 5(e) and "significant new use" actions in process.
- two sets of health effects test standards were proposed in FY 1979 covering good laboratory practices and a wide range of effects.
- chlorofluorocarbons.
  —regulation banning aerosol uses of chlorofluorocarbons promulgated in March 1978 in a joint action with the Food and Drug Administration and the Consumer Product Safety Commission.
- polychlorinated biphenyls.
  —PCB marking and disposal rules promulgated in February 1978
  —rules implementing the TSCA ban on manufacture, processing, distribution, and non-totally enclosed uses of PCBs promulgated in June 1979.

- established and implemented Regional program for voluntary control of asbestos in schools.
- ANPRMs published on controlling asbestos in schools and banning non-essential uses of asbestos in commercial products.
- major TSCA computer based system already partially operational:
  —will provide full public access to all non-confidential data.
  —confidential business information will be strictly protected in separate computer.
- OPTS leading development of a toxics data network that will link Federal system and facilitate information exchange; became partially operational in 1/80.
- toxics integration directories and reference data bases.
  —EPA Chemical Activities Status Report—a compilation of approximately 1,300 chemicals from EPA programs for which some technical data, assessment, or proposed/final regulation applies.
  —Chemtrax—a computerized data base that contains 5,000 chemicals and 50 data sources from OTS, EPA programs, and Federal agencies, designed for tracking and consolidating activities and decisions.
- mounted major effort to harmonize international efforts to control commercial chemicals.

Headquarters Objectives and Activities

First Level Priorities

- Fully operate the pre-manufacturing notification process at an efficient level to ensure that no high-risk chemicals are introduced. We expect 400 notices this year.
- Promulgate the health and environmental test rules proposed in 1980 encompassing five categories of chemicals with 5 to 20 chemicals per category, and propose and promulgate additional test rules for chemicals selected by the Interagency Test Committee.
- Promulgate final regulations on asbestos use and the asbestos school program.
- Have in place a set of tiered information-gathering rules for use by OPTS and other Federal agencies.
- Continue chemical information systems development and operate the system, services, and data base, thereby providing Headquarters and the Regions with the following:
  —background information on individual chemicals, particularly toxicity data and information about past and present regulatory efforts.
  —information, by State and Region, on chemical manufacturers and importers, including estimates of production and importation volume.
- Implement a specific training effort in FY 80 to help the Regions and selected States better understand and use chemical data bases.
- Produce a revised printed version of the chemical inventory, evaluate the current usefulness of the inventory, and propose ways of increasing its usefulness.

Second Level Priorities

- promulgate and propose regulations of existing chemicals with emphasis on generic approaches (e.g., labelling, solvents, dyes).
- achieve international consensus on Organization for Economic Cooperation and Development (OECD)-developed test protocols, a minimum premarket data set, and principles of good laboratory practices.
- continue to review TSCA's economic effects and its impacts on innovation.

Regional Toxic Substances Program

The Regional toxics abatement and control (A/C) program actively participates in TSCA implementation by providing technical aid and guidance to State and local officials to reduce asbestos exposure in schools, and by assisting industry, utilities, the general public, and local, State, and Federal officials to comply with PCB regulations. The Regions also serve as a communication front line on TSCA and toxics-related issues because of their scientific expertise and experience.

The Regional A/C program has taken the lead in their Region's efforts to solve local chemical problems. Some of the mechanisms used to accomplish this are:

- participating in Intergovernmental Regulatory Liaison Group (IRLG) activities.
- establishing Regional Toxics Coordinating Groups.
- identifying and working with State officials interested in toxic substances.

There will be fewer abatement and control positions in the Regions in FY 1981. Regional and Headquarters A/C and enforcement staff will have to work together to ensure that priority items are accomplished. Regional efforts devoted to information use and dissemination will increase

because of the increased availability of chemical information and the ability of Regions to directly access these data.

Regional Objectives and Activities

The Regional activities included here are essential both to implementing TSCA and to the more general task of systematically integrating Regional approaches to toxic substances control. Regional activities are divided into first level priorities and second level priorites.

First Level Priorities

- Regions will continue to work with State and local governments, school superintendents and other Federal agencies to reduce asbestos exposure in schools. Monthly status reports to Headquarters will be necessary. Other-than-permanent-full-time positions (OPFTEs) are specifically provided for this purpose.
- Information assistance to industry, Government, the public, and special interest groups should continue in FY 1981. The Regional A/C programs are the local liaison between EPA, other Federal and State agencies, and the public. They should continue (1) to disseminate information about TSCA (in particular, information on Section 6 Control Regulations), and chemical problems through meetings and seminars, (2) to provide technical assistance, when possible, and (3) to refer requests to appropriate media programs, agencies, or Headquarters.
- Chemical information utilization activities should become much more important in FY 1981, given the greatly increased availability of such information to Regional offices and States. Regional A/C programs should use this information to determine problems unique to the Region, reporting any such problems to OPTS or other appropriate Headquarters offices. The Regional A/C programs should continue to be major contributors to program integration efforts among the various media offices through Regional toxics coordinating groups or other appropriate mechanisms.

Second Level Priorities

A/C positions should review State/EPA Agreements developed by the Regions in conjunction with States to ensure that toxic substances issues—particularly those requiring multimedia or interprogram coordination—are adequately addressed.

- Regions should participate in the review of premanufacturing notices (PMNs) by providing plant or site-specific information to Headquarters.
- Regions should continue participating in IRLG activities.
- Regions should identify and work with State toxics contacts.

The Pesticides Program

In FY 1979 the Pesticide Program emphasized the review and diposition of RPAR chemicals at the same time as it turned its attention to implementing the conditional and generic registration provisions of the 1978 Amendments to FIFRA.

Generic registration of pesticides entails a single comprehensive evaluation of risks and benefits of the active material common to numerous products based on all data relevant to the registration decision. Pending the completion of these efforts, OPP will grant conditional registrations as warranted. This will permit the Agency to register new products if the public interest would be served by a registration, and if risks during the period required to complete and submit additional studies are not unreasonable. New uses of "old" chemicals in addition to new chemicals will also be eligible for conditional registration if EPA determines that enough information is available to evaluate unique hazards that may be posed by the new uses.

The accomplishments of the Pesticides program include the following:

- Work was begun on generic standards in 1979. Data gathering was initiated and completed for a number of chemicals.
- We promulgated regulations governing conditional registration, waivers of efficacy requirements, compensation for the use of data, and registrants' responsibilities for data submission.
- We have approved or provisionally accepted over 1000 conditional registrations in the past year.
- RPAR proposed decisions have been made on 12 chemicals and proceedings have been completed for BAAM, Endrin, Trifluralin, and Benomyl, resulting in a reduction of risk through concellation of uses, modification of labels, and reduction in the residues of contaminants.
- We carried out emergency suspensions of 2,4,5-T and Silvex, and a regular suspension of DBCP.
- Agreements were reached with major Silvex registrants for voluntary cancellation of their products in turn for EPA arrangement of disposal.

- Our laboratory audit process has identified several new suspect chemicals and labs that had significant problems.
- All States but two (Nebraska and Colorado) have approved plans for applicator certification where private and commercial applicators are trained to use restricted pesticides.
- Integrated Pest Management (IPM) is receiving increasing attention through agreements and research funding to develop, demonstrate, and deliver new IPM technology.

The level of funding in FY 1981 will provide for the continuing development of pesticide registration standards. The budget will also permit the continuation of RPAR actions. The RPAR investigative process will be made a part of the registration standards setting system in 1981. By then, any newly suspect chemicals that enter the standards process will be subjected to RPAR review when unreasonable adverse effects are identified. The laboratory audit program will be continued. Funding is also requested for disposal activities including: performance testing of disposal techniques; Environmental Impact Statements on shipping and disposal operations; disposal of Silvex pesticides; and the possible disposal of 2,4,5-T.

Registration will emphasize conditional registrations on new products similar to those on the market, minor uses, public health uses, responding to emergency situations, supporting to State and local governments and registering pesticides for local use, setting tolerance levels on food products, innovative pest controls, farm and farm worker safety, and increasing the overall efficiency of the registration process.

Under the Regional Pesticide Use Management program, the responsibility and resources necessary to manage the Certification and Training program for applicators will be transferred to the enforcement program in FY 1981. The remaining Headquarters and Regional resources in Pesticide Use Management will provide technical assistance to upgrade training materials to the 12th grade level; assist the States on spills, kills, and fires; and conduct limited evaluation activities and handle pesticide inquiries.

Headquarters and Regional Objectives and Activities

First Level Priorities

- continue to implement a conditional registration program and process new registration applications in an efficient and effective manner, giving priority to innovative, environmentally protective pesticides and minor uses.
- prepare pesticide registration (generic) standards, including reassessment of tolerances, and integrate them with the RPAR process.
- review benefits and risks of RPAR compounds identified as posing potentially unreasonable adverse effects, reach final risk/benefit determinations, and reduce health and environmental impacts, if necessary, by restriction or elimination of some or all uses.
- finalize decisions on emergency exemptions and emergency use permits on a schedule that provides the decision prior to the need to use the compound.
- integrate IPM into regulatory actions (e.g., Section 18 emergency exemptions, registrations, rebuttable presumptions) when technically appropriate; and working through the Office of Enforcement, provide State applicator training programs with information on IPM techniques.

Second Level Priorities

- conduct a core Regional program (provide a local Federal presence to assist registrants and to respond to emergencies).
- audit laboratories to ensure underlying data validity.
- ensure farm workers' safety.
- identify requirements for monitoring pesticide residues for hazard prediction and significance of potential problems; and contribute to the development of exposure assessment models for predictive purposes.

Objectives for Regional Interaction with the States

In the implementation of the FY 1980 Operating Plan for each Regional office, careful consideration should be given to existing delegations for work under Sections 5(f) and 24(c). A transition plan should be prepared for reducing activities in these areas from FY 1980 to FY 1981.

The Office of Enforcement and the Office of Pesticide Programs will work together in providing for a smooth transition in transferring responsibility and resources for certification and training to the Office of Enforcement.

Office of Enforcement

Jeffrey Miller
Acting Assistant Administrator

Overview

No major policy shifts in the enforcement of our various statutes are planned for FY 1981. Enforcement must, however, become much more intimately involved in the State/EPA Agreement process. It is essential that enforcement priorities be addressed in negotiating these agreements.

While there are no major enforcement legislative initiatives, Enforcement will play a key role in gathering the data to support Superfund legislative proposals. The passage of this legislation will provide important new enforcement tools, but it will require adjustments in the enforcement strategy. Additionally, supplemental guidance will be required and issued if amendments are made to the Safe Drinking Water Act.

The following priorities form the nucleus of our FY 1981 enforcement program.

- *Management Systems and Employee Development*

  During FY 1981 the Office of Enforcement will emphasize the importance of effective management systems for all enforcement programs. Of paramount concern is the need for effective coordination within Enforcement and with other program offices within EPA given the multi-media nature of our enforcement activities. For example, permit consolidation requires integration of five separate permit programs; implementation of the RCRA permit strategy requires a close working relationship between the Office

of Solid Waste and the Office of Enforcement. The issuance of the National Municipal Policy and Strategy illustrates the benefits to be derived from a well coordinated Agency effort.

To establish effective enforcement programs to deal with toxic substances and hazardous materials, we must consider the various ways such materials enter the environment and are regulated by each statute and enforcement program. For example, enforcement responses to environmental emergencies threatening human health and safety can involve violations of more than one statute and more than one medium. A recognition and coordination of the toxics aspects of each of our programs is essential if we are to deal effectively with the national concern.

The ultimate strength and credibility of all of our enforcement efforts depends on our ability to manage the gathering and review of compliance information, ranging from the design of inspection strategies to the review of self-monitoring reports and data. Headquarters personnel, with Regional participation, will ensure adequate guidance, manuals and procedures to strengthen our management systems, including expedited case reviews and referrals. A system of Regional review visits will be initiated to determine where improvements are needed to obtain priority objectives. Likewise, Regions will be encouraged to work with the States to strengthen technical capabilities and management systems and to improve our basic operating strategies. Also, during FY 1981 the Office of Enforcement will introduce a comprehensive training program to improve the legal and technical skills of enforcement personnel both in EPA and in participating State Agencies.

- *Hazardous Waste Enforcement/Permitting*

The fundamental goal of the Hazardous Waste Enforcement program is to protect the public health and environment from risks posed by hazardous waste. The Agency has developed a two-pronged approach for addressing this problem. First, the Hazardous Waste Enforcement Task Force was created to deal with the most immediate threats to health and the environment. We anticipate filing numerous legal actions during FY 1980.

Second, the Agency is issuing regulations to implement the provisions of the Resource Conservation and Recovery Act of 1976 (RCRA), which will establish a system for handling hazardous wastes from "cradle to grave." The Office of Enforcement has assisted the Office of Solid Waste in promulgating the regulations. Moreover, we have focused on developing an overall enforcement strategy to implement the compliance monitoring, inspection and sampling, and enforcement provisions of RCRA.

In FY 1981, we will continue aggressive enforcement action to clean up both abandoned and active waste sites. Further, as the RCRA regulations become effective, we will focus on ensuring that non-notifying generators of hazardous waste are identified and brought under the regulatory system, and that generators, transporters and disposers of hazardous waste use and comply with the manifest system requirements. In addition, interim and final State authorization plans will be reviewed for the adequacy of their enforcement provisions.

All hazardous waste enforcement and permit efforts will be top priority tasks during FY 1980 and FY 1981. The hazardous waste permitting policy, which will be completed during 1980, will provide specific guidance on the hazardous waste permitting strategy. The permits program itself will begin in FY 1981. As a result, the FY 1981 budget includes increased resources for the program. The Office of Solid Waste, in addition, will provide technical support.

- *Consolidated Permits, Second Round Permit Issuance, and Pre-Treatment Implementation*

Four aspects of Agency permitting activities are of high priority in FY 1981, namely: (a) The issuance of hazardous waste site permits; (b) the control of toxics through issuance of NPDES permits to primary industries, major secondary industries and major POTWs, especially those requiring pre-treatment programs; (c) the expeditious issuance of energy-related permits for all media and (d) consolidation of permit programs under RCRA, the Safe Drinking Water Act, the Clean Water Act, and the Clean Air Act.

- *Major Source Enforcement Effort (MSSE)*

During FY 1979 the Office of Enforcement initiated all actions against over 500 major source violators not in compliance with the initial requirements of the Clean Air and Water Acts. In FY 1980, priority will be given to concluding all the MSEE actions on the original list. As a

result of the issuance of the National Municipal Policy and Strategy, a number of new municipal actions will be added to the MSSE list. An enforcement strategy for the utility industry will be developed during FY 1980 and, as a result, we expect to file additional utilities cases in FY 1981. Also several hundred potential new air actions which were not included in the initial MSEE effort will need to be initiated. Completion of these actions against violators who failed to meet the statutory deadlines of the Clean Air and Water Acts is of vital importance in FY 1981 to demonstrate EPA's resolve to deal with all non-excusable violations of statutory requirements and to ensure that there is no incentive to delay compliance with future requirements.

- *Toxic Substances Control Act (TSCA) Implementation*

  During FY 1980 and FY 1981, implementation of enforceable TSCA regulations will be of growing importance. Enforcement resources have been increased for toxic activities in FY 1981. It is anticipated that, in addition to the Section 6 chemical control regulations for PCB's and CFC's new rules and regulations concerning testing, labeling, and pre-manufacturing notification and other information reporting will be in effect and enforceable in FY 1981. Emphasis must be placed on the design and implementation of Regional compliance monitoring and enforcement systems to ensure the integrity of the TSCA regulatory program.

- *Non-Compliance Penalties*

  Final regulations for implementation of Section 120 of the Clean Air Act to provide for assessment and collection of non-compliance penalties will be issued early in 1980. Assessment and collection of these penalties by EPA and States is a major undertaking of prime importance. It is imperative that EPA and States develop the necessary evidence of violations required to implement the non-compliance penalty program. Implementation efforts will be initiated in FY 1980 and carried into FY 1981 as a priority task.

- *Pesticides Certification and Training*

  By FY 1981 the Office of Enforcement will assume responsibility for implementing the pesticides certification and training programs. We will begin to implement these efforts in FY 1980 and to enforce these new functions in FY 1981.

- *Operation and Maintenance*

  Continuous compliance is a broad program that includes a number of major activities. The Regions must complete the development of adequate overview programs that ensure that States are conducting satisfactory compliance monitoring inspections and providing timely, accurate compliance data to the Regions.

  Also, the Regions must ensure that all sources subject to continuous monitoring requirements have installed the proper working equipment. We also need to expand continuous monitoring and other improved data collection measures, particularly under the Clean Air Act, and take prompt enforcement action to remedy violations caused by poor performance. An overall operations and maintenance strategy will be developed for implementation in FY 1981 which will include an examination of accelerated use of the contractor listing provisions of the Clean Air and Water Acts.

- *Mobile Source Enforcement*

  Recognizing the public health and environmental significance of air pollution from mobile sources, Headquarters will continue to place high priority on its efforts to ensure that vehicles meet emission standards when produced throughout their use. Assembly line testing and recall will continue to be the primary means of ensuring that production vehicles meet emissions.

  Recently completed nationwide surveys indicated that tampering and fuel switching are occurring at disturbing rates. As a result, a centralized enforcement program has been developed to control tampering and fuel switching in order to reduce in-use emissions from mobile sources. This program will include a special effort directed toward preventing a widespread increase in fuel switching caused by a shortfall in unleaded gasoline.

  The anti-tampering and anti-fuel switching effort is intended to complement and facilitate the implementation of I/M programs by preventing further deterioration of the vehicle fleet before I/M programs are implemented. Public resistance to I/M programs is likely to increase proportionately with the percentage of the fleet

that is tampered with and that would be perceived as failing an I/M program. Our enforcement program for in-use vehicles is designed to curtail the disturbing rate of tampering and fuel switching inspections of major chains of automobile repair facilities, fleet operators, new car dealerships, and gasoline retailers. Regions will continue to be appraised of Headquarters' efforts in their particular areas.

- *National Municipal Policy and Strategy*

  Implementation and enforcement of the National Municipal Policy and Strategy is of critical importance if we are to bring major municipalities into compliance with the Clean Water Act. Municipalities are the largest remaining point source of water pollution. Industrial dischargers will be reluctant to comply with current or future standards if we ignore the widespread non-compliance among municipal dischargers. A detailed implementation plan will be issued in FY 1980.

- *Federal Facility Compliance*

  Federal facilities are required to comply with the requirements of all Federal, State and local environmental regulations. Regions should place emphasis on monitoring Federal facility compliance and ensuring that projects are identified and funded in accordance with procedures of Executive Order 12088.

- *State/EPA Agreements*

  As stated earlier, as a matter of policy, EPA Regional personnel are encouraged to include enforcement priority objectives in their State/EPA agreement process and discussions. An understanding of the respective roles in the areas of permitting and enforcement is often critical to maintaining effective working relationships with the States. This is particularly true in FY 1981 for such important activities as hazardous waste permitting and enforcement efforts, the Major Source Enforcement program, Section 120 non-compliance penalties under the Clean Air Act, pre-treatment and energy permits.

- *Grant Priorities*

  EPA Regional personnel should attempt to negotiate reasonable levels for level 1 priority enforcement objectives as part of the State grant process.

- *Enforcement Resources to Emergencies*

  Enforcement actions in emergency situations involving substantial threats to public health or safety whenever or wherever they occur are to receive overriding priority attention.

- *Energy Related Activity*

  The President has identified the creation of an Energy Mobilization Board as a key element of his energy program. It is extremely important that Regions and States do all they can to expedite processing of permits required for facilities designated by any Energy Mobilization Board established by Congress.

Stationary Source Enforcement

Headquarters and Regional Objectives and Activities

First Level Priorities

- Major Source Enforcement Effort:

  The Regions must commit themselves to ensuring that MSEE cases are developed, properly concluded, and all associated schedules and decrees tracked.

- Implementation of Section 120 Non-Compliance Penalties:

  The Regions must begin immediately to prepare for the implementation of the Section 120 program by ensuring that evidence of violations by major sources is current and complete and that technical and legal staff are prepared to handle the issuance of notices and the conduct of adjudicatory hearings.

- Expediting Energy-Related Permits:

  Expediting energy-related PSD/NSR permits for facilities named by an Energy Mobilization Board, if established by Congress, will become extremely important during FY 1981.

- Ensuring Continuous Compliance.
- Developing a Utility Strategy.
- Ensuring Federal Facility Compliance.
- Enforcing NESHAP.

Region-Specific Objectives and Activities

The issuance of Non-Ferrous Smelter Orders will be a level 1 Priority, particularly in the Western

Regions. Responses to Section 110(f) Energy Emergencies and issuances of Section 113(d)(5) Coal Conversion Orders will be a level 1 priority in the Eastern Regions.

Mobile Source Enforcement

Headquarters and Regional Objectives and Activities

First Level Priorities

- anti-tampering efforts.
- anti-fuel switching.
- assembly line testing.
- recall program.

Objectives for Regional Interaction with States

State Grant Priorities

In FY 1981, $2,000,000 in Section 105 grant funds has been earmarked for State/local anti-tampering and anti-fuel switching enforcement programs. Regions should address mobile source enforcement concerns specifically related to tampering and fuel switching in the State/EPA Agreement and during the grant negotiations to require reasonable levels of enforcement activity by States.

NPDES Permits Issuance

Headquarters and Regional Objectives and Activities

First Level Priorities

- Control of Toxics:

  Toxics will be controlled by issuing permits to primary industries, major POTWs, and major secondary industries; by implementing the pretreatment program; and by reviewing State activities.

- Permit Simplification:

  Permit simplification will occur with the implementation of the consolidated permit program and the expediting of permits for critical energy facilities.

- 301(h) Marine Discharge Variances.
- Energy Related Permits.

Second Level Priorities

- conduct and settlement of Adjudicatory Hearings.
- proposal and issuance of General Permits.

Water Enforcement

Headquarters and Regional Objectives and Activities

First Level Priorities

- continue Major Source Enforcement Effort.
- implement National Municipal Policy and Strategy.
- ensure continuous compliance.
- implement improvements to the Enforcement Management System (EMS).
- conduct inspections in support of enforcement cases and emergency situations.
- fully implement Discharge Monitoring Report (DMR) quality assurance program to improve NPDES compliance data.
- begin enforcement of pretreatment regulations.
- expand monitoring and enforcement activities for toxics, priority pollutants and BAT.
- achieve Federal facility compliance.

Second Level Priorities

- begin automated DMR review using the Permit Compliance System (PCS).
- conduct compliance inspections of major permittees.
- continue NPDES enforcement, including enforcement against industrial violators of statutory requirements.
- begin enforcement of Section 404 permits.
- increase criminal enforcement.
- carry out overview of State NPDES permits.

Drinking Water Enforcement

Headquarters and Regional Objectives and Activities

First Level Priorities

The first level priority is the enforcement of the health related Primary Drinking Water Regulations in non-primary States, including significant violations of Maximum Contaminant Levels, reporting requirements, and public notification requirements.

Second Level Priorities

- overview of compliance monitoring and enforcement activities in States that have primary enforcement responsibility for the Public Water Supply program.
- review of the enforcement portions of State applications for Underground Injection Control (IUC) program primacy.

Hazardous Waste Enforcement

Headquarters and Regional Objectives and Activities

First Level Priorities

The first level priority is initiating enforcement actions in situations involving substantial threats to health or the environment, using all available legal authorities for active and inactive sites as well as other hazardous waste management problems.

Second Level Priorities

- ensure that all hazardous waste generators have notified EPA of their status and are properly complying with the requirements of Section 3002 regulations.
- review of interim or final State authorization plans for adequacy of enforcement provisions.
- ensure compliance with interim status standards and requirements.
- conduct an outreach program to encourage voluntary compliance with the provisions of RCRA.

Hazardous Waste Permit Issuance

Headquarters and Regional Objectives and Activities

First Level Priorities

- issue on- and off-site Hazardous Waste Management permits.
- provide national guidance for the permit issuance process and coordinate Regional permitting procedures.
- ensure development of adequate State Hazardous Waste Management programs.

Pesticides Enforcement

Headquarters and Regional Objectives and Activities

First Level Priorities

- ensure the support of an effective base Regional pesticides enforcement program which, among other functions, includes (a) the management, oversight, and evaluation of the State grants program, emphasizing improvements in the quality of State pesticides enforcement programs, and (b) enforcement actions and case development and prosecution, especially in States that do not have cooperative enforcement grants.
- implement and enforce certification and training programs.

Second Level Priorities

- increase the number of States participating in the cooperative enforcement grant program.
- increase emphasis on the training and utilization of Regional personnel in the laboratory data audit program.

Region-Specific Objectives and Activities

In Regions VII and VIII, emphasis will be placed on administration and enforcement of applicator certification in Colorado and Nebraska. We expect, however, that Regions VII and VIII will make every effort to assist Colorado and Nebraska in adopting and establishing acceptable State certification programs. In addition, those Regions with States that are not yet authorized for State use primacy should emphasize steps to upgrade State programs to ensure the granting of primacy. The States where the issue of primacy has not been resolved are Ohio, Utah, Wyoming, Colorado, Nebraska, Arizona, and Massachusetts.

Noise Enforcement

Headquarters Objectives and Activities

First Level Priorities

- continue enforcement of new compressors and medium and heavy duty trucks and to initiate enforcement of buses through production verification and selective enforcement audits.
- continue development of enforcement strategies and regulations for other Section 6 and Section 8 products.
- provide guidance and assistance to State and local noise enforcement programs.
- initiate a program to ensure compliance with noise labeling requirements for hearing protectors.

Regional/State Relationships

The noise enforcement program is centralized at Headquarters. Any future Regional activity will be coordinated with the Regions. State and local governments interested in developing a noise enforcement program should request, through their Region, model noise enforcement guidance developed at Headquarters.

Toxic Substances Enforcement

Headquarters and Regional Objectives and Activities

First Level Priorities

- Highest priority for both Headquarters and the Regions will be initiating enforcement re-

sponses to toxic substances emergencies involving threats to public health and the environment.

- The Regional Offices are urged to establish organizations which integrate the functions and resources of the toxic substances enforcement and pesticides enforcement programs, similar to those now established at Headquarters. In this way existing resources can be most effectively employed to respond to emergencies and to vigorously enforce existing and new toxic substances rules and regulations.
- The existing base toxic substances enforcement program is to receive continued support. At Headquarters emphasis will be placed on assisting the Office of Pesticides and Toxic Substances in developing new rules and regulations, and in developing enforcement programs for such rules and regulations as they become enforceable. The Regional Offices will concentrate on compliance monitoring activities and the initiation of enforcement proceedings, relating in particular to TSCA Section 6 chemical control regulations for PCBs, CFCs, asbestos, and labeling. The Regions will also conduct compliance monitoring and enforcement functions for Section 5 premanufacturing notice requirements, the Section 8 inventory regulation, and any other new rules or regulations which may be enforceable by FY 1981.

Second Level Priorities

Second level priorities include an increased emphasis on training and using Regional Office personnel in conducting laboratory data audits under TSCA Section 4.

Region-Specific Objectives and Activities

The scope of Regional activity in enforcing all TSCA rules will vary according to the presence of companies, sites, or operations regulated or affected by those rules and regulations in effect in FY 1981.

Office of Planning and Management

William Drayton, Jr.
Assistant Administrator

Overview

The Agency's central management objective remains that of creating a national environmental program that derives strength and initiative from decentralization, and purposiveness and environmental coherence from effective integration. OPM's core job is to help the Administrator and Deputy and the rest of the environmental regulatory effort work together to make coherent, timely decisions.

This guidance is divided into three parts: the first describes what the Agency must do to further this central objective; the second outlines the chief priorities for our analytic efforts; and the third deals with the common services that support everything else we do. Each of these parts in turn has two lists of specific tasks: the first level indicating work the Administrator and Deputy and I feel must be done without question and the other, second level but still very important work.

An Integrated, Decentralized Program

Over the last several years we have put in place and greatly strengthened our core cross-cutting, common decision making processes. We are also well into the introduction of a new personnel system that will help us do a better job of managing and of holding one another accountable. In FY 1981 we must finish the job of refining and institutionalizing these tools. More important, we can and should use them to full advantage: we must do a better job of substantively integrating both our programs and the several levels of the Nation's environmental effort—State and local, Regional, and national.

First Level Priorities

- *OPM should diagnose substantive program integration problems and lead in developing solutions.* Let me cite several examples: (1) The next year and a half will see the final design and start-up of the Agency's approach to implementing its new chemical control responsibilities (RCRA, TSCA, Superfund, etc.). Virtually every office in the Agency is involved. We must make sure the pieces fit together logically and practically. (2) OPM must help OPTS and other affected offices work out an integrated approach to rule-writing for toxic chemicals. (3) We should continue to halp ORD strengthen its ties with the programs and Regions. (4) OPM must continue helping the Regions, the program offices, and our State/local colleagues plan and better integrate our and the States' field programs through State-EPA agreements, the Integrated Environmental Assistance Act, our grants, etc. The Administrator and Deputy have asked OPM to increase its work in this area sharply with this Guidance. After first thinking through a specific agenda more carefully with them, we will then have to reorient first management attention and later resources both within OPM and more broadly.
- *OPM must also expand the assistance it gives the Administrator in assessing and ensuring coordination among program and Regional offices.* OPM will continue to press strongly (1) to increase effective Regional participation in Agency regulation/policy and management/budget decision making; and (2) to fill probably the most critical remaining gap in our management process by putting in place the necessary means through which the Administrator and the Agency's managers can measure performance against promise and hold both Regional and Headquarters organizations accountable. This is also an area where the Administrator has asked for greater investment with this Guidance. OPM will seek additional means of meeting this objective, and both it and the rest of the Agency will very probably have to increase the resources allocated to this effort.
- *We should continue to strengthen our regulation development and Zero Base Budgeting (ZBB) processes.* They provide the structure that makes possible broad involvement in the Agency's two principal cross-cutting areas for decision making: (1) regulation and policy development, and (2) priority setting, management and resource allocation. They need continuing adjustment and strong support. Since this core Agency decision making process is now reasonably mature, this task will take less energy than it has in the last several years. The ZBB process should focus more and earlier on a limited number of major issues.

  Because OPM's analytic capacity is not equal to the dramatic increase in the Agency's regulatory workload let alone the several new tasks listed here, it will have to target its regulation-specific efforts more sharply. The Regions and other Assistant Administrators should play a more active, critical, contributive role in helping develop and evaluate regulations and policy.
- *We need both stronger State programs and stronger State/EPA collaboration.* State and local officials now staff 85 percent of the national environmental regulatory effort, and we are seeking to delegate even more. We must strengthen our joint environmental management effort, especially in the following areas:
  - —Our State/EPA Agreements should become more than contracts: they should induce joint planning and they should press decision making on major problems or opportunities up to the senior policy officials. This should make it easier to refocus programs as our needs change and to innovate and integrate. By 1981 the agreements should cover all our programs.
  - —We must win passage for and then implement our Integrated Environmental Assistance legislation to give the States the flexibility and added resources for such refocusing, innovation, and integration.
  - —The Regions, especially those with management analytic centers, should begin direct, constructive program evaluations of their States' programs.
  - —The Regions should encourage personnel interchange and training, e.g., through group IPAs. (A secondary priority for all Regions except those pilot-testing new approaches, except where such approaches promise significant resource savings as well.)
- *Our Regional Administrators must strengthen their management/analytic capacity* so that they can better manage their Regions, lead and evaluate the State and local agencies in their areas more effectively, and participate equally in Agency-wide policy and management decision making. Unless the Regions' ability to think and manage is strong, both Regional decentralization and EPA's linkage with State and local government are at risk. Headquarters analytic units must work jointly with the Regions

to develop this capacity, and both groups should build strong, continuing ties.

Regional Administrators, helped by OPM, should give immediate priority to finishing the job of recruiting uncompromisingly first class managers and staff for the Regional Analytic Centers as quickly as possible, preferably over the next several months. They, again helped by OPM, should pay close *personal* attention to the start-up of these centers: their selection of early projects; their strong institutional positioning in the Region, e.g., in the process of developing State/EPA Agreements; and the effective progress of their early undertakings.

- *All EPA managers should adopt Agency-wide career paths.* True independence, based ultimately on the real ability to move if frustrated, will flow from the professional breadth, self-confidence, and reputation such mobility will foster. It will also give the Agency a management team with Agency-wide environmental perspective and loyalty, a critical step in our successful integration. Individual managers should both pursue such breadth in their own careers, and encourage and help their staff towards that same end.

Second Level Priorities

We should further streamline and strengthen our regulation review and budget development processes. We should eliminate some of the rough spots which appeared in last year's workload analysis and explore its extension to the States. We should also complete renovation of the Agency's routine reporting system. Senior Management Reports should build into this as an "exceptions report"—highlighting especially critical problems which need attention from top management.

Regions can also build on the foundation provided by first level activities. In particular, Regions should work to increase their use of State/EPA Agreements as tools which *integrate* the activities of separate EPA and State programs in solving complex environmental problems.

Analytic Services

Our analytic services—directly supporting our top managers, helping prepare regulations, posing the tough budget issues and checking pricing, providing legal or economic analyses, negotiating with other agencies conducting program evaluations, and the like—must keep up with a growing workload and maintain a superior level of professional quality. Compromise here is foolish.

We must continue our leadership in regulatory reform. Finding more effective, equitable, and economical ways of doing our work is one of the most useful, highly leveraged opportunities open to us. (Further, as America's largest regulatory agency, we have a responsibility to lead.) Our two most important reforms are controlled trading and improving the tools for regulatory decision making, including benefits analysis.

First Level Priorities

- The Regions, aided by OPM/OANR, must *fully implement controlled trading.* The compounding growth of the economy and consequently of pollution will press ever harder against the world's unchanging quantity of air, land, and water—forcing society to pay more and more just to maintain current levels of environmental safety. These higher and higher prices for the same benefit inevitably mean increased political resistance. Increasing the rate of control technology innovation and thereby lowering the cost of control is the only way we can avoid this dead end. Controlled trading (the bubble, offsets, banking, brokerage) will provide the positive incentives we need to encourage such innovation. Making it work is essential to the long-term health of the environmental movement. This reform also provides the first practical way of avoiding the deadweight loss caused by the fact that rules unavoidably are overgeneralizations that somewhat rigidly force set and often quite suboptimal solutions on each particular case. Controlled trading does so by encouraging those we regulate to counterpropose more efficient ways of cleaning up—as long as they are environmentally equivalent and equally enforceable.

  The Regions must press the widespread implementation of this most important, strategically necessary reform with utmost vigor in 1980 and 1981. They should actively reach out to responsible firms in their area in 1980 and encourage and help them to develop good quality counterproposals. At the same time they must actively go out to each of their State and local counterparts, explain the importance and value of the reform to them, help train their staffs, and provide continuing support and encouragement. They should also actively explain the reform to their environmental constituents and the general public. OPM/OANR must help just

as vigorously. The Regional Administrators will have to give this reform their personal attention, and we will have to provide added resources at all levels.

- We should continue to contribute to the development of the Administration's *clean energy policies,* encouraging the development of relatively economic and environmentally benign options and pressing to ensure adequate environmental control of all energy sources. At the same time the Regions must efficiently process and carefully track energy permits and the Agency must adjust to the new Energy Mobilization Board.
- OPM must strengthen and expand its *program evaluation* effort, and it should also stimulate and lead an expanded evaluation effort in the programs and the Regions. Our current joint effort with the Regions to review delegations and EPA oversight is a good example.
- The Agency needs a much improved *strategic planning* capacity. We must anticipate new problems and do a better job of forward environmental planning. In 1980 we must lay the intellectual groundwork for the 1981 and 1982 legislative agenda, which in turn must be sufficiently far-seeing to provide a wise foundation for the environmental needs of the mid- and late eighties. For example, how are we going to deal with the increasingly apparent fact that pollutants affect people cumulatively and synergistically, not one by one? The Administrator has asked OPM to take the lead and increase the resources devoted to this task in reviewing this guidance.
- OPM, working with the program offices, must continue to develop *better methods of regulatory decision making, especially applied benefits analysis.* In recent years, EPA has been a model for the Federal Government in identifying the full costs of our regulatory actions. This has helped us both develop better regulations and defend them more effectively. Now we must develop our ability to articulate the benefits. The Economic Analysis Division will help program offices demonstrate and quantify the benefits of a limited number of major regulations. This experience should help us write regulations which we can defend more easily, and which we can "target" more closely on the most severe problems.

Second Level Priorities

- *Expand our controlled trading reforms beyond the Air program.* We should, for example, press our current work to explore the value of the bubble in Water.
- Further develop our *permitting reforms,* e.g., the skeleton permit, single application forms, standard permit conditions, and common procedures for processing, tracking, and issuing permits.
- Expand the number of *energy alternatives* we press within the Administration. Seek analogous *modification in economic policy.*
- Support the *Regulatory Council* and other cross-agency efforts.
- Press *cross-agency ZBB.*

Providing Responsive, Efficient Services

We are responsible for many services the rest of EPA *must* have—grants, personnel, contracts, support services, facilities management, employee health and safety, and information management. Although we will be able to take the initial steps toward purchasing the next decade's computer system and to improve our information management capabilities, funding for many of the other activities during FY 1981 will remain at a level similar to that for FY 1980. Meanwhile, we will have an increasingly heavy workload in all areas because of program growth and shifts in emphasis. For that reason, we need to develop more innovative and efficient ways of performing these services. We must take particular care to provide excellent services to EPA's new, high priority, high stress chemical control programs.

This guidance reflects a program designed to improve our performance with the limited resources available and to focus especially hard on ensuring adequate support to help get the Agency's new programs off the ground.

First Level Priorities

- EPA's research, regulatory, and enforcement missions depend heavily on having reliable data. The Agency now recognizes that there are serious problems with our current methods of collecting, storing, and analyzing these data.

  To respond to these problems, the entire Agency will be making an intensive effort in FY 1981 to improve and integrate our monitoring and information systems. As part of that effort OPM will devote significant Headquarters resources to upgrading the Agency's computer systems. This is an expensive undertaking, and one that will affect our ability to store, inte-

grate, and analyze data for the next 20 years. We should complete the concept design phase of the computer system acquisition in FY 1981.

Regional and Headquarters planning and management staff should contribute to this effort in the following areas:

—We must help other offices integrate the data and information systems developed for TSCA and RCRA and other new systems with the Agency's extensive existing systems. For example, we have begun integrating RCRA inventory, permit tracking and compliance information systems with each other and with related Agency data systems. We will begin the process of building a strong central systems development staff to assist in the integration of major data systems immediately.

—We must make the Agency-wide clearinghouse launched in FY 1980 fully operational during FY 1981 so that it can handle the data available on hazardous waste and other information needed by State and Federal regulators and the research community.

- Under Civil Service Reform we are developing improved ways to evaluate employee performance and provide positive rewards for exceptional service. During this period we must by law implement fully, at Headquarters and in the Regions, the Senior Executive Service and Merit Pay systems. We must finish the job of training managers at Headquarters and in the Regions in putting performance standards in place.
- We will improve our common services in a number of ways:

—We will fully implement a contract voucher system beginning in 1980 that will provide new performance incentives for both contracting personnel and program offices. These incentives should help us improve the contract acquisition process by establishing clear performance measures and rewards for contract negotiators and, equally important, for program office personnel who control a substantial part of the contracting process. The facts that our contracts staff has been widely recognized as one of the best and that they have cut processing times and carryover sharply in the last several years makes it possible for us to take this step.

—OPM will provide new internal management consulting services to EPA managers.

—The Agency's personnel managers will further cut processing times and also substantially increase and improve training, recruiting, counseling, affirmative action, and other more active personnel management tasks.

—We will further automate and strengthen our financial management systems in FY 1981.

—We will use contracts to perform more of our administrative management functions in the Regions.

Second Level Priorities

As with OPM's other efforts, there are support service activities which, though not first priority, are important and should be addressed within the limits of available resources.

- We should move where possible to link information systems throughout the Agency. One important means to this end is to institute management controls to integrate information systems more fully. This should include further strengthening OPM's data processing staff so that it can provide a higher level of assistance in the development of both existing and new information systems.
- OPM's grants staff will continue to help ORD design and implement its new grants peer review approach.

Region-Specific Guidance

Region X has been a leader in moving to link its resource allocation to identified environmental problems. Because of the developing pressure to link resource allocation to problems and accomplishments and because of Region X's experience in the area of environmental profiles, we expect the Region to continue developing an environmental results-oriented management system as a first priority. This pilot activity in Region X is significant to the Agency and should be supported as a major management initiative on the Region's analytic agenda.

Several Regions, particularly II, III, V, and X, have made significant investments in information management, including the development of data systems to support critical Regional activities such as permit issuance and tracking and grant processing, and providing leadership in the deployment and use of minicomputer technology. These investments should be continued and coordinated with the Agency-wide reforms in information management.

Priorities for State/EPA Agreements

The activities which I would like to see included in State/EPA Agreements are:

- A firm, joint commitment to implement controlled trading defining a series of specific objectives for each State and providing in a number of cases for pilot experiments with banking and other new ideas in each Region.
- Streamlining and tracking permits for critical energy facilities.
- Agreeing to new program evaluation and accountability approaches.

* * * * *

One last point underlies all of what I've said above. OPM managers and the Regional management staff must continue to build and maintain a superior level of professional quality among their staff. This includes a continued strong push for affirmative action in all our programs. The skills of our people are the "capital investment" upon which all other productive returns depend. Compromise here makes no sense at all.

Office of Research and Development

Stephen J. Gage
Assistant Administrator

Overview

From now through FY 1981, the Office of Research and Development (ORD) will continue to stress the achievement of three major objectives: (1) the continued integration of research and development planning into the mainstream of the Agency's regulatory and enforcement activities; (2) the enhancement of our capability to provide the scientific and technical data EPA will need for future decision making; and (3) the improvement of the quality of these data. To support these objectives, we will also continue to improve ORD management systems as a necessary factor for better use of available resources. Although we have made significant progress in all of these areas during the past year we still have much to do.

The following three sections contain guidance that relates to the objectives just identified. Specific guidance applicable to each Research Committee is then presented.

Integrating ORD Planning into the Mainstream of the Agency

Ninety percent of ORD's base program will be *jointly* planned with the regulatory programs through thirteen Research Committees, twelve of which were established before the FY 1981 budget cycle. (See figure 1.) Thus far, each Committee's attention has been mainly on the development of multi-year research strategies and involvement in the budget process (DU development, media ranking, etc.). Over the next year and a half, the Committees' attention will shift

RESEARCH COMMITTEES AND CORRESPONDING PROGRAM OFFICES

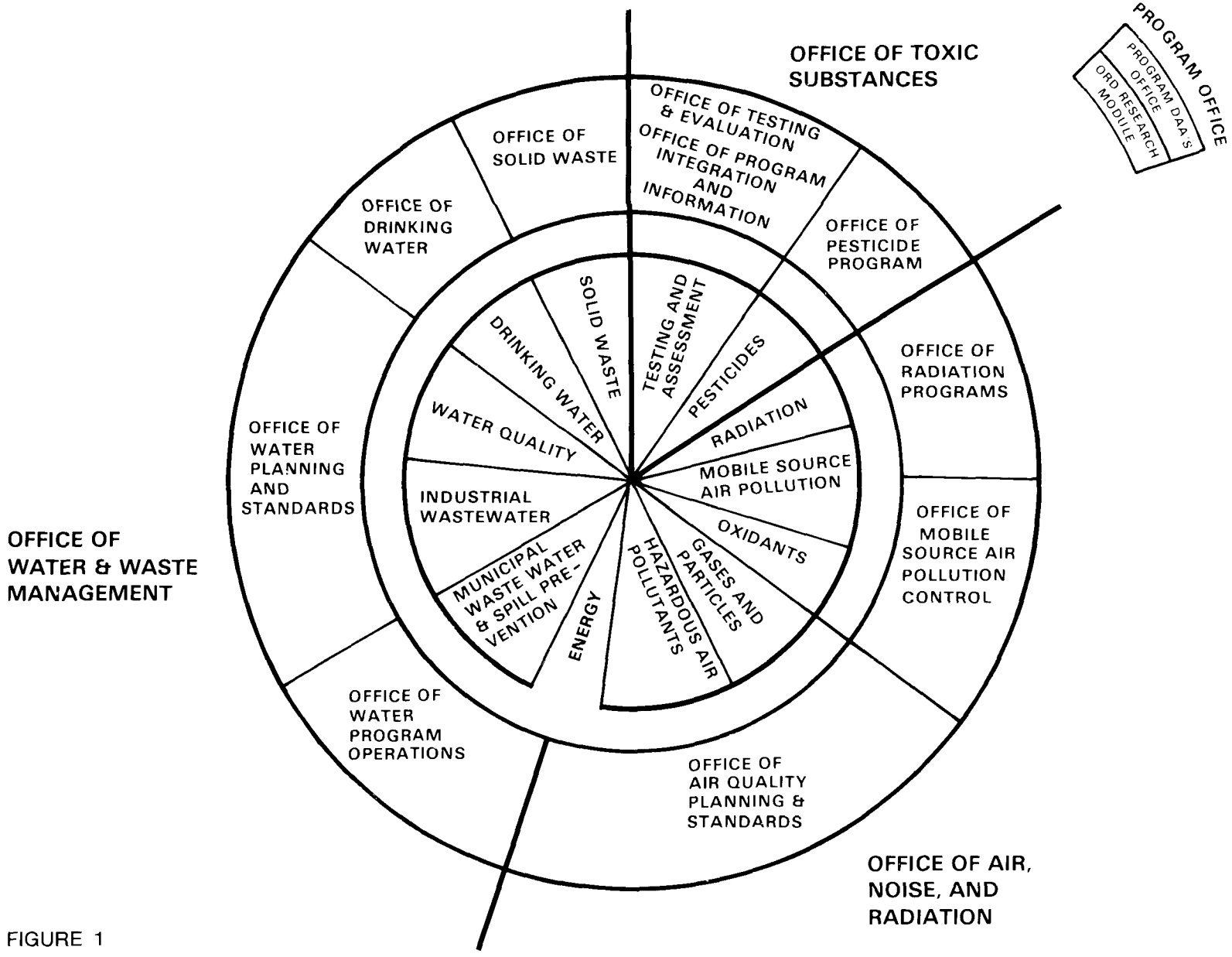

FIGURE 1

increasingly toward monitoring the ongoing program and evaluating recently completed research results.

During this time, ORD will also examine ways to further improve the Research Committee system. A Research Council chaired by ORD's Assistant Administrator and composed of ORD Research Committee co-chairmen and Deputy Assistant Administrators will be established. The Council will enable us to approach research planning from a multimedia perspective and should be extremely useful in addressing cross cutting Committee issues.

One especially important application of the Research Council will be in developing a research response to the acid rain problem. The threat acid rain poses to the environment may be one of the most important issues EPA must come to grips with in the coming years. Although our Anticipatory research program has focused on this problem for the past two years, we must recognize that acid rain will soon be incorporated in the Agency's ongoing regulatory activities, and that a research effort responsive to these activities will therefore be needed. Because acid rain cuts across three Committees' areas of interest (i.e., Gases and Particles, Energy, and Water Quality Research Committees) the Research Council will provide a mechanism for us to design a well coordinated research plan. Once the President's newly created Interagency Acid Rain Program (co-chaired by EPA and the Department of Agriculture) is well under way, we should have a significant contribution to make toward better understanding and dealing with this critical problem.

Three other activities aimed at better integrating ORD planning into the Agency's mainstream should also be noted. First, pending OMB approval, ORD will restructure its decision units for FY 1982 so that each Research Committee will have only one decision unit containing all the activities within its purview. This new decision unit structure will present the research program in a manner paralleling the regulatory program, and will clarify its purpose to the rest of the Agency. With this alignment, Committee inputs to the Agency's planning process can be explicitly tracked. Second, the energy research program will be linked to the Research Committee process by creating a Research Committee to enable joint planning of the bulk of the energy program. And, third, ORD will work closely with the Regions to ensure that the Regional point of view is effectively integrated into Research Committee planning.

Enhancing ORD's Capability to Assist Agency Decision Making

ORD will continue to improve its capability to deliver scientific and technical data for future Agency decision making. In FY 1979, ORD realigned the laboratory reporting relationships to consolidate functional or discipline groupings. (See figure 2.) This realignment established an office to manage health effects research, an office to integrate environmental transport, fate and effects research, and an office to integrate control technology and hazardous waste research. The Office of Monitoring and Technical Support was unchanged. Furthermore, ORD created an Office of Health and Environmental Assessment to improve coordination of the effects assessment activities required in the Agency's development of regulations. ORD will also continue to experiment cautiously with matrix management approaches, primarily to improve the coordination of high visibility, short term research products.

In addition to the realignment of our laboratory reporting relationships, three of ORD's Deputy Assistant Administrator offices will be reorganized along media lines in FY 1980. This reorganization will allow our Headquarters divisions to better relate to the program offices as well as the Research Committee system (which is also structured along media lines). Specifically, the Office of Environmental Processes and Effects Research will consist of three divisions: one for toxics and pesticides, one for water and land, and one for energy and air research. The Office of Health Research will have a division supporting programs within the Office of Air, Noise, and Radiation (OANR) and a division supporting programs within the Office of Water and Waste Management (OWWM) and the Office of Toxic Substances (OTS). Finally, the Office of Monitoring and Technical Support (OMTS) will have two divisions—a division responsible for research for media within OANR and a division for OWWM and OTS. A Quality Assurance Management Staff will also be established. (The name of the Office of Monitoring and Technical Support will be changed to the Office of Monitoring and Systems and Quality Assurance.)

Paralleling with these activities, ORD is taking steps to ensure that the Agency is addressing the most important future problems and attracting the best scientific talent to work on them. We are now in the process of creating an Office of Exploratory Research (OER) which will provide the organizational capability to anticipate emerging environmental problems and provide responsive research funding to solve them. OER will be

OFFICE OF RESEARCH & DEVELOPMENT

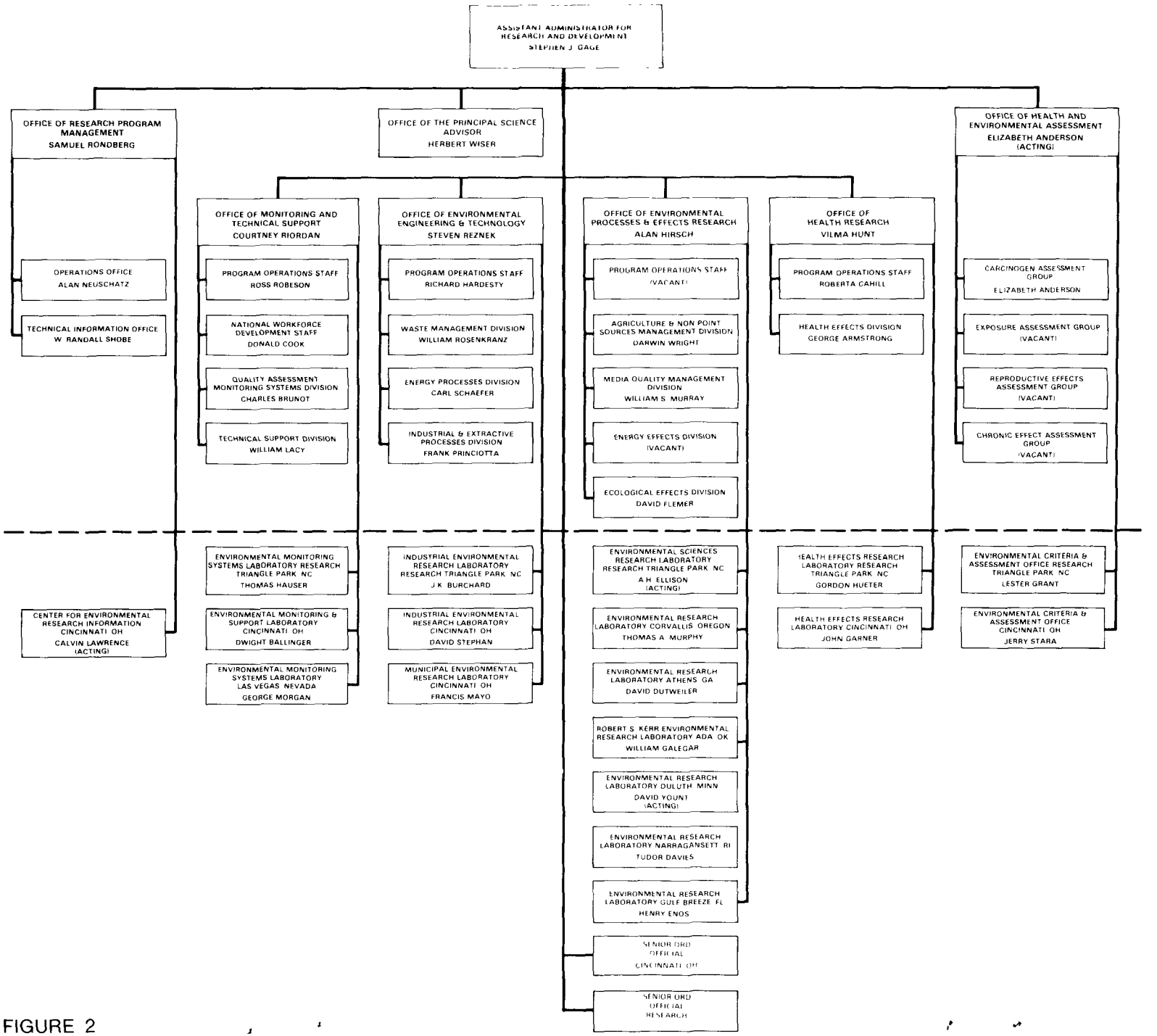

FIGURE 2

☆ U.S. GOVERNMENT PRINTING OFFICE: 1980 O— 317-248

responsible for coordinating collaborative efforts with the Canadian government and the Acid Rain Interagency Task Force to handle the acid precipitation problem, and working with OANR to identify possible control strategies for acid rain. OER will also administer the Center Support Program. This program was initiated in FY 1979 to fund research at major universities across the country for indepth study of environmental problems. Thus far, centers have been established for epidemiology, advanced control technology, and groundwater research; four additional centers will be established during FY 1980 in the areas of intermedia transport, ecological systems, ultimate disposal, and marine sciences research.

We will continue to actively support the Innovative Research Program established in FY 1979. This program is specifically designed to provide ORD's inhouse staff with opportunities to conduct research away from the day to day pressures of their normal working environment. Four sabbaticals were sponsored by this program in FY 1979 and we anticipate sponsoring four to five more in FY 1980.

ORD has consulted extensively with the Science Advisory Board and outside groups (primarily universities) on ways to improve the quality of its grants program. Because research grants are the primary mechanism available for supporting innovative ideas, we will make the scientific community more widely aware of research grants, encouraging much greater competition for them, and acting to ensure that grants are awarded on merit through enhanced peer review. Additionally, we will consolidate scientific peer review and administration of research grants, including an expanded research proposal solicitation system.

We will also improve the use of cooperative agreements in conducting environmental research by taking steps designed to encourage wider competition for funds. These steps will be coupled with a training course for project officers on the effective use of cooperative agreements.

Finally, ORD will emphasize enhanced accountability in its research activities. In FY 1979, ORD revised its internal implementation documentation system to reduce paperwork and to stress research outputs, rather than resource inputs. We now have an automated system in place to reliably track critical research milestones and outputs. Early in FY 1980, we must ensure that milestones and outputs of key importance to the Research Committees are incorporated in this system and must use the system to monitor these activities. We are also working to develop an ORD-wide performance management system for Senior Executive Service and Merit Pay System employees that links together program strategies, required accomplishments, commitments by individual managers, and salary incentives to attain or surpass those commitments.

Improving the Quality of Agency Data

The credibility and integrity of the scientific and technical data used in EPA decision making is crucial to the promulgation and enforcement of meaningful environmental regulations. Through FY 1980, ORD will move aggressively in two areas to improve the quality of these data. First, we will continue to build appropriate improved review mechanisms into all of the ORD's data development efforts. Second, we will spearhead the development and implementation of the Agency's mandatory quality assurance program. Our first area of attention will be at the project level. Here, we will emphasize that, whenever feasible, research results should undergo rigorous scrutiny by outside experts through their publication in refereed journals. We are reorienting our technical information program to encourage such publication in journals. We also are moving to ensure that our research findings are packaged in an appropriate format and are reaching appropriate audiences.

In addition to the peer review of individual research efforts, we will systematically review our research programs. To supplement reviews at the laboratory level, we will continue the cross-cutting Assistant Administrator-level program reviews initiated in FY 1979. At these quarterly meetings, we will assemble the best technical people from outside EPA to critically review major research programs and outputs. We will increasingly direct our programmatic reviews according to those of the Research Committees as well as high priority areas such as the FY 1980 Public Health Initiative.

The second area of attention will significantly expand our efforts to improve the quality of environmental data. The Administrator has given ORD lead responsibility in implementing the Agency's mandatory quality assurance program. With the creation of the Quality Assurance Management Staff within the Office of Monitoring Systems and Quality Assurance, ORD will have a focal point for the establishment, direction, and coordination of this critical program. We will first make sure

our own house is in order by requiring adequate quality assurance practices for *all* environmental quality monitoring, sampling, and analytical activities conducted in the ORD laboratories or under contract, cooperative agreement, or grant. We will also require similar quality assurance practices for all of the Agency's laboratories, contractors, and grantees. Finally, we will work closely with the Regional Offices to bring quality assurance practices into uniform use in all of the State and local laboratories that provide the bulk of the environmental quality data available to the Agency. Specifically, we will encourage Regions to implement recommended quality assurance policies and procedures in the following areas: ambient air and water quality monitoring, NPDES source monitoring, public drinking water system monitoring, and hazardous waste site monitoring.

Program-Specific Guidance

As noted previously, ninety percent of ORD's base program is jointly planned with our principal clients—the program offices, the Office of Enforcement, the Office of Planning and Management and the Regions. The guidelines contained in the following sections convey the areas of emphasis that each Research Committee has specified for FY 1981. During the analysis period that preceded the restructuring of this year's guidance, OPM solicited inputs from the Regions regarding specific research needs. Although many of the needs identified in this exercise have already been identified by the Research Committees and incorporated in ORD's research plans, all other needs must undergo careful scrutiny by the responsible Committee before ORD can make a commitment to sponsor them and guidelines can be developed. All Regional needs identified thus far have therefore been forwarded to the appropriate Research Committees for their consideration. It should be noted here that ORD has just recently developed an information system to track Regional research needs. This system should prove invaluable in keeping the Regions as well as the Research Committees informed of the needs that have been identified and of what needs should be considered in the development of Committee strategies.

Mobile Source Research Committee

Significant accomplishments in the mobile research program have been made during FY 1980. These accomplishments include results from bioassays of ambient air samples collected in New York City, preliminary results from diesel inhalation experiments using Strain A mice, a critical review of diesel epidemiological studies of populations exposed to diesel exhaust, an assessment of carcinogenic risk of diesel emissions, and preliminary results from *in vivo* tests that compare the carcinogenic potency of diesel particulates with extracts from cigarette smoke, coke oven emissions, and roofing tar.

Comparative carcinogenesis work will continue in FY 1981 and our development of bioassay and diesel emission collection methods will be emphasized. In particular, we wish to develop short term tests that can reliably detect the carcinogencity or mutagenicity of a substance. We also want to devise methods to collect and test the unregulated gaseous emissions from diesel engines.

Greater emphasis will also be placed on the modeling and monitoring of human exposure to automotive emissions. In conjunction with the Oxidants Research Committee, we are planning to do work to determine the concentrations of carbon monoxide to which commuters are frequently exposed.

Concurrent with these directions, we expect a decline in the number of our whole animal inhalation experiments in FY 1981 because some of the key results needed for regulatory purposes will be provided during FY 1980.

Gases and Particles Research Committee

Much new work was begun in FY 1980, largely because of our Public Health Initiative. Epidemiological research, development of animal models to assess health effects, and clinical experiments will continue to be of major importance through FY 1981.

In FY 1980 we initiated a study of the transport patterns of aerosols through complex terrain. We undertook field studies to validate our air quality simulation models and to identify conditions under which prolonged pollution episodes exist. We expanded our nationwide inhalable particulate sampling network to include almost 150 stations and developed methods to improve the reliability and accuracy of our measurements of particulate matter. A problem definition study designed to direct and focus major epidemiological research projects will be completed this year.

In FY 1981 we will continue to expand this sampling network, especially because it will support our expanded epidemiology program. Using the results from our problem definition work, we ex-

pect to initiate major epidemiological studies focusing on the effects of sulfates and nitrates in areas where sufficient data on health and air quality are available.

We will also emphasize our particle characterization work, which can help identify the sources of particulate pollutants, as well as the reduction and analysis of data derived from our field studies. The development of reliable portable monitors that can be used for enforcement purposes is also a high priority.

The products of our research will be used in revisions of the criteria document for particles and sulfur oxides and will be used to support adoption or revision of ambient air quality standards.

Oxidants Research Committee

By 1983, the Office of Research and Development must present an updated data base to support maintenance or revision of the ambient air quality standards for ozone, photochemical oxidants, nitrogen oxides, and carbon monoxide. To improve the data base for these pollutants, ORD's research activities in this area can be placed into the following major categories: animal toxicology; clinical and epidemiological studies on the health effects of these pollutants; studies to detect, understand, and predict the impact of these pollutants on terrestrial ecosystems; studies on the transport and fate of these pollutants in the atmosphere; and research on the development of new instruments and methodologies, and research on hydrocarbon and nitrogen oxide control technology. The experimental phases of studies related to the health effects of ozone must be completed by the end of FY 1981 in order to provide data for the ozone criteria document and ambient air standards in FY 1983 and FY 1984.

The FY 1981 oxidants research program will continue to focus on the adverse health effects resulting from exposure to ozone, carbon monoxide, and nitrogen oxides. To determine the effects of ozone and other photochemical products more accurately, various kinds of stress and special at-risk groups will continue to be studied. Research on natural and agricultural crops will also place more emphasis on reductions in crop yields and associated costs. More of this research will be conducted under actual field conditions instead of in laboratory chambers.

The following activities represent the major research that ORD will be conducting in FY 1981 in response to specific requests by the Office of Air, Noise, and Radiation.

- We will characterize the kind and magnitude of various pulmonary function losses that constitute an adverse health effect. Special emphasis will be placed on atoxic symptoms such as throat tickle, chest tightness, and wheezing.
- We will develop more information on the effects of oxidant air pollutants on sensitive population groups such as young children, whose lungs are developing.
- We will investigate the adverse effects of other pollutants in the photochemical mixture such as PAN, nitric acid, formaldehyde, and acrolein.
- We will conduct field studies to measure the impact of ozone and other photochemical oxidants on crop yield and growth and convert these impacts on vegetation to economic impacts that can be better understood by both the farmer and the consumer.
- We will estimate the impact of high, natural background levels of ozone on the attainment of the ozone standard in remote, rural areas.
- We will determine the role of ozone as a surrogate for other oxidants through smog chamber studies and field investigations.

Many of the preceding activities are responsive not only to the program office's needs but also to the Regional office's needs. However, the following additional activities are more specifically tied to Regional requests:

- We will provide technical assistance.
- We will determine the health effects of exposure to carbon monoxide at high altitudes.
- We will determine the overall air quality impact of photochemical atmospheric processes on visibility degradation through formation of finely divided aerosols in the atmosphere.
- We will complete development of improved ambient air monitoring instrumentation for nonmethane hydrocarbons.
- We will conduct needed experimental studies to permit development of regional scale air quality simulation models for oxidants.
- We will conduct area-specific studies in the Regions (Houston, Southern California, etc.).
- We will determine the volatile organic emissions from a number of industrial processes.

Hazardous Air Pollutants Research Committee

Thus far, ORD's research on hazardous air pollutants has focused on vinyl chloride, benzene,

mercury, cadmium, asbestos, and beryllium. EPA has recently developed and plans to implement a systematic approach for regulating hazardous air pollutants within the purview of the recently proposed air carcinogen policy. Since carcinogens have been identified as highest priority, ORD's emphasis will shift from research on the heavy metals to more research on organic chemicals that have a high potential of being human carcinogens.

The following categories of research represent the major research needs identified by the Office of Air, Noise and Radiation and ORD:

- *Identification of Potential Ambient Air Carcinogens*

  The identification and characterization of potentially hazardous substances in ambient air is of prime interest to OANR. To minimize the time needed to characterize potentially hazardous air pollutants, ORD is developing several different biological rapid screening techniques. A pilot program to test the utility of the output from this type of air characterization program is underway in FY 1980. The results of this program will be used to modify the characterization techniques, if needed, and will be used as a basis for implementing an ambient air characterization program.

- *Development of Risk Estimates*

  ORD is providing risk numbers from existing effects data to the Office of Air Quality Planning & Standards (OAQPS) for analyses integral to the implementation of the carcinogen policy. In those instances where data is not available and is not being generated elsewhere, ORD is performing the necessary *in vivo, in vitro,* and epidemiology studies to permit risk analysis. Deficiencies in the tests are being identified in FY 1980; research to develop faster, more accurate, less expensive tests will continue at least through FY 1981.

- *Development of Control Technology Techniques*

  The FY 1981 control technology research program will cover a wide range of activities. Control of volatile organic compounds will be emphasized. Small scale, add-on technology equipment constructed in FY 1980 will be used to determine the feasibility of control for high priority toxic sources in FY 1981. Field tests to verify control capability will be conducted at a limited number of sites. Test programs to evaluate the effectiveness of maintenance as a generic technology for the control of fugitive volatile organics will be started.

- *Non-Carcinogenic Effects*

  Although the major portion of ORD's research on the health effects of hazardous air pollutants focuses on carcinogenic effects, ORD will devote some research efforts to non-carcinogenic effects. Initial discussions with OAQPS on how to integrate this research with the development of a non-carcinogen hazardous regulatory policy are under way in FY 1980.

Under the hazardous air pollutants research program, ORD provides the Regional offices with analytical and monitoring support, and with technical assistance during emergency episodes or upon request.

Radiation Research Committee

ORD's radiation research program has four primary thrusts:

- *Research on the health effects and non-ionizing radiation*

  The ORD is systematically conducting research on biological effects on animals of prolonged exposure to non-ionizing radiation, the mechanisms of interactions between non-ionizing radiation and biological systems, and the potential effects of non-ionizing radiation on the human population. Pilot studies are being conducted on the effects of continuous long term exposure to radiofrequency radiation (970 MHz) on rats. These will lead to more definitive studies in FY 1981. In the same vein, the design and engineering phases for an experimental animal, lifetime exposure system directed at more realistic simulation of population exposure conditions will be initiated. An epidemiological study of the effects of high level microwave exposure on life span, cause of death, and morbidity will be initiated.

- *Offsite monitoring*

  EPA provides offsite radiation safety and surveillance services to the Department of Energy (DOE) at and around the Nevada Test Site and at other test sites around the country. The objective of this agreement between EPA and DOE is to document environmental radiation levels resulting from nuclear test activities. In addition, EPA is responsible for assessing the exposure and estimating the dose that the gen-

eral population receives from these activities. ORD has provided the Office of Radiation Programs (ORP) with funds for a mobile van equipped with pulsed radiofrequency radiation monitoring equipment. ORP will use this van in FY 1981 to assess population exposure to pulsed sources of microwaves. Similarly, ORD is providing funds to buy field instruments for radiofrequency monitoring to be used in the Regions in resopnse to requests for hazard evaluation.

- *Emergency response support*
- *Quality Assurance*

  EPA is developing a comprehensive, national quality assurance program to document and improve the precision, accuracy, and intercomparability of radiation measurements.

ORD's FY 1981 research and development program will continue to focus on the health effects on non-ionizing radiation. Greater emphasis will be placed on conducting epidemiological studies. Research with various exposure modes and frequencies will be continued. Studies to refine microwave dosimetry techniques and to develop improved experimental and population exposure assessment methods will be continued in FY 1981. The preceding research supports the development of interim Federal environmental guidelines on non-ionizing radiation by EPA's Office of Radiation Programs. ORD will provide more immediate support to the Office of Radiation Programs by developing a Criteria Document on the Health Effects of Radiofrequency Radiation. This document will be part of the ORP Radiofrequency Exposure Guidance package to be issued in FY 1981.

In addition to the research activities that primarily support specific EPA regulatory needs, the ORD will continue to provide technical assistance, monitoring equipment, and training to the Regional Offices.

Chemical Testing and Assessment Research Committee

The fundamental purpose of EPA's toxic substances research is to provide accurate, scientifically rigorous, timely information to support decisions to regulate and control manmade toxic materials in the environment. The research structure is designed to address the three aspects of the hazardous chemical problem: the sources of pollution (e.g., energy production, manufacturing), the types of pollution (e.g., solid waste, particulate emissions), and the receiving enviromental media (e.g., air, sediment).

Four goals provide the framework for ORD's toxic substances research program: to provide specialized technical assistance to resolve complex problems; to develop research capabilities to meet implementation timeframes for the Toxic Substances Control Act (TSCA); to develop a comprehensive long-range program to continuously refine test methods and assessment schemes; and to build continuity and stability into the program to meet future challenges.

ORD will support EPA's toxic substances program by providing the expertise and methodology for required tests and by aiding the Office of Pesticides and Toxic Substances (OPTS) in toxic substances hazard and exposure assessment. OPTS will require improved hazard assessment test evaluation procedures, both to analyze data from industry sources and to support its own results for regulatory purposes. Improved exposure assessment tests will give additional depth to the program by allowing EPA to clearly evaluate exposure levels from a variety of pollutants and the consequent hazard they pose to humans and the environment. Exposure parameters to be documented include toxic chemical release, fate, use, distribution, and disposal.

Specific needs for the next fiscal year will include technical assistance, development of precise, inexpensive testing methods and justification and expansion for scientific assessment methodology. Additionally, ORD will aid OPTS in a number of special projects not necessarily in response to any one section of TSCA. Chemicals of specific regulatory and research interest will be studied, as will improved methods for risk assessment. Thus, ORD's toxics research program will effectively converge with EPA's effort to implement TSCA, in the study, evaluation, and documentation of the health and environmental impacts of toxic substances.

Pesticides Research Committee

The Research Committee on Pesticides advises the Assistant Administrator for Research and Development on needs and priorities in pesticides research. The research plan developed by the Committee focuses on data and techniques for assessing potential health and environmental risks and on techniques to minimize introduction of pesticides into the environment. Three basic elements are necessary to evaluate potential overall

human health hazards and environmental hazards for pesticides: (1) identification of the population at risk; (2) assessment of population exposure; and (3) determination of adverse effects on health and ecology. The Committee is charged with developing a program designed to provide scientifically sound and legally defensible information to support regulatory decisions on pesticides.

Pesticide research needs will focus strongly on environmental exposure studies in support of EPA's registration standards and research on biological pesticides. Additional research needs include a quality assurance program in measuring pesticides in agricultural soils, increased environmental exposure assessment work, and increased health effects and exposure research. New research problems that will be addressed include contamination of groundwater by pesticides and control of drift from aerial application of pesticides. Additional ORD emphasis should be given to integrated pest control techniques that can minimize unnecessary environmental contamination by pesticides used in agriculture. Resource increases beyond current levels should also produce efforts in quality assurance in measuring pesticides in urban soils and in developing short term screening procedures to reduce the time required for reproductive and teratologic studies.

Water Quality Research Committee

Over the next several years we expect continued or increased demand for a number of areas of water quality research. During this period, the Agency is likely to consolidate its programs and expand enforcement efforts for technology based effluent limitations, expand controls for toxic substances, and evaluate those situations where technology based effluent limitations may not alone be appropriate, either because water quality goals cannot be achieved or because they can be achieved with lower cost alternatives (e.g., Section 301(h) of the Clean Water Act). It will also continue to evaluate alternatives for waste disposal, such as ocean dumping or placement of dredge spoil. Water quality planning will be further integrated with water resource management efforts. Finally, the Agency will continue its actions to protect sensitive ecosystems such as wetlands.

These activities will require expanded and more efficient toxic pollutant measurement methods accompanied by rigorous quality assurance guidelines, data to support balanced health and environmental criteria for additional numbers of toxic pollutants, more sophisticated and definitive methods for measuring and assessing the effects of stress on water ecosystems, including wetlands, and more discriminating methods for assessing the impacts on water quality of alternative pollution management strategies. Our research plans for FY 1981 and beyond reflect these priorities.

During FY 1981 we will determine if effects of certain toxic substances are similar in aquatic and mammalian species and if effects on short-lived species can be extrapolated to man. In addition, we will determine the relationship between sediment contamination and toxicity, pollutant bioaccumulation and pollutant availability, and effects on marine organisms; continue to study the effects of acid precipitation on aquatic ecosystems; develop procedures for use in defining wetlands; and determine the effects of stress on wetland function and productivity. Finally, we will intensify our efforts to characterize the transport and fate of pollutants in the environment, and we will refine and validate models for predicting the persistence and fate of toxic organic chemicals and for assessing pollutant impacts in specific ecosystems.

Drinking Water Research Committee

The long range goal and overall concept of this program is the provision of a scientific basis for ensuring safe supplies of drinking water in this country. Therefore, research related to drinking water must be designed to yield data that will help determine whether we need to regulate specific substances, and, if this need exists, to help determine the levels at which standards should be set. The program addresses organic, inorganic, and microbiological contaminants in water supplies, as well as the protection of groundwater. It is composed of four types of research: Health effects, treatment control technology, groundwater, and quality assurance.

In FY 1981, we will try to find practical, cost effective processes to meet the needs of small communities that have difficulty complying with State and national drinking water standards.

The highest priority in the drinking water research program will continue to be on organic contaminants, including those associated with, or produced by, disinfection practices. In the health effects area, the research will emphasize studies on carcinogenic and other chronic effects. These studies will be complemented by chronic toxicity and epidemiology studies as well as shorter term projects on important organics to provide data

relevant to making determinations on maximum contaminant levels. In the treatment area, research will focus on measurement and control, with concern for avoiding the formulation of contaminants as well as their redirection to acceptable levels. Updating of the interim treatment manual to control chloroform and other trihalomethanes (THM) will be helpful for implementing the THM Regulation in FY 1981. The groundwater and quality assurance portions of the program will also emphasize organics. In the quality assurance area, we will continue to emphasize compounds being considered for regulation.

Research on inorganics will continue to focus on cardiovascular effects. A recent report on control technology for asbestos has been distributed and should help the Office of Drinking Water evaluate the potential for regulating asbestos in drinking water. In the groundwater area, we will focus our attention on determining absorption, movement, and transformation of contaminants. The quality assurance effort will be directed toward substances for which regulations have been developed to help ensure proper implementation of these rules.

Detection and control of the occurrence of microbiological related disease will continue to be of concern because outbreaks of waterborne disease still occur in this country, especially in poorly operated systems for treatment and distribution of drinking water. In the case of bacteria, projects on microbiological contaminants are concerned with gastrointestinal illnesses. Viruses will also be included in the program.

Industrial Wastewater Research Committee

Emphasis in the Industrial Wastewater Research Committee is on control technology. However, the program relies, and can continue to rely, on analytical and effects data derived as part of other programs, especially those under the Committee. Thus, coordination among those Research Committees active in the water quality area will continue to be imperative. The wastewater program may be categorized in four areas: industrial source characterization and assessment; control methods evaluation, research, development, and demonstration; analytical methods evaluation and quality assurance; and recycle/reuse research, development, and demonstration. Recycle/reuse as a category is intended to emphasize the potential that this technology has for approaching zero discharge.

In the source characterization activity, both conventional pollutants and specific compounds from existing and emerging industries will be addressed. Major milestones will include: characterization updates of the 21 high priority industries for the 129 toxic pollutants mandated by the legal process; characterization and assessment of wastewaters from the synfuels technologies for coal and oil shale conversion; assessment of non-treatment alternatives such as modification of manufacturing processes; and reassessment of conventional pollutants from industry.

We will continue to emphasize control methods. Research to develop treatability data will cover both conventional and other priority pollutants. This work will also include an effort to identify surrogate compounds or other measurable parameters that will indicate response to treatment in a similar manner as the difficult and expensive analysis of a host of compounds of interest. Milestones related to treatability will include a treatability manual prepared for guideline developers, permit writers, and design engineers; updating the treatability data base for newly recognized toxics; and exploration of basic mechanisms of treatability in the most important treatment processes.

A significant portion of our effort on control methods will be concerned with optimizing available treatment methods and developing innovative technologies. This area of the program includes development and demonstration of new and improved means of control for both direct discharge and pretreatment. We will emphasize the goal of reducing cost and energy consumption. Milestones include: demonstration of centralized treatment of metal finishing wastes, bench and pilotscale development of textile wastewater control technology to support 1983 guidelines, including non-conventional pollutants and pretreatment regulations; and general development and demonstration of treatment technology and non-treatment alternatives, with emphasis on high degrees of removal of selected toxic pollutants.

ORD is responsible for promulgating the analytical methods requirements supporting the National Pollution Discharge Elimination System (NPDES) program. We will focus primarily on analytical methods evaluation and quality assurance. These activities will have the Effluent Guidelines Division, the Regions and the Office of Enforcement as principal clients.

Under the recycle/reuse category, evaluations will continue on existing systems in an effort to draw conclusions on their applicability to other industrial applications. Also, demonstrations for

new industries will be initiated. Milestones will include: demonstration of recycle/reuse for industries with high potential to solve toxic discharge problems through these systems; and examination of various recycle/reuse technologies to determine factors including the possibility of their development in the private sector.

Municipal Wastewater and Spills Research Committee

The research covered under this Committee supports EPA activities in the area of municipal wastewater and sludges, oil and hazardous spills, and response to uncontrolled hazardous waste disposal sites. In this latter area, currently listed as EPA's top priority, we will in FY 1981 build on much of the work initiated in FY 1980 on the development of new or improved sampling and analytical protocols and methodologies, the establishment of a quality assurance program for all data developed (in support of enforcement actions against the owners of these disposal sites), and the adaptation of previously developed spills technologies for remedial action at these polluting disposal sites.

In the municipal wastewater area, research will deal primarily with the development and evaluation of innovative biological treatment systems, with increased emphasis on energy efficiency and reduction of capital and operating costs. The assessment of the effectiveness of aquaculture systems for pollutant removal will also be accelerated.

Top priority research under this Committee in the spills area will focus on the area of hazardous spill prevention addressing technologies which analysis of historical data identifies as offering the greatest potential payoffs. Increased emphasis will be placed on the development of technologies for the ultimate disposal of hazardous material residues recovered during spill cleanup and on improved technology for use in evaluating the environmental impact of uncontrolled hazardous waste disposal sites. Increased attention should also be placed on the development and promotion of field application of overland and other land treatment technology. Finally, efforts will continue to address the resolution of the health issues associated with the land application of sludge and the development and promotion of the control technology necessary to recommend environmentally acceptable management methods for disposal of municipal wastewater sludges. Immediate increased effort is being focused on active support of the Agency's innovative/alternative construction grant program and production of improved guidance for design of Publicly Owned Treatment Works.

Solid Waste Research Committee

With the possible exception of toxics research, solid waste research should be the major growth area for EPA in the years ahead. Until recently the solid waste research program has focused almost exclusively on nonhazardous waste (primarily municipal refuse); in FY 1981, ORD will shift the primary emphasis of its research program to hazardous waste. The regulations for hazardous waste management must be supported by an active research program to be workable.

One of our top priority activities in FY 1981, and a key component of our solid waste research, will be the establishment of a program to develop new or improved sampling and analytical methodologies and validation procedures for identification of hazardous waste. Another top priority activity will be the creation of a quality assurance program to ensure the validity of all data generated. These activities are the Office of Solid Waste's top research priorities. Additionally, ORD will accelerate its efforts in incinerator and land disposal research for hazardous wastes in FY 1980 and 1981 to provide useful technical data to EPA permit writers for hazardous waste treatment, disposal, and storage. Emphasis will be placed primarily on the thermal decomposition and containment of hazardous waste.

Attention will also be directed to research in the hazardous waste effects area (i.e., health and ecological effects and pollutant transport and fate). Efforts will emphasize the establishment of a credible program for dealing with the health effects of hazardous waste exposures. Research in the area of nonhazardous waste, including resource recovery, will, for the most part, be phased out by the end of FY 1981.

Energy Research

The energy program's underlying goal is to contribute substantially, by providing scientific information to developing policies that strike the proper balance between ample domestic energy production, reasonable cost, and environmental quality by providing scientific information. These policies and incentives and the program pertain to extraction, processing, and utilization aspects of energy systems. There are two primary com-

ponents of the program, one concerned with health and environmental processes and effects and the other with control technology. There is also a strong and extremely important interagency component of the program.

Plans for FY 1981 call for an expansion of about $6.2 million. This figure represents a major initiative concerned with the control technology portion of the synthetic fuels industry—an industry emerging as a significant element of the Nation's energy future. The resource increase also provides for an expansion of the dry scrubber sulfur oxides control technology program.

Overall, the program addresses both conventional and advanced energy systems. Research emphasis is on the current and projected coal fuel cycle as well as the oil shale cycle. Uranium and offshore oil and gas extraction operations will also be studied, but to a more limited extent. Emphasis given to synfuels in FY 1981 will be sustained.

There are identified efforts in the program that are complementary to non-energy (e.g., Air or Water program) concerns. A portion of the program also has a strong multimedia perspective. This part of the program will receive special attention from the newly established Energy Research Committee. This group is a significant addition to the Research Committee system because it will complete overall ORD planning by incorporating the full energy program into the existing Committee forum and enhance coordinated planning between the energy and related non-energy programs.

In the health area, a series of projects will be continued on development and validation of bioassay screens and predictor tests relative to determining health effects of pollutants from fossil fuel combustion. This part of the program will also include ongoing determinations of health hazards of fossil fuel leachates. In the environmental processes area, projects will be sustained on pollutant transport, transformation, and environmental impacts, with special emphasis on the effects of acid deposition on aquatic and terrestrial ecosystems. The results of these projects are targeted, for example, for use in developing regulations and for translation into guidance manuals providing data on carrying out phases of energy production and use in ways that minimize environmental impact.

In the control technology area, coal extraction research will focus on defining pollution sources from active mines and on the development and demonstration of methods to control, treat, and abate pollutants from mining and beneficiation processes. Research on oil shale will evaluate control technology and techniques that can protect surface and subsurface water from the effects of runoff caused by extraction and spent shale disposal.

We will give special emphasis to portions of the program dealing with conventional combustion. This effort is concerned with coal, where the major pollutants are sulfur oxides, nitrogen oxides, particulates, and associated fly ash and sulfur sludge. It focuses on developing and demonstrating cost effective control technology to be used in conjunction with utility and industrial processes in order to render them less environmentally damaging.

To support the Nation's renewed interest in synthetic fuels as an alternative to imported oil, our energy research program includes an accelerated effort to evaluate and develop the controls needed for synfuel processes. Our research will address both the performance and cost of control technologies for the major coal liquefaction, gasification, and oil shale processes. Results of this effort are to be targeted toward near-term completion of guidance documents for synfuel developers and permitting authorities prior to promulgation of legally binding standards.

Administrator's Guidance on FY 1981 State/EPA Agreements

Overview

State/EPA Agreements (SEAs) are intended to be key management tools that top managers in both EPA and the States can use to focus attention on priority activities and problems. Each Assistant Administrator has, in the appropriate section of this Guidance package, identified both program priorities and SEA priorities for Fiscal Year 1981. These SEA priorities should be used to guide the negotiation of the FY 1981 SEAs with a goal of maximizing the use of available resources to solve environmental problems.

This section of the Operating Year Guidance for FY 1981 provides direction for development of FY 1981 SEAs. It includes a concise statement of the roles and responsibilities of Headquarters, the Regions and the States in the SEA process. It defines the activities which occur in the development of SEAs, sets forth a suggested schedule for SEA development, and defines the essential elements of the SEA. The Guidance also discusses the role of tracking and public involvement in the SEA process. It covers both required and suggested activities for SEA development and is based on the actual experience of States and Regions with FY 1979 and 1980 Agreements* and the recommendations of the Administrator's Committee on State/EPA Agreements.**

*See October 1979 Annual Report: State/EPA Agreements.

**Convened by the Administrator in November 1979, to discuss SEA development and recommend future direction.

More detailed information, including examples of innovative or successful approaches to SEA development, will be included in the FY 1981 SEA Handbook which will be available by March 1980.

SEAs as a Management Tool

Based on past experience, the consensus is that SEAs should be strengthened as a management tool by:

- including all EPA programs as candidates for coverage in SEAs.
- focusing SEAs on priority issues, with particular emphasis on addressing problems across program lines.
- making the negotiation and implementation of SEAs a top level, personal priority of Regional Administrators.
- using SEA priorities to "drive" program grant activities.
- tracking specific State and EPA commitments.

Roles and Responsibilities

In delineating Federal and State roles in the Safe Drinking Water Act, Resource Conservation and Recovery Act, Clean Water Act, Clean Air Act, and other environmental legislation, Congress clearly expected a Federal/State partnership. The State/EPA Agreement process should make that partnership real by encouraging States and Regional Offices to negotiate their priorities in order to maximize the use of available resources.

The EPA Headquarters role in SEA development includes:

- setting national priorities.
- developing regulations and guidelines to implement environmental legislation.
- providing grant funds.
- developing program guidance.
- developing methods to consolidate and streamline overall paperwork.
- providing a forum for information exchange.
- reviewing the SEAs and assessing operation of the SEA process.

EPA Regional Offices and the States are the most active participants in the negotiation and implementation of State/EPA Agreements. EPA Regional Offices have responsibility for:

- identifying and assessing Regional environmental problems.
- identifying opportunities to integrate resources and activities to solve environmental problems.
- providing States with program guidance consistent with the Agency Operating Year Guidance.
- consulting with appropriate Assistant Administrators before negotiating SEAs which conflict with major national program priorities as stated in the Agency Operating Year Guidance.
- negotiating SEA priorities and work plans with States.
- streamlining the SEA process and consolidating paperwork where possible.
- assisting States with public participation.
- identifying and implementing EPA commitments in SEAs.
- evaluating SEA progress and tracking commitments to ensure that they are met.

The State, as recipient of Federal grant funds, is responsible for complying with applicable Federal laws and regulations. The SEA offers States the opportunity to negotiate, with EPA, the priorities within their annual grant work plans, as well as the crosscutting issues that call for the application of time and resources across program lines (e.g., hazardous waste sites). State responsibilities include:

- identifying and negotiating SEA priorities with the Regional Office.
- identifying opportunities to integrate resources and activities to solve environmental problems.
- developing grant work plans based on SEA negotiations and integrating them where possible.
- conducting public involvement activities (notices, public hearings, workshops).
- implementing SEA commitments and grant work plans.
- evaluating SEA progress and tracking commitments to ensure that they are met.

Although the States and EPA have primary responsibility for negotiating the Agreements, participation by the public and other governmental agencies is important to the negotiation and execution of the Agreements. EPA and the States should, therefore, work closely with the public and appropriate interstate agencies and Regional and local agencies in developing the Agreements.

SEA Regional and State Organizational Models

Because the FY 1980 SEAs included three or more environmental programs, many Regions and States found it advantageous to assign responsi-

bility for coordinating SEA development to specific organizational units. Regardless of the organizational model used by the Region, it is clear that support of the Regional Administrator and other top managers, along with active, continuous involvement by the program offices, enhances the quality and utility of the Agreement. Program offices should be involved in negotiating the Agreements to ensure that the SEA priorities are effectively implemented through the grant work plans.

State arrangements for SEA development vary, but in general they can be grouped into two types. In one, negotiations are conducted by a single environmental agency that has responsibility for all of the programs included in the SEA. In the other, two or more State agencies individually conduct negotiations for the program grant area(s) for which they are responsible and become co-signers of the SEA. This arrangement is frequently accompanied by an "umbrella" Agreement with the Governor.

Methods of organizing and negotiating Agreements are less important than the character of the negotiations. The State/EPA Agreement must be a truly *bilateral agreement.* Both EPA and the States must be willing to commit themselves to specific activities (in addition to the award of grant funds).

SEA Development

Process

The State and EPA should begin to develop the Agreement as early as possible each year (see Schedule below). Generally, the SEA process should include the following broadly defined activities:

- assessment of environmental problems and existing strategies.
- identification of priority problems.
- identification of available resources.
- negotiation of SEA priorities.
- assessment and selection of alternative problem-solving approaches.
- assignment of tasks, schedules, funding and responsible parties.
- implementation of the signed Agreement, including the award of grants.
- periodic evaluations of SEA outputs and annual revision.

In planning for the FY 1981 SEAs, both Headquarters and the Regions should make a concerted effort to streamline the SEA process by consolidating planning activities and related paperwork where possible.

FY 1981 SEA Schedule

The following is a suggested schedule for FY 1981 SEA development. It is similar to several Regional schedules and provides a general calendar for SEA activities.

MONTH	ACTIVITY	RESPONSIBLE PARTY
1979		
October	Award FY 1980 grants	Regions
	Assess FY 1980 SEA process and identify needed improvements	HQ/Regions
	National EPA/SEA Coordinators Meeting	HQ
November	Initiate review of FY 1980 SEAs to determine strengths and weaknesses	HQ/Regions/States
December	Prepare FY 1981 SEA schedules and "scope of work"	Regions/States
	Review environmental problem assessments	Regions/States
1980		
January	Begin FY 1981 SEA priorities planning	Regions/States
	Review draft National SEA Guidance	Regions/States/locals

SCHEDULE—Continued

MONTH 1980	ACTIVITY	RESPONSIBLE PARTY
February	Issue final Agency Operating Year Guidance, which includes guidance for SEA development	HQ
	Prioritize problems based on problem assessments and available multi-year strategies	Regions/States
March	Prepare program priorities for SEA negotiations based on Agency Operating Year Guidance	Regions
	Begin negotiations on SEA priorities	Regions/States
	Issue public notice about SEA development	Regions and/or States
April	Public meetings/workshops/questionnaires for SEA priorities	States/Regions/locals
	Mid-year review of FY 1980 SEA	Regions/States
May	Complete SEA negotiations for draft FY 1981 SEA	Regions/States
June	Distribute FY 1981 SEA draft for review	Regions/States
	Prepare summaries for public	Regions or States
	Solicit public comments on SEA draft	Regions and/or States
July	Final SEA negotiations	Regions/States
August	Complete FY 1981 SEA, reflecting public comments	Regions/States
	Prepare public responsiveness summaries and distribute as appropriate	Regions/States
September	Sign FY 1981 SEA	Regions/States

HQ - EPA Headquarters
Region - EPA Regional Offices
States - Appropriate State Offices

The SEA negotiators should coordinate their schedules with those of existing EPA program grants. State planning and budget cycles should be considered to the extent possible. Generally, this means that the draft SEA should be completed by June 1 of each year. Following final negotiations, review, and public input, the final agreement should be submitted to the Regional Administrator and State signator(s) in September of each year.

Format and Content

The key to SEA success is flexibility and accommodation of individual States' environmental problems and resource capabilities. Keeping this in mind, the Regions and the States have flexibility regarding SEA formats. The term "format" refers to how an SEA is packaged; that is, how priorities, work plans, grants, summaries, signature pages, and the like are included or appended. Regardless of what format is used, the Agreement should deal with a manageable number of priorities and should be streamlined so that it is useful to top EPA and State managers.

The Agreements should, however, have some uniformity of content to enhance their use as management tools. With this in mind, FY 1981 Agreements should include the following:

- an executive summary (if the SEA is longer than 25 pages).
- a clear identification of priority problems based on problems assessments and multi-year strategies, where feasible (an example of a multi-year strategy format is shown in figure 1).
- annual grant work plans, which may be appended.
- a documentation of tasks and resources needed to meet SEA priority commitments (an example of a format for documentation of resources is shown in figure 2).
- a description of public involvement.
- a procedure for management tracking.

FIGURE 1 – SAMPLE MULTI-YEAR STRATEGY FORMAT MULTI-YEAR AIR QUALITY STRATEGY
(Stationary Source Control)*

PROGRAM OBJECTIVES	TASKS	RESPONSIBLE AGENCY	RESOURCES	SCHEDULE 1980	1981	1982	1983	1984	1985
*Reduce pollution levels caused by stationary sources.	Task No. 1	State	Y	3/80	3/81				
	Task No. 2	EPA	X	6/80		9/82			
	Task No. 3	State	T	9/80	2/82				
*Prevent violations of air quality standards.	Task No. 4	EPA	U	4/80				3/84	
	Task No. 5	State	V	9/80					6/85

*Actual air strategy format used by State of Alaska for FY 1980 SEA.

FIGURE 2 – DOCUMENTATION OF ACTIVITIES AND RESOURCES USED TO MEET SEA PRIORITY COMMITMENTS

PRIORITY ISSUE: Develop Emergency Response Program*
REGION: XII
STATE: Xanadu

ACTIVITY	MILESTONES	FY 80 RESOURCES WORK YEARS STATE	FEDERAL	$ x 1000 PROGRAM/AMT	RESPONSIBLE AGENCY(s)
*Prepare predictive analysis study to forecast spills in the following areas oil, hazardous wastes and toxics substances	10/80-2/81	1	1	CWA-106/30	State: Dept of Environmental Quality EPA: Surveillance and Analysis Division
*Develop emergency response plan.	10/80-5/81	1	–	CWA-106/30	State: Dept of Environmental Quality
*Response to spills in accordance with plan (estimate 10 major spills in FY 1981).	on-going	3	2	CWA-106/70 RCRA-3011/40 SDWA-1443a/40	State: Dept of Environmental Quality Dept of Health
*Provide information and technical assistance to States on spill protection program.	10/80-9/81	–	2	–	EPA Surveillance and Analysis Division Enforcement Division
	TOTALS:	5	5	210	

*Example adapted from approach used in Region VIII FY 1980 SEAs.

SEA Tracking

A general criticism of the FY 1980 SEAs by both States and EPA is that many commitments in the Agreements are so loosely worded that tracking progress (verifying specific, measured steps toward the stated objectives) is difficult.

To help improve SEA tracking, several Regions have *suggested:* (1) tying major SEA commitments to managers' performance agreements; (2) giving each program office a checklist of SEA tasks and output dates for which it is responsible (this should assist in tracking commitments at all management levels); (3) using the SEAs as the basis for State/EPA mid-year reviews where commitments by EPA and the State are evaluated; and (4) assigning State and Regional project officers to each priority.

Clearly, as in all aspects of the SEA process, top management must support SEA implementation and evaluation. Where commitments are not met, the Regions and States must take needed corrective actions.

Public Involvement

The States and EPA have principal responsibility for negotiating the Agreements; however, the involvement of the public and other interested parties is important to the development and implementation of each SEA. Federal regulations require EPA and the States (1) to notify the public about the goals and scope of the Agreement; (2) to provide information to help people participate in the Agreement process; and (3) to schedule ample opportunities for participation by the public. Specific procedural requirements for public involvement, including those for public meetings or hearings, are contained in the public participation regulations (40 CFR 25). In addition to the general public, EPA and the States must work closely with Regional planning and implementing agencies, as well as interstate agencies and local governments, to agree on cooperative strategies, priorities, and responsibilities.

The FY 1981 SEA Handbook will contain detailed suggestions on how to improve public involvement, including the use of target groups, Regional and interstate agencies and consolidation of public participation activities.

DATE DUE

MAR 0 1 1988

HIGHSMITH 45-220

[illegible]
[illegible] Library
[illegible] South Dearborn Street
[illegible]cago, Illinois 60604

1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981
1981