

# **Air Resources Study**



**Prepared by**

**The Office of Air and Radiation  
The Office of Program Management Operations**

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THE AIR RESOURCES STUDY  
AN ANALYSIS OF THE SECTION 105  
GRANT PROGRAM

PREPARED BY  
THE NATIONAL EVALUATION STAFF  
OFFICE OF PROGRAM MANAGEMENT OPERATIONS

January, 1989

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

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OFFICE OF  
AIR AND RADIATION

FOREWORD

The Air Resources Study has been prepared by this office to provide a comprehensive evaluation of the Section 105 grants program. This program is now more than 25 years old and has resulted in the provision of some \$4.8 billion in Federal, state and local funds to support air quality planning and management throughout the country.

This study provides a detailed analysis of how EPA allocates, manages and accounts for these annually appropriated grant funds. These administrative and management processes have become complex over the years and this study recommends actions to be taken to help streamline this oversight and strengthen the joint Federal and state and local partnership in effectively managing these funds. The study also analyzes the current and projected demand for additional funding and makes recommendations on how the increasing resource requirements for the 1990s might be met.

We hope you will find this Air Resources Study an informative and useful report. My office looks forward to working with you in further implementing the various recommendations contained in this study.

A handwritten signature in dark ink, appearing to read "Don Clay", is positioned above a horizontal line.

Don Clay, Acting Assistant Administrator  
for Air and Radiation  
January 1989



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<p>NOTE: For purposes of the Federal Managers' Financial Integrity Act this draft study is categorized as accessible unit number 2000.</p>
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## ABBREVIATIONS USED IN THIS REPORT

AA	- Assistant Administrator
AAM	- Annual Arithmetic Mean
AGM	- Annual Geometric Mean
APCA	- Air Pollution and Hazardous Waste Control Association
APTI	- Air Pollution Training Institute
AQ	- Air Quality
ARS	- Air Resources Study
AT	- Air Toxics
EACT	- Best Available Control Technology
CAA(A)	- Clean Air Act (Amendments)
CDS	- Compliance Data System
CEL	- Continuing Eligibility Level
CEM	- Continuous Emissions Monitoring
CFCs	- Chlorofluorocarbons
CFR	- Code of Federal Regulations
CO	- Carbon Monoxide
CTGS	- Control Technology Guidance Documents
DAA	- Deputy Assistant Administrator
DD	- Division Director
D/R	- Demolition and Renovation (Asbestos)
EERS	- Emergency Episode Reports
EPA	- U.S. Environmental Protection Agency
FIP	- Federal Implementation Plan
FSR	- Financial Status Report
FY	- Fiscal Year
GAD	- Grants Administration Division
HAP	- Hazardous Air Pollutant
HEW	- U.S. Department of Health, Education and Welfare
HRPS	- High Risk Point Sources
HUD	- U.S. Department of Housing and Urban Development
I/M	- Motor Vehicle Emissions Inspection and Maintenance
LAER	- Lowest Achievable Emission Rate
LOE	- Level of Effort
M(\$)	- Millions of Dollars
MOE	- Maintenance of Effort
MQA	- Maximum Quarterly Average
MYDPS	- Multi-Year Development Plans
NAAQS	- National Ambient Air Quality Standards
NAAS	- National Air Audit System
NAMS	- National Air Monitoring System
NESHAPS	- National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub> /NO <sub>2</sub>	- Nitrogen Oxides/Nitrogen Dioxide
NOV	- Notice of Violation
NSPS	- New Source Performance Standards
NSR	- New Source Review

O<sub>3</sub> - Ozone  
 OAQPS - Office of Air Quality Planning and Standards (EPA)  
 OAR - Office of Air and Radiation (EPA)  
 OC - Office of the Comptroller (EPA)  
 OGC - Office of the General Counsel (EPA)  
 OIG - Office of the Inspector General (EPA)  
 OMB - Office of Management and Budget  
 OPMD - Office of Program Management Operations (EPA)  
 ORC - Office of the Regional Counsel (EPA)  
 OSWER - Office of Solid Waste and Emergency Response (EPA)  
 Pb - Lead  
 PBAB - Performance-Based Assistance Policy  
 PIP - Productivity Improvement Project  
 PM<sub>10</sub> - Particulate Matter (10 Micrograms Per Cubic Meter)  
 POTWS - Publicly-Owned Treatment Works  
 PSD - Prevention of Significant Deterioration  
 PTA - Pass-Through Agency  
 QA - Quality Assurance  
 QAQP - Quality Assurance Program Plan  
 RA - Regional Administrator  
 RCRA - Resource Conservation and Recovery Act  
 R/D - Research and Development  
 RO - Regional Office  
 RPTS - Regional Priority Tracking System  
 S. - Senate bill  
 SARA - Superfund Amendments and Reauthorization Act  
 SCAQMD - South Coast Air Quality Management District  
 SEA - State-EPA Agreement  
 SIP - State Implementation Plan  
 SLAMS - State and Local Air Monitoring System  
 SO<sub>2</sub> - Sulfur Dioxide  
 SPMS - Strategic Planning and Management System  
 STAPPA/ - State and Territorial Air Pollution Program Administrators/  
 ALAPCO Association of Local Air Pollution Control Officials  
 SV - Significant Violators  
 TCMS - Transportation Control Measures  
 TSCA - Toxic Substances Control Act  
 TSDFs - Treatment, Storage and Disposal Facilities  
 TSP - Total Suspended Particulates  
 UST - Underground Storage Tank  
 VOC - Volatile Organic Compound



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## EXECUTIVE SUMMARY

Since the first Clean Air Act (CAA) was passed in 1963 the Environmental Protection Agency (EPA), and its predecessor agency, the Department of Health, Education and Welfare, have allocated under Section 105 of the Act, some \$1.3 billion in grants to help control and reduce air pollution. This Federal funding has been matched with a total of some \$3.5 billion by state and local air quality agencies throughout the country. The resulting total of \$4.8 billion represents all funding derived from Section 105 of the Act between 1963 and 1987.

This Air Resources Study is an examination of how and why these grant funds are being spent. This study examines the history of the Section 105 funding, what this funding has bought, what pollution control improvements have been achieved during this period of time, how these funds have been allocated and managed, what emerging issues and trends could impact this grant program and, finally, what are the potential funding requirements and alternatives for meeting these requirements in the 1990s.

This study has been prepared by the Office of Program Management Operations (OPMO) within the Office of the Assistant Administrator for Air and Radiation (OAR). Information and data for this study were obtained from OAR's program offices, EPA's Regional Offices and various representative state and local air pollution control agencies. Both cooperation and support have been provided by the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO) throughout the various phases of study. A major portion of the study is based upon extensive interviews conducted during the fall of 1987. These interviews included both Regional Office Section 105 grant managers and officials of the various state and local agencies.

The following sections summarize the basic information and analysis contained in each of the study's six chapters. The study's recommendations, contained in Chapter 7, are presented at the end of this Executive Summary.

### CHAPTER 1 - BRIEF HISTORY OF AIR GRANTS FUNDING

- o In the 25 year period between 1963-1987 a total of some \$4.8 billion has been expended under the Section 105 program. State and local agencies have contributed approximately \$3.5 billion and EPA has awarded some \$1.3 billion in Federal funds. The Federal portion has averaged about 38% for this period. State and local contributions have increased by about 3% per year.

- o The useful buying power of Section 105 funds has continued to decline even when adjusting for inflation. Not adjusting for inflation, about \$1.16 was spent per person nationally in 1986. When adjusted for inflation this figure dips to \$1.02 per capita.
- o The maintenance of effort (MOE) concept (annual maintenance of a grantee's level of contributed support) was first introduced in the 1963 CAA. Subsequent amendments established Federal and state percentage funding shares pursuant to the nature of the activity. The 1970 CAA Amendments raised the maximum Federal funding percentage share to three-quarters of the cost of establishing and developing an air pollution program for grantees responsible for a State Implementation Plan (SIP) and three-fifths of the cost for maintaining an established air pollution control program.
- o State and local air program responsibilities have continued to expand beyond the requirements contained in the 1977 Act. Part of this is due to continued nonattainment of National Ambient Air Standards (NAAQS) beyond statutory deadlines for criteria pollutants and to the emergence of unforeseen air pollution problems like air toxics, acid deposition, indoor air pollution and cross-media transfers. Criteria pollutants are those pollutants for which NAAQS have been promulgated. These include: sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, particulates, and lead.

#### CHAPTER 2 - SECTION 105 ACCOMPLISHMENTS

- o Since the enactment of the 1970 CAA, the nation's population has increased by over 40 million, the gross national product has more than quadrupled, overall hourly manufacturing output has risen by nearly 60% and the number of motor vehicles has increased by some 75 million. During the same time period, the overall volume of the pollution for the six criteria pollutants has decreased by over 70 million tons. Another 115 million tons of pollution have been prevented.
- o Only indirect correlations can be made between Section 105 expenditures, the outputs achieved, and the amount of air pollution reduced, or prevented, since numerous other factors can intervene to effect air quality. Nevertheless, much of this gain is attributable to the development and operation of state and local air pollution control programs funded under Section 105.

-III-

- o From 1978 to 1987 areas not meeting the health-related NAAQS for sulfur dioxide ( $\text{SO}_2$ ) had declined by 45%, for carbon monoxide (CO) down by 33%, for ozone ( $\text{O}_3$ ) by 44% and, nitrogen dioxide ( $\text{NO}_2$ ) by 67%. However, results are mixed if total population exposure is examined with the gains in reducing CO and  $\text{O}_3$  having been reversed in recent years.
- o EPA receives ambient data from a nationwide monitoring network consisting of over 4700 monitors. In 1987, approximately 22 percent of total state and local Section 105 resources were utilized to deliver this data and maintain this network.
- o State and local agencies expended approximately 28% of all their Section 105 resources for planning and administrative activities. These included the revision of SIPs.
- o Over the last five years some 150,000 source inspections have been conducted as part of state and local agencies' compliance and enforcement efforts. Currently, over 40,000 Class A, New source Performance Standards (NSPS) and non-transitory National Emission Standard for Hazardous Air Pollutants (NESHAPS) sources are considered for high-priority enforcement by EPA each year. These constitute only a small percentage of all the sources actually subject to state and local agency review. State and local agencies expended approximately 31% of their total Section 105 resources in related compliance and enforcement activities.
- o State and local agencies reviewed or issued nearly 20,000 permits for Prevention of Significant Deterioration (PSD) sources, Part D nonattainment sources and other major and minor sources in 1987. This activity constituted about 11% of their total Section 105 resources. These permits represent only a portion of all the permitting activity state and local agencies undertake.
- o Section 105 funds have been used to initiate motor vehicle inspections and maintenance programs (I/M) and anti-tampering and anti-fuel switching programs. Over 35% of the nation's motor vehicles are covered, representing about 50 million vehicles and 100 million people. Combined with other aspects of the Federal motor vehicle control program, these actions have resulted in a 39% reduction in volatile organic compounds (VOC) from highway vehicles from 1978 through 1986.
- o The number of state and local air toxics programs have nearly tripled since 1983 under the continued financial support of Section 105 funds.

### CHAPTER 3 - A DESCRIPTION OF THE BUDGET AND GRANTS PROCESS

- o From the initial formulation of program priorities to the receipt of the final financial status report, the life of one budget and grant year cycle covers over three years. The budget process has four phases which span this period.
- o The formulation of annual operating program priorities begins well before EPA's annual Spring planning meeting. The Air Program must annually compete with other media programs within EPA for its share of the Agency resources requested in the annual budget submittal.
- o The OAR request, including the grants portion, is subject to the Office of Management and Budget (OMB) and Congressional scrutiny and modification each year. There is no assurance that the Section 105 funding level will remain the same or will increase annually. OAR must continually defend its budget request and must show that its assistance to state and local agencies is productive and responds to changing national priorities.
- o The CAA allows EPA a certain amount of flexibility in allocating funds to meet its various mandates; and the Agency's changing air management priorities. Over the years OAR has attempted to maintain a balance between providing funds for an adequate state and local air quality infrastructure, and for the support of important new national air pollution control program initiatives. This has not occurred without controversy.
- o Since 1985 the Air Program has relied upon an approach of distinguishing base activities (regular, on-going programs) versus high priority activities, (major, usually pollution specific emphasis areas). These funds are then redistributed both programmatically and geographically. Current controversies surrounding program priorities and inter-Regional funding redistributions have been sparked by either a decline, or a flat level of grant funding combined with increased responsibilities. To contain this controversy, the Assistant Administrator (AA) for OAR in 1986 developed a set of principles to govern the allocation and use of Section 105 funds. These principles outlined a disinvestments approach, defined the relative percentages to be allocated between base and high priority activities, and placed a limit on the percentage of funding that could be redistributed among Regions.

- o Each Regional Office differs slightly in how it allocates its grant funds to its individual grantees within these grant principles. While Headquarters allows the Regions to have some latitude in making their agency-by-agency determinations, the national allocation scheme and the Assistant Administrator's goals largely influence the allocation rationale employed by the Regions. However, Regions still adjust their areas of emphasis depending upon: grantee applicability, Regional priorities, and prior grantee performance.
- o The Regions must also account for statutory limitations on the assistance award amount and percentage contribution—i.e., minimum (one half of one percent) and maximum (ten percent) percentages of the total national allocation available to each grantee. Other allocation considerations include increasing requests from Indian Tribal governments.
- o Variations in Regional approaches to negotiation have diminished over the last several years particularly in areas of negotiating timetables, sharing information with grantees and determining required work program contents.
- o Pursuant to 40 CFR 35.130 of the state and local assistance regulations, the grant work program serves as the basis for the management and evaluation of performance under the award. As such, the workprogram should specify work-years, amounts and sources of funding for each program element, committed outputs, schedules for completion, and responsible agencies. Outputs should be measurable and compatible with EPA information systems. Work programs should also reflect past grantee performance.
- o Requirements and guidance for the evaluation of grantee performance are contained in 40 CFR 150. Each Regional Office in consultation with its recipients, has developed a process and plan for evaluation of recipient performance. Normally, Regional Office evaluation includes at least one on-site review per year, specific performance measures and grantee reporting requirements. The Regions may resolve performance problems through negotiation but also have corrective actions at their disposal.

#### CHAPTER 4 - CRITIQUE OF THE AIR GRANTS PROCESS WITH SUGGESTIONS FOR IMPROVEMENT

##### Regional Office Organization

- o Senior Regional management involvement in grants issues is not only important to encourage grantee productivity but also to improve Regional Office staff communication and enhance morale.

### Priority Setting

- o The interpersonal, negotiation and technical skills of the Regions' air grants staff has much to do with the degree of grantee cooperation and productivity.
- o There is general agreement on broad program priorities among EPA Headquarters, Regional Offices, and state and local agencies. Differences arise on the degree of emphasis afforded competing priorities and any discontinuity in sustaining a financial commitment to them. Priority-setting has largely been influenced by the extent of the problem and prevailing popular and legislative perceptions.
- o OAR has made extensive efforts to: (a) better explain the priority-setting and allocation process to Regions and state and local agencies; and (b) more intimately involve the Regions in discussions of workload allocations, the development of operating and grants guidance, and the inclusion of Regional priorities through the use of the lead Region concept. Most state and local agencies now feel the overall grants process is open and provides opportunities for their input.
- o The Air Program currently faces the dilemma of needing to meet both base and high priority requirements. The easiest disinvestments have already been achieved. In some further instances redistribution of funds to high priority activities may threaten the Air Program infrastructure. The continued struggle to balance base and high priority needs raises the question of the appropriate focus of the Section 105 program.
- o One of the most crucial concerns of state and local agencies is program continuity and certainty of funding. Grantees have urged that OAR adopt a more formalized multi-year approach to planning and programming in order to promote more program certainty.

### Allocation of Funds

- o The Section 105 allocation rationale used by OAR was initially based on an approach developed in 1974. In ensuing years, increases in funding have been allocated on the basis of individual activity rationales and proportional distribution factors. Several of the factors used in the 1974 scheme are either duplicative or in need of revision. Furthermore, some of the purposes for which earlier funding increases had been allocated have now been accomplished. These factors, plus the changing picture of air pollution problems of the 1990s, indicate that OAR's current 105 allocation approach may be outdated.



February 1989

FACT SHEET  
AIR RESOURCES STUDY

The Air Resources Study provides a critical examination of the Clean Air Act's Section 105 air grant program and other resource issues effecting the Federal support for air pollution control agencies.

The study examines the history of Section 105 funding, what the funding has purchased, what air quality improvements have been achieved since the program's inception, how grant funds have been allocated and managed, what emerging issues and trends are impacting the grant program and, finally, the potential funding requirements of the 1990s and the alternatives for meeting them are discussed.

The Section 105 air grants have grown to be a \$100 million dollar a year program. In the 25 year period between 1963-1987 a total of some \$4.2 billion has been expended - \$1.3 billion in Federal funds and \$3.5 billion in state and local funds.

The Section 105 program has been largely responsible for the establishment of a nationwide air pollution control infrastructure. This includes: the establishment and maintenance of air pollution control programs in nearly 200 agencies at the state and local level employing approximately 7500 persons; operation and maintenance of a nationwide air monitoring network of nearly 4500 monitors; inspections of over 40,000 major industrial sources of air pollution; and motor vehicle emission control programs in areas covering 40% of the nations population.

The Air Resources Study was prepared by the Office of Program Management Operations within the Office of the Assistant Administrator for Air and Radiation. Information and data were obtained from EPA's program offices, Regional Offices and various representative state and local air pollution control agencies. A major portion of the study was based upon extensive interviews conducted during the fall of 1987 with both Regional Office Section 105 grant managers and with officials of the various state and local agencies.

The Study resulted in various conclusions and recommendations, including: the need to reexamine the proper focus of the program and the appropriate Federal and non-Federal roles; pursuit of additional funding, including approaches currently available such as permit fees; establishment of a clearinghouse on permit fees and alternative financing mechanisms; reexamination of the rationale for the national allocation of Section 105 grants; integration of a multi-year approach to air program planning; and numerous other management improvements intended to streamline internal operations and encourage improved grantee performance.



### Grant Negotiations

- o The expedited schedule for the development and dissemination of operating and grants guidance has facilitated grant negotiations and, combined with the advent of the Performance Based Assistance Policy (PBAP), has resulted in more definitive grantee work plans over the last several years.
- o Depending upon the Regional Office, variances in grant periods can complicate grant negotiations and oversight of performance. To better assure EPA priorities are met some Regions have formalized the supplemental release of funds on a schedule where EPA and grantee grant periods converge. In Regions relying upon the State-EPA Agreement process, delays in negotiation and resolution in one media area may delay the entire award.
- o A grantee requires at least a minimum of two months to negotiate an acceptable work plan with EPA. Receipt of late supplemental guidance is problematic and not in keeping with the principles of the PBAP. To increase productivity, approximately half of the Regions now use or will soon convert to, a personal computer-based format for the development and review of grantee workplans.
- o While EPA Headquarters outlines broad grants policies, procedures and requirements, it is the Regional Offices which affectively manage the grant program and provide guidance to recipients on what specifically needs to be accomplished. With these considerations in mind, EPA has produced grants guidance intended to foster uniform and equitable treatment of grantees including: the withholding of funds, the openness of the grants process, and the escalation and resolution of grant negotiation and performance disputes.
- o Not all 105 activity costs are necessarily detailed in the work program. Regional Offices tend to place greater emphasis and need for grantee specificity in the high priority areas. Regions tend to be more concerned with having outputs accomplished than in documenting how grants are actually spent. Some grantees are reluctant to include a descriptions of all their air quality activity in their Section 105 work programs for fear that this could lead more extensive EPA oversight of their programs.

### Evaluation and Performance Resolution

- o While the Office of the Inspector General (OIG) criticized some Regional Offices for their inconsistency in their evaluation of grantee performance, this occurred prior to the implementation of PBAP. Over the last several years, the PBAP and the Section 105 audits have fostered a more uniform approach among the Regions in the evaluation of grantee performance.

- o Some grantees have indicated that EPA grants tracking has enhanced their own efforts to better manage their programs. Other grantees complained that EPA reporting requirements were becoming increasingly burdensome. In general, EPA's reporting requirements were found to be not unreasonable considering the importance of the topics, past grantee performance, and continuing problems of nonattainment.
- o The chief vehicles for Regional evaluation of grantee performance are the quarterly status reports and the mid-year on-site grantee evaluations. Many Regions utilize the results of the mid-year review to influence their grant negotiations for the upcoming grant-year.
- o Only a few Regions coordinate and interrelate national air program audits with Section 105 grant evaluations since they feel these evaluations focus on different aspects of the grantees' program operations.
- o Despite a perception by some that the PBAP constrains a Region's ability to influence grantee performance, most Regions still employ a variety of approaches to do so. These include: limitations on the use of carry-over funds; adjusted schedules of award; supplemental awards; set-asides; performance-based allocations; and evaluations of federal promulgation liability.

#### Enhancing Grantee Performance

- o Incentives have not been pursued with great zeal because they are viewed primarily in terms of increased funding which has not been available. While reduced reporting and oversight and disinvestments flexibility can also be exercised, the flat level of Section 105 grant appropriations discourages any formalized financial approach to grantee incentives at this time.
- o Grant recipients appear to be more receptive to EPA requirements when accompanied by adequate resources and technical assistance. The cost of addressing current inadequacies in air pollution control training alone has been estimated to be about \$2.5 million. In FY 1989, Congress appropriated \$700,000 in training funds. EPA is expanding its information clearinghouse and other technical assistance functions.

## CHAPTER 5 - ASSURING GRANTEE FINANCIAL INTEGRITY

- o In 1987 the OIG audited five Regions on the adequacy of their Section 105 grants management and administration. The OIG audits were critical of the Regions in several areas. These included:
  - (a) their ability to assure that grantees met their requirements;
  - (b) the adequacy of their programmatic oversight and evaluation;
  - and (c) the adequacy of the grantees' fiscal reporting and accountability.
- o In concert with the Regions, OAR and the Grants Administration Division (GAD) formed a task force to examine these OIG concerns and other administrative/financial issues identified in the Air Resources Study interviews. This effort produced a series of discussion papers which recommended various corrective actions. Issues covered included: recurrent expenditures and equipment costs, nonselective reductions, state and local contributions to the MDE, MDE certification and verification, annual on-site evaluation and adequate financial review.
- o The continuance of the MDE requirement was strongly supported by grantees and Regional Offices. However, certain administrative modifications to the MDE provisions have been suggested.
- o Responsibility for, and the adequacy of, grantee financial review or audit remains a topic for further discussion between OAR, GAD and the OIG. Ways to more effectively use limited audit resources for Air Program purposes need to be identified.
- o Virtually every Region has strengthened its operating practices and has clarified its policies and procedures in those areas of concern to the OIG. Some of the more noteworthy actions include: the addition of an auditor to the Regional Grants staff, training sessions on financial integrity requirements for grantee financial officers, and joint Regional Air and Grants staff reviews and site visits.

## CHAPTER 6 - THE FUTURE OF THE SECTION 105 PROGRAM

### Future Resource Requirements

- o EPA and state and local agencies will have to look beyond the provisions of the Section 105 program in order to adequately respond to the needs of the 1990s. Preliminary estimates of future need vary, but significant increases in work years and other resources over current levels are expected to be required by both EPA and by state and local agencies in implementing the requirements of any new clean air legislation.

### Funding the Future

- o Apart from, and in addition to, receiving increased Section 105 appropriations, there are three major approaches that could be used by EPA and state and local agencies to reconcile resource requirements with program demands in the 1990s: (1) continue periodic restructuring of program priorities and disinvestments, (2) pursue additional funding alternatives, (3) redefine programmatic roles and financial responsibilities.
- o While virtually no Region has completely disinvested a required activity, concern was expressed that further grant disinvestments could seriously jeopardize the integrity of air program operations. If further disinvestments by EPA occur, state and local agencies will have to assume increased funding responsibility. If state and local agencies cannot assume these responsibilities then these activities will go undone.
- o Various alternatives for determining program priorities and the allocation of funds have been proposed and merit examination by OAR. One such alternative is an Air Branch Chiefs' four-step proposal which recommends: (1) joint EPA-STAPPA/ALAPCO development of a grantee workload display system; (2) ranking of program priorities with CAA mandated activities taking precedence; (3) institution of a grant activity costs tracking system; and (4) integration of these elements to distribute the available grant funds.
- o Most state and local agencies have yet to make full use of the existing permit fee provisions successfully applied in several states, and required under Section 110 (a)(2)(K) of the Act. A preliminary analysis of the estimated costs to state and local agencies for permitting applicable Section 110 (a)(2)(K) sources yields an estimate of over \$50 million. An estimate of the total funds devoted to such permitting activity indicates just over \$31 million supports this work, approximately \$12 million of which is Federal Section 105 funding. Section 105 funds going to this area could conceivably be freed for other purposes if grantees recovered these costs.
- o An EPA Permit Fee Task Force, formed in June, 1987, concluded that expanded guidance on Section 110 (a)(2)(K) national permit fee requirements was advisable and should be produced in consultation with STAPPA/ALAPCO. The task force also recommended that any

guidance should: focus on the bottom line of cost recovery (permit issuance and implementation), allow maximum state and local flexibility in fee system structuring, encourage collected fees to go to the respective air agencies and utilize the withholding of 105 funds as a sanction for non-implementation of the permit fee requirement only as a last resort. The task force also found that permit fees do not necessarily serve as an impediment to economic and business development.

- o Grantees are not limited to the Section 110(a)(2)(K) fee provisions. Certain state and local agencies have been quite progressive in establishing permit and other user-fee systems covering smaller stationary sources and nontraditional sources like asbestos.
- o EPA has examined numerous other user-fee proposals which potentially could cover the air pollution control costs of the area regulated. These include VOC, NO<sub>2</sub> and SO<sub>2</sub>, and air toxics emissions fees. Other potential areas of resource support include tax incentives and disincentives, like control technology equipment tax breaks, or a technology-forcing emissions tax. All of these options, however, would necessitate actions by parties external to EPA.
- o In some instances, industry has taken a cooperative role in contributing to research on air pollution problem characterization and on control strategy development, as in the Denver Brown Cloud Air Toxics Study.
- o Another area of potential change in funding air program needs involves the redefinition of relative Federal and non-Federal programmatic and financial roles and responsibilities. Much of this has to do with what should be the focus of the Section 105 program: base activities emerging problem areas, provision of technical assistance, or a combination of purposes. These questions can really only be answered in a wider public forum involving the EPA, Congress and state and local governments.
- o Much of the difficulty in knowing what program areas to emphasize is due to an absence of knowledge of how funds are currently being expended. An analysis of the costs of operating state and local 105 air programs, the results of which had not been completed in time for inclusion in this study, would assist in providing insight on the range of costs of state and local activity. Grantees feel this analysis will reinforce the position that they are overworked and underfunded. EPA would like to use the analysis to better define overall costs in order to determine where further disin-

vestments, if necessary, should occur. However, without complete and reliable survey results, neither EPA nor the grantees will be able to confidently assess: (a) what constitutes a base or core activity; (b) whether or not enough funds are available to do both base and high priority activities; (c) to what degree the Air Program infrastructure is truly threatened; and (d) what level of resource support may actually be necessary.

#### Future Management and Policy Considerations

- o There are several management and policy actions that could be considered in order to enhance air program effectiveness. Actions that OAR could take within current management of the Section 105 program are: (a) better match anticipated program support needs to realistic resource strategies and projections; (b) integrate a longer range outlook into the ongoing planning, budgeting and execution cycle; and (c) refine and improve systems for grants accomplishments tracking.

Actions which involve decisions beyond OAR's immediate influence are: (a) promote with Congress the desirability of providing funds on a multi-year basis; and (b) consider various statutory modifications to the Section 105 provisions of the Act dealing with grants allotment and management.

### CHAPTER 7 - SUMMARY AND RECOMMENDATIONS

#### POLICY

- o EPA, state and local agencies and Congress should determine the appropriate focus of the Section 105 program for the future, and in so doing reexamine and define the appropriate Federal, state and local programmatic and financial support roles and responsibilities.

#### Action Items:

- Prepare discussion paper evaluating the options for utilizing Section 105 funds.
- Convene a high level work group to examine and recommend appropriate Federal and non-Federal programmatic roles and financial responsibilities into the future.
- Consult on policy alternatives with groups outside EPA.
- Issue a policy clarifying applicable Section 105 program expenses.
- Draft CAA amendments based upon new policy direction, as needed.



- o The Air Program should examine and promote other approaches to the traditional command and control approach of "doing business."

Action Items:

- Encourage and publicize cooperative public-private air quality projects such as the Denver Air Toxics "Brown Cloud" Study.

FUNDING

- o EPA and state and local agencies need to pursue additional funding and develop funding mechanisms to supplement the Section 105 grants program. In so doing they should fully utilize existing permit fee provisions.

Action Items:

- Establish an OAR clearinghouse on permit fee information.
- Request Congress to mandate 110(a)(2)(k) permit requirement in new CAA reauthorization.
- Provide information on other revenue-generating, or cost-saving options, such as the pooling of shared equipment resources, improved data management and innovative personnel practices.
- o EPA should study the feasibility of possible legislative revisions to Section 105 to gain additional funding for: (1) equipment needs, (2) expanded training, and (3) Indian Tribe support.
- o EPA should also consider requiring all grantees which are not now doing so to match Section 105 funding with at least minimum 40% non-Federal contribution. Any changes need to be phased in gradually. The one half of one percent minimum funding level requirement should be retained. The maximum level of funding support to any one grantee should be reexamined with the possibility of lowering it from the current 10%.
- o EPA, in consultation with state and local agencies, should reexamine the basis for the national allocation of Section 105 funds and update it as appropriate.

Action Items:

- Allocation criteria and data base should be updated.
- Work group should examine results and determine if modification options to current allocation scheme are warranted.
- Any new allocation scheme should be phased-in.

### MANAGEMENT

- o EPA should integrate a more strategic, multi-year perspective into its ongoing Air Program planning, programming and budgeting process including the state and local assistance element. EPA should also better assess the costs of implementing new activities on state and local agencies.

#### Action Items:

- The OAQPS strategic planning sessions should be used as a first step towards similar multi-year strategic planning by other OAR program offices.
  - Section 105 grants should be negotiated and managed on a multi-year, possibly three year, basis. Implementation of this recommendation would require close cooperation with state and local agencies and STAPPA/ALAPCO.
  - The implementation costs of each new OAR program activity should be assessed on a multi-year basis. Resource demands and availability should be reconciled through the establishment of realistic implementation schedules.
  - EPA should urge Congress to consider multi-year appropriations.
- o Within the current Section 105 program, EPA should implement various administrative and management improvements intended to streamline the internal management of the process, and encourage improved grantee performance.

#### Action Items:

- Encourage increased involvement of Regional Office senior management in Section 105 issues.
- Continue to examine grants management issues in the Assistant Administrator's Regional Review trips.
- Continue to hold annual grant coordinators national meetings.
- Issue a Section 105 grants reference manual.
- Continue to obtain early Regional Office input on the operating and grants guidance.
- Promote rotations and exchanges of air program personnel between the various levels of government.
- Continue efforts to improve EPA and grantee communications on grants management.
- Continue efforts to improve grantee performance in managing the 105 program through mid-year evaluations, provision of performance incentives, and other similar efforts.
- Emphasize EPA technical assistance and technology transfer to state and local grantees.

- Develop closer coordination between Regional Office grant evaluations and national air audits.
  - Encourage each Region and the Program Offices to undertake a pilot program to streamline oversight and reporting requirements with the expectation that a nationwide streamlining of grant oversight can be accomplished.
  - Review, on periodic basis, OAR's Withholding and Escrow Policy.
  - Develop and expand the use of interactive computers for Section 105 management.
- o EPA, with the cooperation of state and local agencies, needs to improve its management information and data base systems to enable more effective decision making on resource utilization.

Action Items:

- Complete the EPA/STAPPA-ALAPCO survey on the costs of operating State and Local Air Programs.
  - Complete the Automation of the current grant obligations tracking system.
  - Improve and integrate current Regional tracking systems for overall grants accomplishments by major activity area, and integrate this information as a component of the Regional Priority Tracking System.
  - Develop a discussion paper on the desirability of developing state and local workload allocation models at the Regional Office level.
- o EPA must continue its efforts to improve and maintain grantee financial integrity and accountability and strengthen Regional capability for adequate programmatic/fiscal oversight.

Action Items:

- Conduct workshops for state and local financial officers on fiscal requirements.
- Hire Regional Office auditors/accountants who can help oversee Section 105 grants.
- Conduct joint Air and Grants Division site visits to grantees.
- Agree on auditing responsibilities between OAR and OIG.
- Continue joint OAR/GAD efforts to implement maintenance of effort guidance and pursue legislative changes to current MOE requirements.



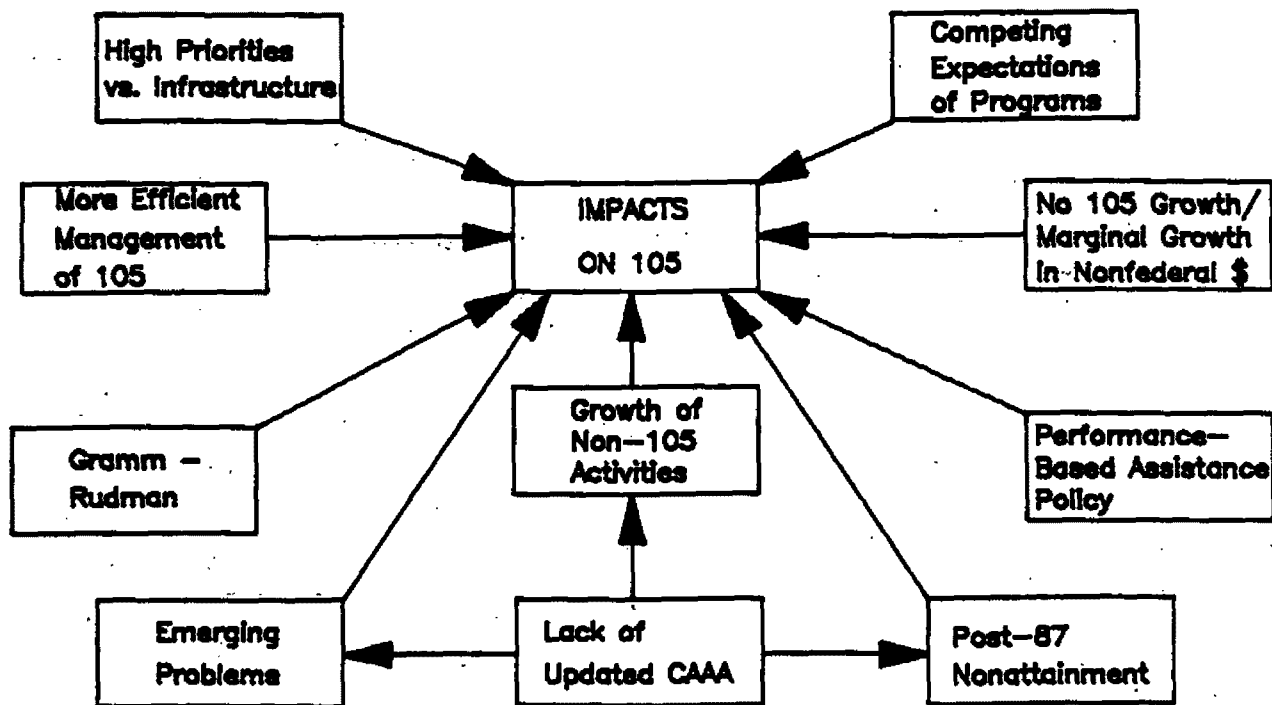
## INTRODUCTION

There are two major reasons why this is a particularly appropriate time in the 25 year history of the air management program to examine Section 105 funding. The first among these reasons is the national priority to reduce the current Federal budget deficit. This important goal has exerted strong pressures to either reduce Federal domestic program funding or to hold these programs at the previous fiscal year's level. For the Section 105 program, this has meant a flat level of Federal funding appropriated for state and local air pollution control activities in the three year period from FY 1986 through FY 1988. In FY 1989, however, Congress appropriated \$101.5 million in Section 105 funds an increase of \$6.5 million over the previous year's level. While this recent increase in funding is helpful, it does not fully offset the erosion in real buying power that annual inflation has had on state and local agencies in previous years nor does it approach actual air program funding needs.

At the same time that Federal support has been essentially static, programmatic responsibilities to manage air quality at the state and local levels have increased. These responsibilities include such major activities as: Part C PSD requirements, delegations for NSPS and NESHAPS, post - 1987 CO/0<sub>3</sub> SIP development, emissions trading options, PM<sub>10</sub> NAAQS, and the air toxics program. The push and pull of static Federal resources and increasing program requirements have led state and local air quality officials to seek additional non-Federal funding, and/or cut back on some of their programs. These twin pressures have developed to a point where basic questions must be asked about how Section 105 funds should be used, how funding can be more effectively managed, and what are the future funding requirements for effective air quality management.

There are other major reasons for the Air Resources Study. For several years, senior management within EPA have been interested in documenting the specific products of the Section 105 program and its contribution to the effective control of air pollution. In addition, there are both Congressional and Office of Management and Budget (OMB) interest in which specific program elements are supported by Section 105 grants and what impact recent funding levels have had on the effectiveness of state and local air management programs. State and local interest in the study has focused on the relative distribution of these funds among various program elements and the need for national consistency from EPA in the management of these funds. Finally, the EPA's, Office of the Inspector General (OIG) completed an audit of Regional Office management of the Section 105 program in 1987 and raised a number of issues related to improving the management and accountability of the program. This study addresses all of these issues raised from both inside and outside EPA (see Figure 1).

Figure 1 FACTORS AFFECTING SECTION 105



This study has been prepared by the Office of Program Management Operations within the Office of the Assistant Administrator for Air and Radiation (OAR). Information and data for this study were obtained from OAR's program offices, EPA's Regional Offices and various state and local air pollution control agencies. Both cooperation and support have been provided by State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO) throughout the various phases of the study. A major portion of this study is based upon extensive interviews conducted during the fall of 1987. These interviews included both Regional Office Section 105 grant managers and officials of various state and local agencies.

The study is divided into seven chapters. Chapter 1 provides a brief history of Clean Air Act (CAA) legislation and the growth of the Section 105 air grants program. This includes a discussion of the purposes and role of Section 105 in establishing and promoting state and local air pollution control programs. It also discusses the growth of air quality programs responsibilities under Section 105.

Chapter 2 discusses what Section 105 funding buys. This includes an examination of what these funds purchase at the state and local level and how they are used. The chapter also analyzes various indicators of progress, including trends in air quality emissions, reductions in various pollutants, population exposure, and other indicators of Section 105 program accomplishments.

Chapter 3 describes EPA's budget and grants process. This includes: the establishment of annual national priorities, the development of operating and grants guidance, the Performance-Based Assistance Policy, the provision of Regional guidance and grant allocations to states; the evaluation of grantee performance, and finally the assurance of grantee financial integrity. Special issues that are examined in this chapter include: a discussion of the minimum allocation level of Section 105 funds to a grantee; funds for Indian Tribes; a discussion of planning versus maintenance funding percentages; and the pass-through of funding to local agencies.

Chapter 4 provides a critique of the grants process and describes exemplary Regional practices in administering the Section 105 program. The critique of the grants process is based on extensive interviews with each Regional Office, various program offices, and state and local agencies. It provides a discussion and suggestions for improvement in such areas as: Regional Office grants management organization, air priority setting, grants negotiation, program evaluation and grantee financial integrity. The chapter concludes with a brief discussion highlighting model practices and procedures used by various Regions and their grantees.

Chapter 5 provides a detailed discussion of grantee financial integrity issues raised by the (OIG) audits. Corrective actions taken by the Regional Offices and EPA Headquarters are discussed. Areas needing additional clarification are identified.

Chapter 6 discusses emerging policy issues that will shape the future of program support for air quality planning and management. A current concern that will likely increase in the future is the growth of air activities funded outside of the Section 105 Program and the definition of an applicable Section 105 expense. Multi-media impacts on air control programs and funding resources are also discussed. Future funding needs are discussed in the context of the potential impact of new Clean Air Act Amendments (CAAA) currently under consideration by Congress. The continuing use of disinvestments to establish priorities and distribute funding among air control program elements and the need to maintain a basic program of core activities, will also be discussed. Finally, alternative funding sources for the air program, including a discussion of permit fee programs, are noted.

Chapter 7 presents the study's conclusions and recommendations. These cover recent developments and suggested actions for improved grant program effectiveness, as well as, possible options to support air program activity in the future. The study's recommendations are grouped into three categories: (1) policy determinations; (2) funding initiatives; and (3) management and productivity improvements.





## CHAPTER 1

### BRIEF HISTORY OF AIR GRANTS FUNDING

#### Early Air Quality Activity

Prior to the major (CAAA) of the 1960s and 1970's, air pollution control was considered to be primarily a local issue. In the absence of institutionalized control programs, air pollution problems were dealt with in the courts through the doctrine of nuisance. Local control programs eventually developed where there were strong perceptions of industrial soot and flyash problems. The first municipal ordinances were enacted in Chicago and Cleveland in 1881 and in the early 1900's Albany County, New York became the first county with an air pollution control program.

The states and the Federal government were relative newcomers to air pollution control. The first comprehensive state legislation for air pollution prevention was instituted in Oregon in 1952. Other states--including Massachusetts, New Jersey, California, Florida, Hawaii, and Idaho--passed legislation during that decade. Nine additional states carried out air pollution control activities under general public health statutes. By the end of the 1960's, all states had legislative authority for air pollution control.

Federal legislation prior to 1970 did establish grant funding to air pollution control agencies, although it did not provide for Federal controls or national standards. While Federal clean air legislation in 1955 provided some opportunities and incentives for the training of state and local employees in air pollution methods under Section 103, it was the CAA of 1963 that provided the initial authority for Federal grants to state and local public agencies through the Department of Health, Education and Welfare (HEW).

#### 1963 Clean Air Act

In 1963, a Presidential "Special Message on Health" requested grants-in-aid to develop, establish and improve state and local air pollution control programs. These grants were provided in Section 105 of the CAA of 1963, which included an authorization that resulted in appropriations of over \$60 million between for the period from 1964 through 1966. The funding was supplied for up to two-thirds of the cost of planning, developing, establishing or improving state and local air agencies. The focus of the 1963 Act was the establishment of a state and local process, of technical methods to inventory and monitor pollution sources, and to enforce existing statutes. The 1963 Act also introduced the concept of

the annual maintenance of a state appropriation level in order to retain eligibility to receive the Federal award. In the air program this is known as the maintenance of effort or continuing eligibility level.

#### 1966 and 1967 Clean Air Act Amendments

The CAAA of 1966 gave the HEW authority to make grants for up to one half the cost of maintaining existing air pollution programs. The 1967 CAAA, in addition to reaffirming the previous authorities, added specific authorizations to enable state and local agencies to plan for air pollution control programs. The provisions for two-thirds federal support for development and one-half for maintenance provisions were retained and incentives for up to three-quarters federal support for multi-jurisdictional and interstate agencies were added. The 1967 statute provided for states to enact ambient air quality standards, develop comprehensive strategies to implement them, and establish air quality control regions. However, while the state standards and plans were to be submitted to HEW, there were no provisions for attainment deadlines or for the review of new sources of pollution. Enforcement was left to the states.

#### 1970 and 1977 Clean Air Act Amendments

In 1970 the EPA was created and assumed air quality management responsibilities from HEW. The Federal government's role was expanded to one of being more of an active participant with responsibility to set uniform national standards for the protection of public health and welfare, and to take action when state and local agencies would not.

In contrast to the rather generic responsibilities required of state and local governments under preceding legislation, the 1970 and 1977 CAAA were much more prescriptive about what grantees had to do and the consequences for not doing so.

Section 110 of the 1970 Act enumerated the grantees' responsibilities for the submittal of State Implementation Plans (SIPs). A SIP was to contain a control strategy demonstration with sufficient enforceable measures to meet the applicable National Ambient Air Quality Standards (NAAQS) within specific deadlines. Further, state and local agency responsibilities included: preconstruction review responsibilities for major new air pollution sources through the adoption of New Source Performance Standards (NSPS), development of transportation control plans; and the adoption of National Emission Standards for Hazardous Air Pollutants (NESHAPs). A dual Federal/state enforcement provision was also added, as were provisions for citizen suits. Also Section 110(c) of the 1970 Act provided that in the event a state should fail to submit an adequate SIP, the Federal government could promulgate a Federal Implementation Plan (FIP) to meet the national standards.

In support of these new program requirements, the 1970 Act also raised the allowable Federal funding percentage share for all grantees responsible for producing or implementing a SIP to three-quarters for development and two-thirds for maintenance activity. The 1970 amendments changed the focus of the 105 program from support for plan and process development, to one of control strategy development and implementation and support for operation of an established air pollution control program. The 1970 CAA was also a significant landmark in Federal, state and local relationships and responsibilities. As state programs matured and their responsibilities grew, the state role increased while the role of many of the local agencies diminished.

New legislation in 1977 added further major requirements for state and local agencies. These included permitting of new sources seeking to locate in clean areas; maintenance of these areas' PSD 'increments'; and Part D requirements specifying the basis for approval of 1979 and 1982 ozone, carbon monoxide, and nitrogen oxide SIPs. The latter included some new and diverse programs and requirements for nonattainment areas such as air pollution control technology determinations, additional new source review provisions, and demonstrated progress in maintaining any emissions reductions achieved.

The requirements for SIPs and the enactment of reasonably available control technology regulations required a significant resource investment by state agencies. So did new enforcement, air quality monitoring, and quality assurance requirements. Broad intergovernmental consultation responsibilities for plan development, designating nonattainment status, development of transportation control measures, and motor vehicle inspection/maintenance (I/M) requirements were also required. Anxious to retain state primacy over their air programs, states accepted delegation of PSD, NSPS and NESHAP programs in increasing numbers.

The 1977 Act also put pressure on states and locals to attain standards by meeting predetermined deadlines or face funding assistance limitations. These limitations included: the suspension of new source review construction permits, limitations on highway and sewage construction grant funding, and the suspension of Section 105 grant awards. Increased Section 105 appropriations, however, served as a more positive inducement. By 1977, Federal grants increased to nearly \$65 million. Section 105 was modified to foster a more equitable and uniform approach in the development of state programs by limiting the maximum percentage of the total allocation that any one state could receive to 10%, and by assuring a

minimum percentage that each state could attempt to qualify for (one half of 1% of the total national allocation) each year.<sup>1</sup> State and local program responsibilities have continued to rise. An examination of EPA's Annual Operating Guidance and Annual Grants Guidance documents indicates that numerous responsibilities have been added to state and local agencies agendas over the last several years (see Figure 2).

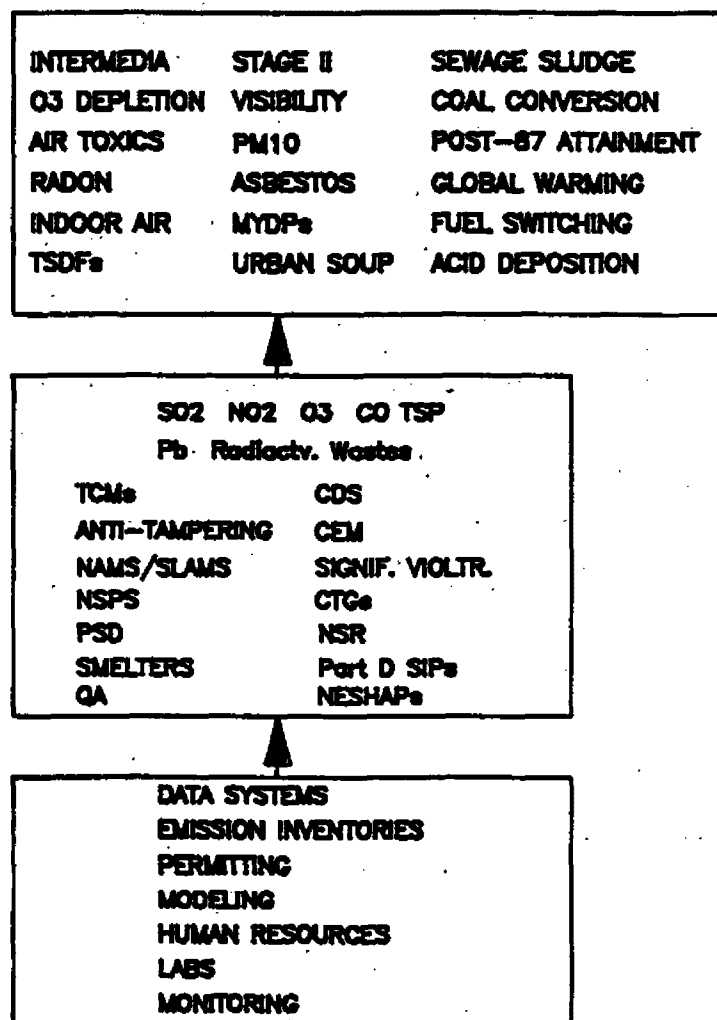
Figure 2

## EVER-INCREASING RESPONSIBILITIES

DEAL W/ EMERGING PROBLEMS AND CONTINUED NONATTAINMENT

DEAL WITH CRITERIA POLLUTANTS

ESTABLISH INFRASTRUCTURE



1987

1963

1. Section 105, as it appears in the 1977 Act, is replicated in Appendix A. In addition to Section 105, Section 106 of the Act contains funding provisions for agencies designated to do air quality planning for interstate air quality control regions designated pursuant to Section 107. Awards to such agencies are generally made under the auspices of the Section 105 program.

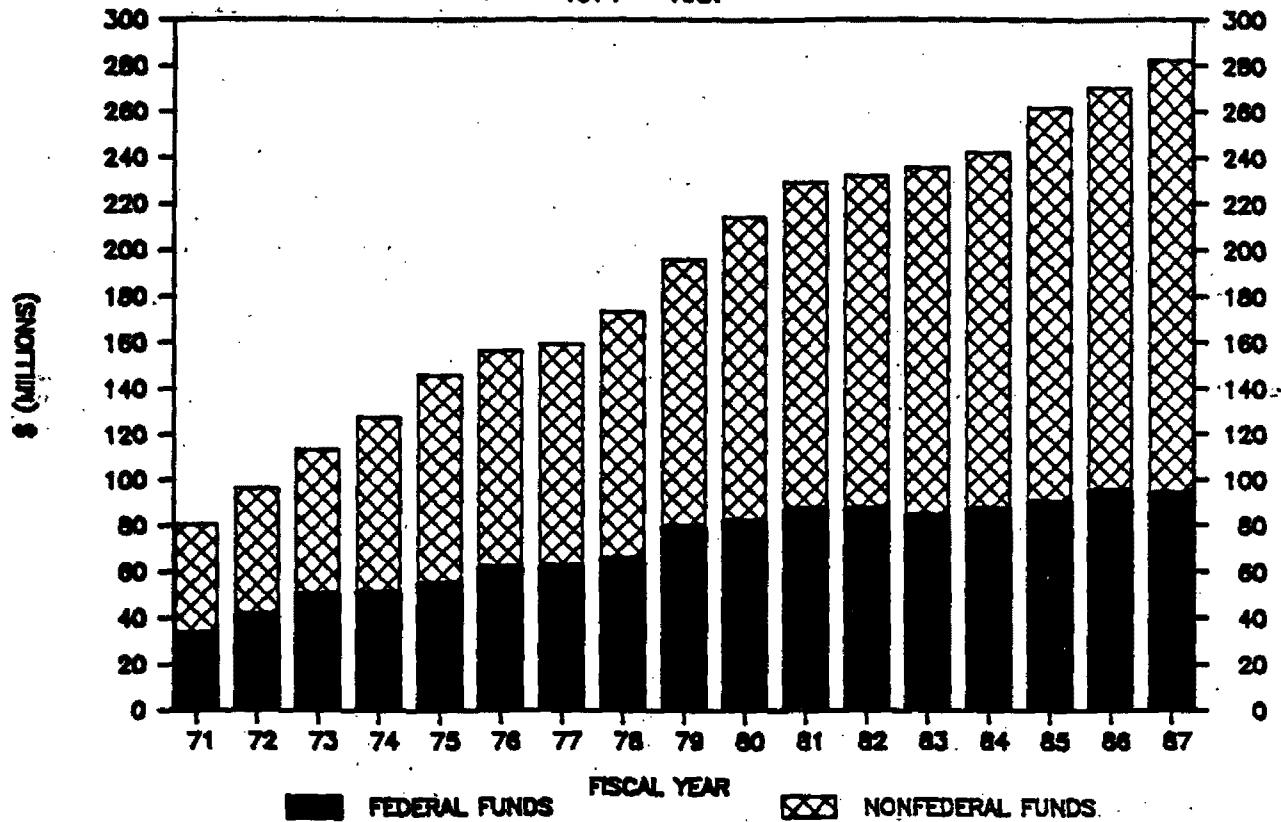
### Changes in Section 105 Funding Levels

Despite these increases in funding, on an aggregated national basis, state and local governments have always assumed the greater percentage share of the cost of air pollution control. Figure 3 shows state and local program budgets since 1965 along with Federal Section 105 contributions. While Federal funds have averaged about 37-38% of the expenditures over the last 20 years or so, their percentage share has generally been declining since 1979. In 1987, Federal Section 105 grants constituted approximately a one-third of the overall air program contribution. However, when large states such as California, Texas and Florida (and others which have substantial non-Federal sources of revenue) are discounted, the Federal/non-Federal ratio more closely approaches a 40/60 split (see Figure 4). An examination of recent State Section 105 air program budgets shows considerable variation in non-Federal 105 support generally when the state-contributed 105 portion is compared to that of the state's overall 105 program. This is discussed in more detail in Chapters 4 and 6.

The impact of Federal Section 105 support generally has been diminished over time by the affects of inflation. Figure 5 compares actual Section 105 appropriation levels to levels adjusted to 1972 dollars and, starting in 1982, to 1982 dollars. The 1972 comparison covers the period incorporating the passage and start-up funding for the CAA, as well as the period when inflation ravaged the value of the dollar. The trend indicates that as the level of Section 105 funds rose actual buying power declined. Even if the less volatile post-inflation period of 1982 is used as a base the useful buying power of Section 105 funds has continued to decline. Not adjusting for inflation, about \$1.16 was spent per U.S. citizen in 1987. When adjusted for inflation, the average per capita figure actually decreases to \$1.02. In recent years state and local Section 105-related contributions have increased by only about 3% per year. This is largely due to the Act's maintenance of effort provision and the need to accommodate employment benefits.

In ensuing sections, the trends of increased state and local responsibilities (including those added in the past few years) and of stable funding support are discussed. Their impacts on state and local operations, and the Federal-state relationship for the 1990s and beyond, will be examined.

**Figure 3**  
**CONTRIBUTIONS TO 105: FEDERAL and NONFEDERAL**  
 1971 - 1987



**Figure 4**  
**105 CONTRIBUTIONS BY %**  
 1971 - 1987

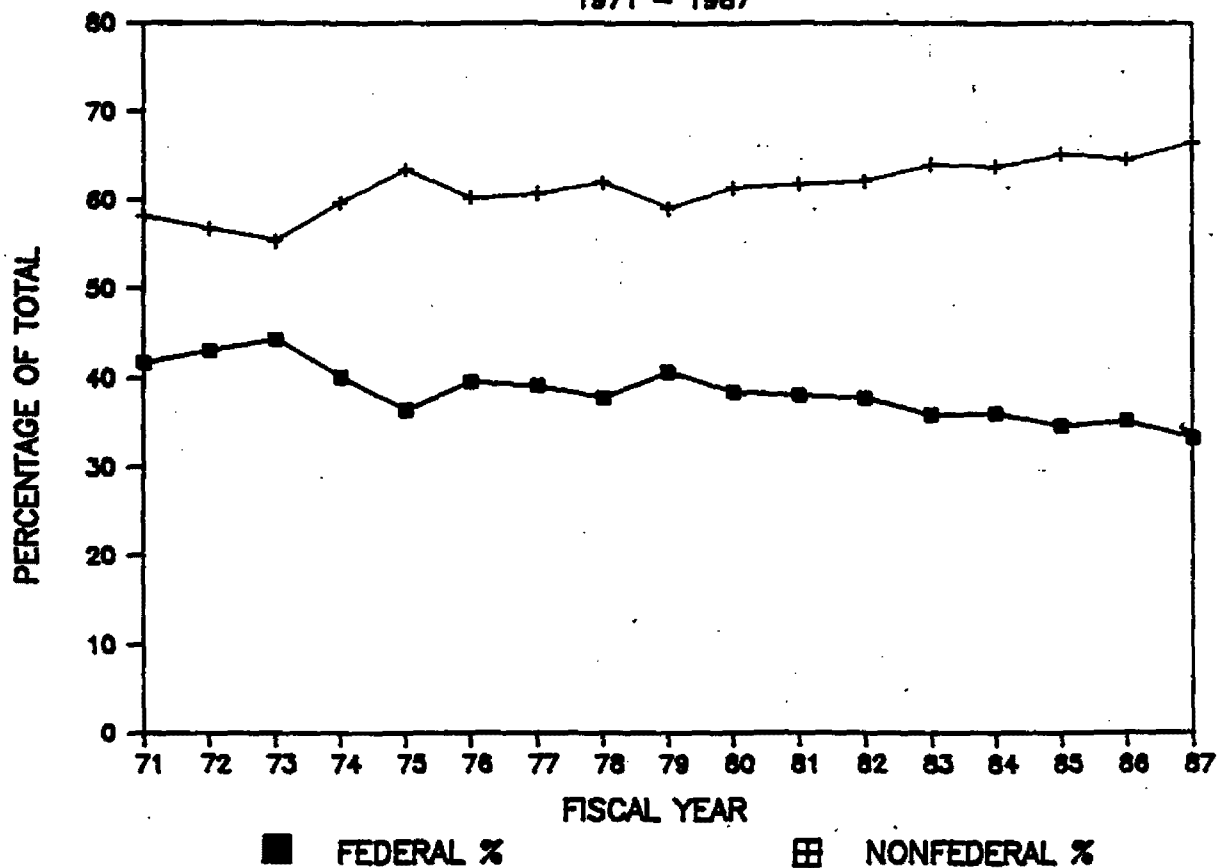
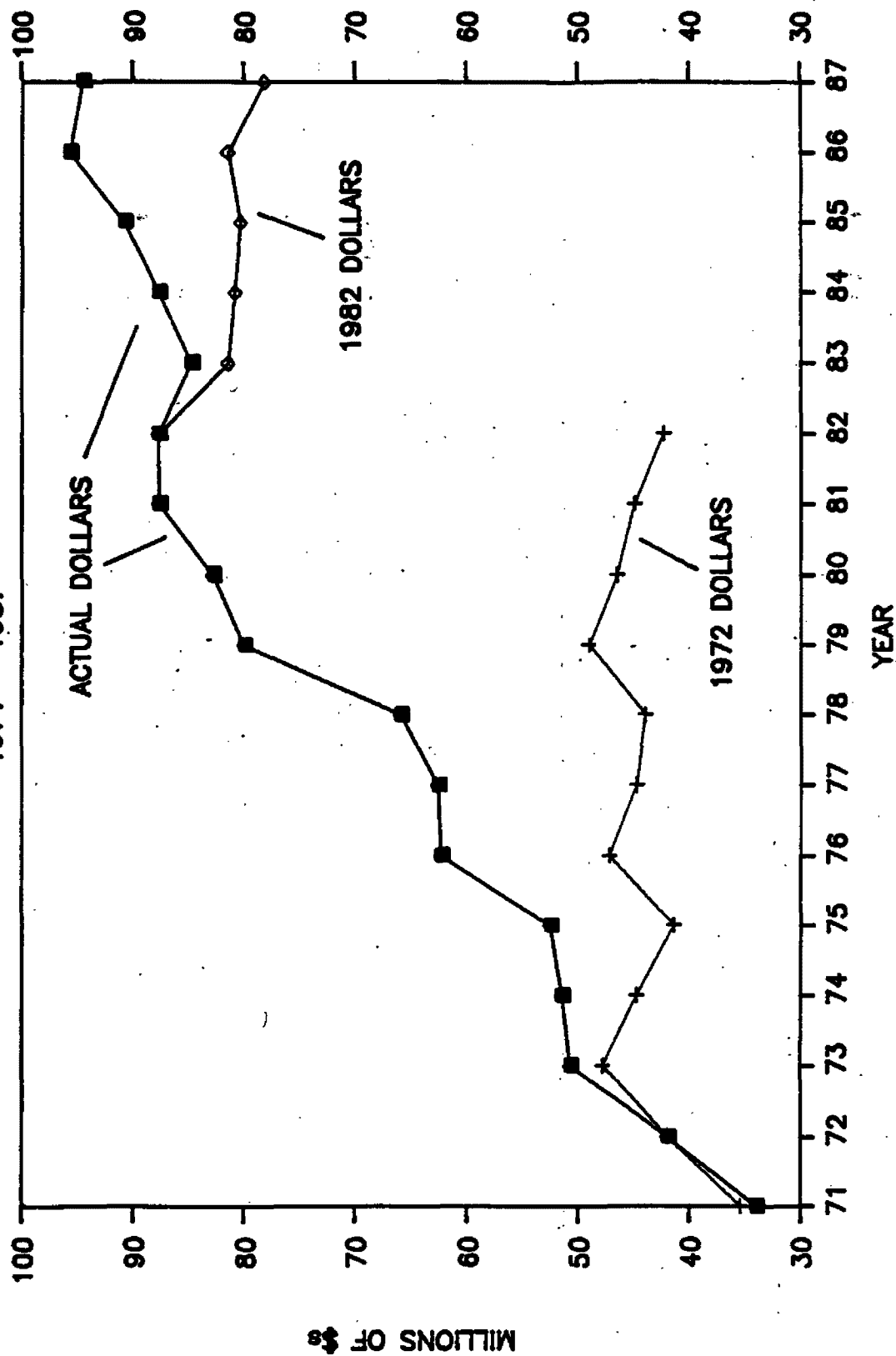


Figure 5  
 ACTUAL 105 APPROPRIATIONS VS.  
 1972 and 1982 INFLATION—ADJUSTED VALUES  
 1971 - 1987







## CHAPTER 2

### WHAT THE SECTION 105 PROGRAM HAS ACCOMPLISHED

#### Introduction

What has the expenditure of over \$3 billion in Federal, state and local funds since 1970, via the Section 105 program, accomplished? A recognition of the cumulative accomplishments of the program tends to be subsumed for several reasons. Progress achieved over the years is often overshadowed by continued nonattainment problems and the emergence of newer and potentially more ominous health and air pollution hazards. For example, recent widespread increases in the number of exceedances of the ozone standard detract from the noteworthy progress achieved since 1978. Often too, as evidenced by the Comparative Risk Study, attention tends to drift away from areas where early successes have been achieved and to environmental problems currently in the public spotlight whether or not, based upon actual risk, such a shift in concern is warranted.

Another factor is that air program achievements are usually described in vague terms since, presently, only indirect correlations are drawn between funds expended, outputs achieved and pollution reduced. The correlation is necessarily indirect since a multitude of factors other than the expenditure of funds serve to impact air quality gains. For example, the assessment does not account for the tremendous impact of the Federal Motor Vehicle Emission Control Program, nor for wider economic forces or changes in meteorology.

Nonetheless, by looking at some of the major products of the Section 105 effort and the concurrent reductions in pollution, an overview of the program's notable achievements can be gained. Given the reduction or prevention of 400 billion pounds of air pollution since 1970, what would our air quality be like today in the absence of the intergovernmental efforts enabled by the Section 105 program?

#### Indicators of Change

##### Growth and Air Quality

Since Congress passed the CAA in 1970, the nation's population has increased by over 40 million, the gross national product has more than quadrupled, overall hourly manufacturing output has risen by nearly 60%, and the number of motor vehicles has increased by some 75 million (see Figure 6).

Figure 6  
Selected Indicators of Growth  
(1970-1987)

	1970	1987	% Increase
Resident U.S. Population (millions)	203	243	20
Number of Motor Vehicles (millions)	108	183	70
Number of Vehicle Miles Traveled (millions)	1.12	1.85	65
Gross National Product (\$ billions)	1015	4235*	317
Manufacturing Output Per Hour (77 index)	80.8	126*	56

\* (1986 figures)

Despite this increase in national growth, the overall volume of pollution for the six criteria pollutants has decreased by over 70 million metric tons during approximately the same time period. As much as an additional 115 million metric tons of pollution have been prevented. Much of this gain is attributable to the development and operation of state and local air pollution control programs funded under Section 105. From 1965 through 1987, Section 105 grants and corresponding contributions from state and local governments totaled over \$4.5 billion dollars.

In the following section indicators of change resulting from these expenditures are described. These include: changes in ambient and emission levels of pollutants, the number of exceedances, the degree of population exposure, the extent of the air quality infrastructure established, and selected programmatic accomplishments.

#### Improvements in Overall Ambient Concentrations and the Level of Emissions

While millions of persons continue to breath air that is still in violation of healthful national ambient air quality standards, considerable progress has been made. Overall ten-year changes in emissions and ambient levels are shown in Figure 7.

Figure 7  
Changes in Emissions and Ambient Levels  
1977 - 1986

<u>Pollutant</u>	<u>Standard</u>	<u># of Sites Nationwide</u>	<u>% Emissions Level Reduction</u>	<u>% Ambient Reduction</u>
TSP	AGM	1435	25	23
SO <sub>2</sub>	AAM	302 <sup>a</sup>	21	37
CO	8hr	182	26	32
O <sub>3</sub> <sup>b</sup>	Max. 1hr	242	19	21
NO <sub>2</sub>	AAM	111	8	14
Pb	MQA	82	94	87

Source: USEPA, National Air Quality and Emissions Trends Report, 1986.

a - Measured at continuous emissions monitoring sites nationwide

b - Includes monitor calibration changes in 1978-1979

Abbreviations: AGM - Annual geometric mean

AAM - Annual arithmetic mean

MQA - Maximum quarterly average

The reduction in the total volume of pollution is even more dramatic if recent emission levels are compared, not just to 1970 levels, but to what levels would have been had there been no controls whatsoever instituted from 1970 onwards (see Figure 8).

#### Changes in Nonattainment Areas

Changes in the number of areas exceeding the national ambient air quality standard for the period of 1978-1987 for five of the criteria pollutants are shown in Figure 9.

**Figure 8 POLLUTANT EMISSIONS PREVENTED**  
1970 - 1986

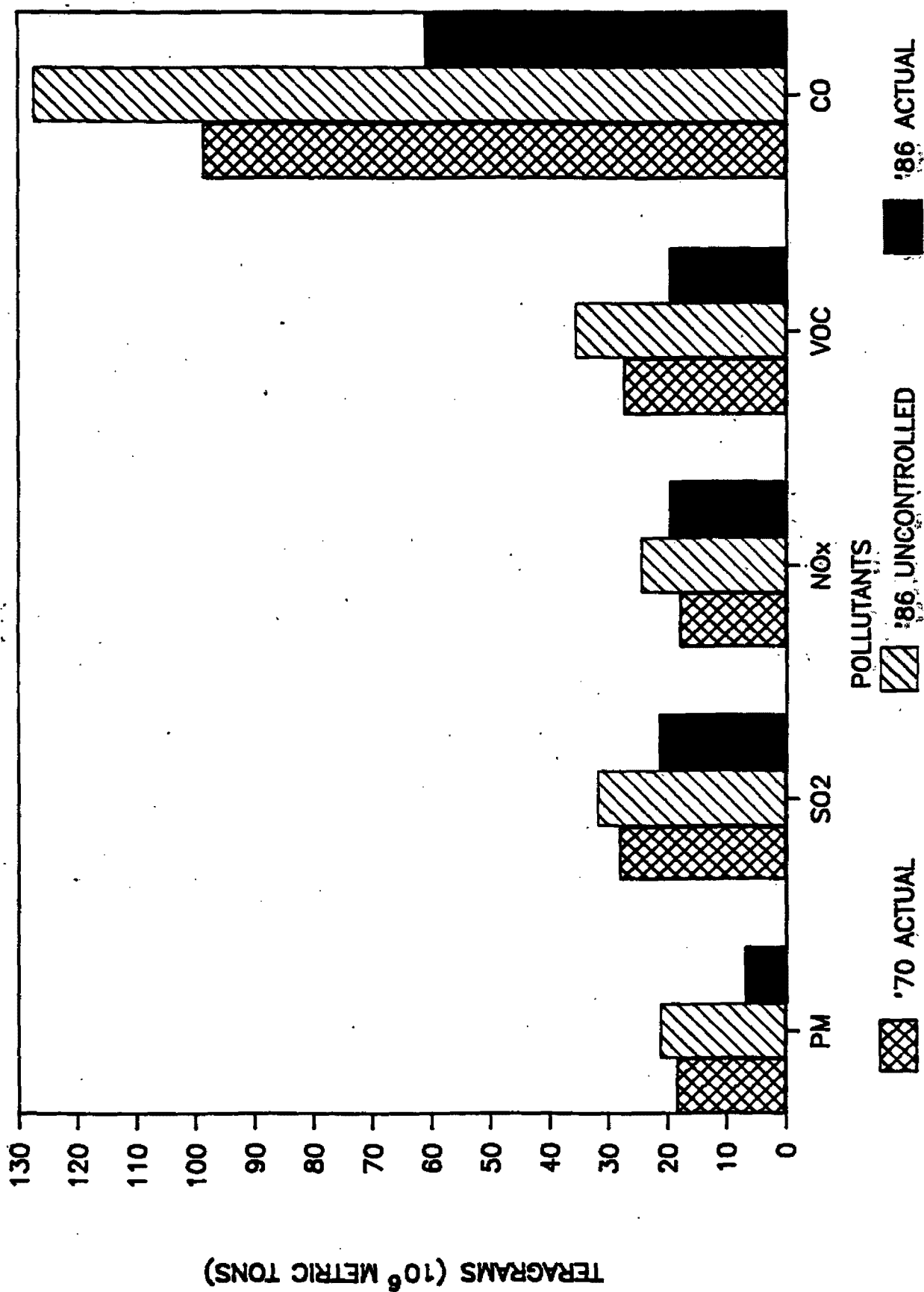


Figure 9  
Progress In The Reduction Of The Number Of Areas<sup>1</sup> Not  
Meeting National Ambient Air Quality Standards (NAAQS):  
1978-1987

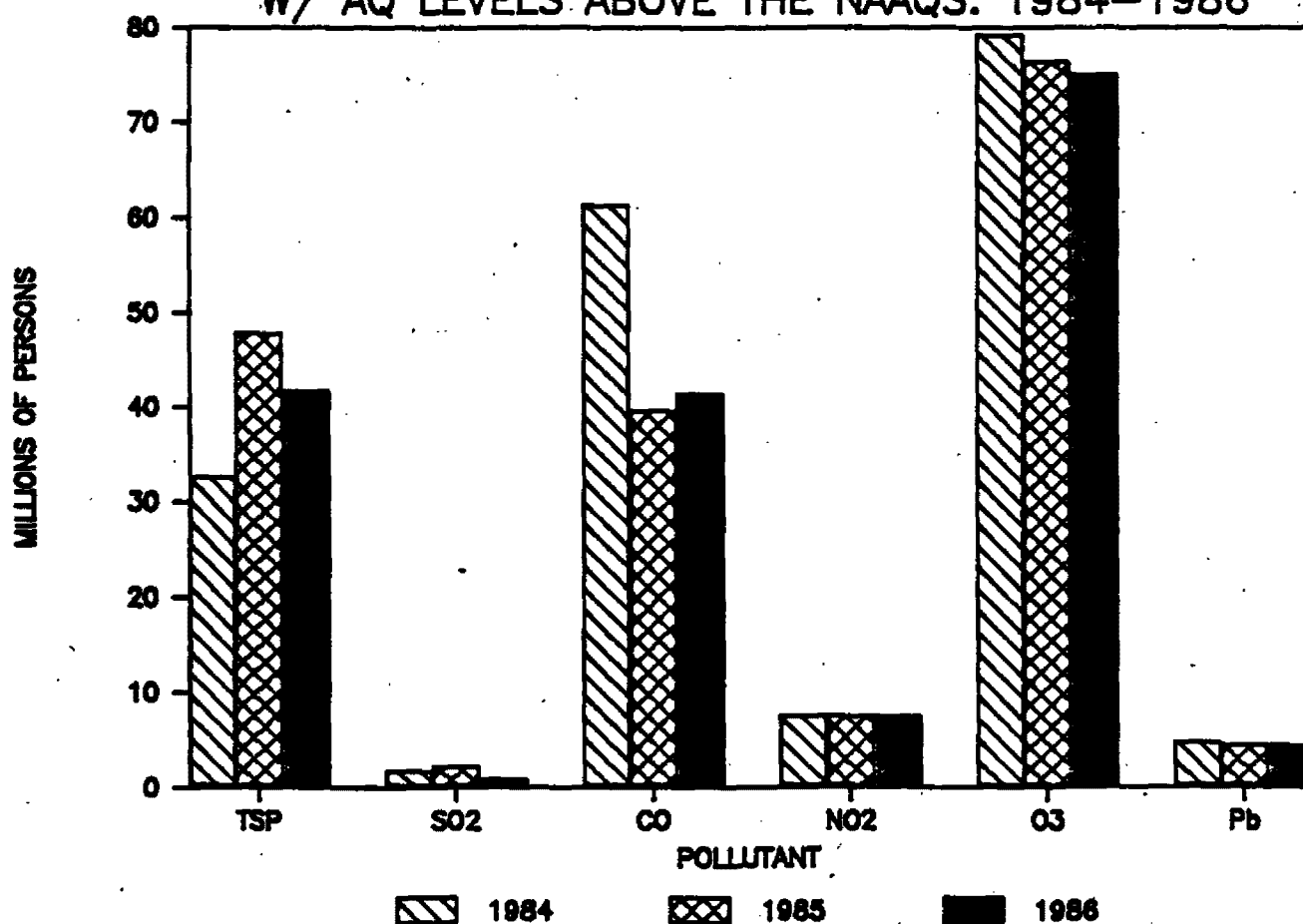
	Total Sulfur Dioxide Primary/ Secondary Nonattain- ment Areas	Total Carbon Monoxide Nonattain- ment Areas	Total Ozone Nonattain- ment Areas	Total Nitrogen Dioxide Nonattain- ment Areas
March 1978	101 (NA/NA)	190	607	12
June 1981	95 (89/6)	163	508 <sup>2</sup>	12
February 1982	70 (63/7)	152	473	11
March 1984	66 (59/7)	146	425	5
July 1984	65 (57/8)	145	393	4
September 1985	60 (54/6)	142	368	4
December 1986	64 (51/16)	129	349	4
December 1987	66 (50/16)	127 <sup>3</sup>	341 <sup>3</sup>	4

- Notes: (1) Areas counted are normally counties but can be smaller jurisdictions; above numbers include both entire counties and portions of counties.
- (2) Standard change in O<sub>3</sub> accounts for bulk of improvement between 1978 and 1981.
- (3) Most recent data available indicates increases in emissions, ambient levels and nonattainment areas for CO and O<sub>3</sub> primarily due to increased growth and over-optimistic estimates of control strategy and rule effectiveness.

### Population Exposure

Reductions in the amount of the total population living in areas with air quality levels above the NAAQS, for a recent three-year period for the criteria pollutants, are shown in Figure 10. The table illustrates how total population exposure has increased for carbon monoxide and nitrogen dioxide. While not reflected in the data, areas have been added to the ozone nonattainment list. This underscores the point that despite noticeable gains in the reduction of pollution since 1977, much of the nation is still nonattainment for at least two pollutants and further Federal, state and local efforts remain essential.

**Figure 10**  
**NUMBER OF PERSONS LIVING IN COUNTIES**  
**W/ AQ LEVELS ABOVE THE NAAQS: 1984-1986**



### Section 105 Expenditures and Accomplishments at the State/Local Level

The extensive air pollution control infrastructure established and supported at the state and local levels by Section 105 air grants is largely responsible for the achievement and maintenance of the air quality improvements noted earlier. Since 1970, over \$1.2 billion in Federal 105 grants and a corresponding \$2.1 billion in state and local funds have enabled: the employment, training and support of thousands of state and local personnel; the development of plans to prevent further air pollution and maintain air quality in 55 states, territories and the District of Columbia; the purchase of equipment and the establishment of a nationwide monitoring network; the permitting, inspection and compliance assurance of over 40,000 industrial sources of Federal concern annually; and, the control of excess emissions of approximately 35% of the nation's motor vehicle population. The following discussion highlights some of the more prominent areas of air program activity funded with Section 105 grants and notes the programmatic progress achieved as a result.

#### Establishment of an Air Program Infrastructure

Currently, 50 states, 4 territories, the District of Columbia, the Commonwealth of Puerto Rico, and approximately 197 municipal, county, regional or multi-regional agencies carry out air pollution control activities.<sup>2</sup> Of all of these, 176 receive Federal 105 support including nearly 50 pass-through agencies.

The number of state and local employees funded in part with Section 105 funds peaked at 8,200 (4,388 state, 3,812 local) in 1978. This figure declined to 6,470 (3,882 state, 2,588 local) in 1984. This overall reduction can be partially attributed to the attrition of local agencies, and state and local agency budgetary constraints. Current employment data are inexact but range from just under 7,000 to over 8,000, assuming full agency staffing.<sup>3</sup> EPA's workload model estimates the current state and local staffing level to be about 7,200 persons. An estimate of total positions for those agencies listed in the American Pollution Control Association (APCA) directory totals over 8,000 but when multiplied by a vacancy rate of 7-13% would yield an amount closer to the 7,200 figure.

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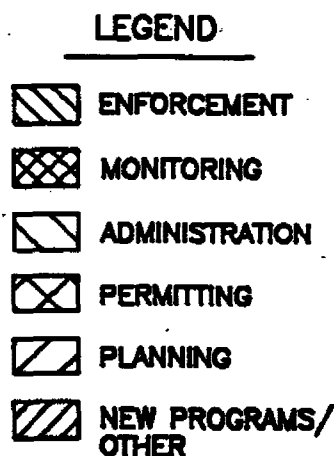
2. See Journal of the Air Pollution and Hazardous Waste Control Association; 'Agency Directory'; April 1988.

3. Information obtained from Roger Westman, (STAPPA/ALAPCO) March 1988.

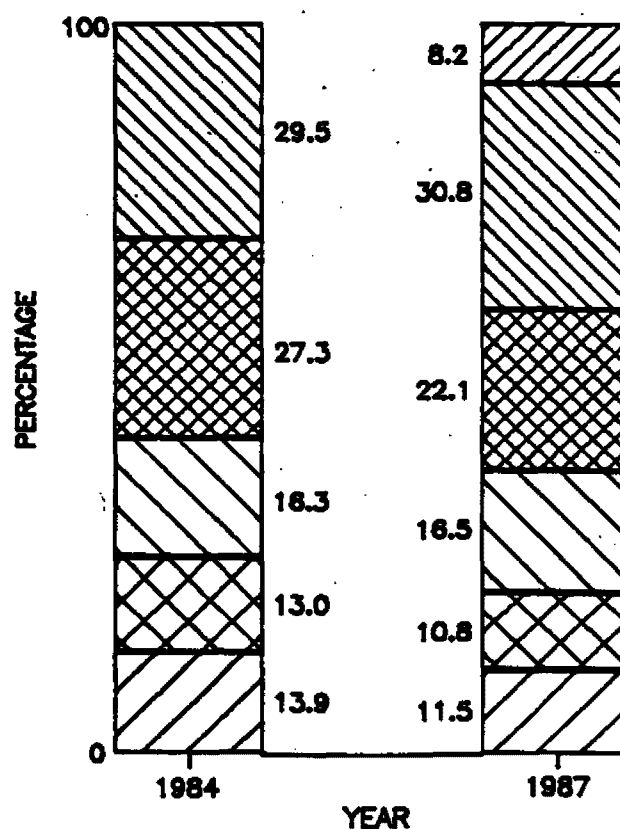
# State and Local Air Program Activities

Section 105 funding is devoted primarily to the support of five major, broadly-defined categories of activity: monitoring, planning, enforcement, permitting and administration. Figure 11 shows the relative percentages of air program support devoted to these categories (and other selected high priority areas) for 1984 versus 1987. This information was obtained from an analysis of 17 agency grant applications from 1984 and from a sample of 17 different agencies used in the 1987 pilot survey of the costs of state and local air activities. In the following sections major programmatic accomplishments occurring within these categories are noted.

**Figure 11**  
**COMPARISON OF COSTS**  
**BY PROGRAM ELEMENT \***  
**1984 - 1987**



\* SECTION 105 ACTIVITIES  
ONLY; MAY NOT TOTAL  
100% DUE TO ROUNDING





(a) Establishment and Maintenance of a National Air Monitoring Network

Ambient air quality monitoring provides the basis for determining whether air pollution problems exist and helps to characterize the nature of the problems. Section 110 of the Act requires ambient air quality monitoring as part of a SIP.

A strategy was adopted in 1977 to form the basis of revisions to state and local ambient air quality monitoring networks and air monitoring regulation. Two types of air monitoring stations were defined as the result of the strategy: State and Local Air Monitoring Stations (SLAMS) and National Air Monitoring Stations (NAMS). The SLAMS network consists of fixed monitoring stations that meet the needs of state and local air pollution control agencies. The total number of monitoring instruments in the SLAMS network is approximately 4,720. The NAMS network is a subset of the SLAMS network and emphasizes monitoring in areas of highest air pollution concentrations and population. The total number of NAMS monitors is 1,256. NAMS are located in urban areas and oversight is provided by EPA Headquarters. SLAMS oversight is provided by EPA Regional Offices.

State and local agencies must submit a summary of all data collected from SLAMS sites to EPA on an annual basis. Data collected from NAMS sites must be submitted to EPA quarterly. Based on the EPA regulations, state and local agencies must also report a daily air quality index to the general public in urban areas with more than 200,000 population.

Figure 12 shows changes in the number of monitors from 1977 to 1987 and the projected 1988 monitors. With the advent of the NAMS/SLAMS requirements of the 1977 CAAA the overall monitoring network has been reduced to about one half of its original size. The monitors were located using uniform network design and setting criteria to utilize standard quality assurance procedures and to assure an adequate level of coverage for the criteria pollutants at that time. In 1987 approximately 22% of total state and local 105 resources were utilized to deliver the ambient data and maintain the network.

Figure 12

Number of Monitoring Sites

Pollutant	1977	1982		1987		1988; (Estimate)	
		SLAMS	NAMS	SLAMS	NAMS	SLAMS	NAMS
PM <sub>10</sub>	-	-	-	583	-	485	271
TSP	3987	1860	642	1445	573	1539	3
SO <sub>2</sub> (total)	2382	406	222	315	179	317	182
CO	470	325	114	330	118	336	120
O <sub>3</sub>	542	392	215	393	217	390	225
NO <sub>2</sub> (total)	1558	245	59	168	58	166	62
Pb	542	250	102	243	110	238	111
Subtotal	-	3478	1354	3487	1255	3471	974
TOTAL	9481	4832		4742		4445	

(b) Planning Activities to Support State and Local Programs

Planning activities include SIP revisions (including control strategy and regulation development), evaluation of air quality data to determine attainment status, development and maintenance of emission inventories, air quality modeling, planning and development of new programs, and coordination with other agencies.

Grant funds are allocated to the states to develop SIPs for the purpose of meeting the requirements of the CAA. Among the several requirements, the states must prepare a plan to implement: (1) attainment and maintenance of national standards, (2) PSD, (3) review NSR, (4) NSPS, (5) NESHAPS, and (6) visibility protection. The tangible benefits from these plans are not solely achieved through the development of the regulations and procedures included in the plan, but in concert with

the implementation and enforcement of the provisions. The plan alone, therefore, is not an end to which benefits can be directly related and measured. Instead, resources allocated to plan development must be evaluated over the long-term by assessing the overall effectiveness of the control agency program in meeting the primary objectives of the Act.

Section 107 of the 1977 amendments to the Act required states to submit formal designations of attainment status of NAAQS. As noted earlier, Figure 9 indicates the gains achieved in reducing the number of nonattainment areas for five of the six criteria pollutants for the period from March 1978 to December 1987.

Special modeling studies and the evaluation of ambient air quality data are performed to identify new nonattainment areas and to measure progress toward attainment in existing nonattainment areas. Emission inventories must be updated and evaluated in terms of accuracy. Ambient air quality modeling is also essential in reviewing modeling results submitted by sources or contractors in support of new source permit applications or proposed changes to state and local regulations.

Approximately 28% of total grantee resources were estimated to be used to cover both planning and administration activities in 1987.

#### (c) Stationary Source Enforcement and Compliance Activity

State and local agencies' stationary sources compliance and enforcement programs are designed to ensure compliance with air emission standards by stationary sources of air pollution, including such major facilities as power plants, steel mills, smelters, and refineries. In addition to ensuring compliance with emission limitations contained in SIPs, agencies are delegated responsibility for ensuring that sources comply with new NSPSs and NESHAPs.

A major component of an enforcement program is compliance monitoring. The compliance monitoring of stationary sources is conducted primarily by state and local agencies. Compliance monitoring includes a broad range of activities including surveillance, on-site inspections, and reporting and maintenance of compliance data. Of these activities, the most important is on-site inspections.

A second major component of an enforcement program is violation resolution. Depending upon the nature of the violation, the agency may initiate an administrative action which orders immediate compliance or the agency may place the noncomplying source on a legally-enforceable compliance schedule. The agency may assess administrative penalties if it has the authority. Another option is to initiate a judicial action that may require the noncomplying source to pay civil penalties and be placed on a court-ordered compliance schedule.

Figure 13 displays the primary compliance monitoring and enforcement activity levels for stationary sources of air pollution conducted by EPA and state air quality agencies. The primary activity levels are the number of sources issued an administrative order, and the number referred to courts for civil action. High priority enforcement categories are Class A (major) SIP, NSPS and nontransitory NESHAPs sources. Over the last five years, sources in these categories have annually totaled 40,000 and this is only a small percentage of all sources which are subject to state and local review.

Over 150,000 total inspections for 105-related sources have occurred in this five year period. Also of high priority is the asbestos demolition and renovation (D&R) NESHAP program. It was not included in Figure 17 since accurate data was not available at the time. However, for fiscal years 1986 and 1987, EPA and state and local agencies annually conducted approximately 15,000 D&R site inspections and issued approximately 1,000 enforcement actions.

Figure 13

	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987
Inspections					
State	32,160	40,295	41,637	41,757	40,489
EPA	1,996	3,360	3,370	3,469	2,939
Admin. Orders					
State	199	362	782	1,104	1,098
EPA	33	120	127	143	186
Civil Referrals					
State	32	62	337	270	425
EPA	60	96	66	86	75

Figure 14 indicates the compliance status of sources as of June 1988. These figures are based on information submitted to EPA's Compliance Data System (CDS) by state and local agencies.

Approximately 31% of state and local resources were devoted to compliance activity in FY 1987.

Figure 14  
Compliance Status  
As Of June 1988

		CLASS A	CLASS A1*	NSPS	NESHAP
Number of Sources		33,402	17,440	5,243	5,923
In Compliance	#	30,744	15,785	4,663	3,581
	%	92.0	90.5	88.9	60.4
Meeting Schedule	#	561	395	81	70
	%	1.7	2.2	1.5	1.1
In Violation	#	1,224	799	210	1,028
	%	3.7	4.5	4.0	17.35
Unknown	#	873	461	289	1,244
	%	2.6	2.6	5.5	21.0

"A" SIP Sources - Sources with potential uncontrolled emissions, while operating at design capacity, equal to or greater than 100 metric per year of any regulated air pollutant.

\* "A1" SIP Sources - A subset of Class A, these are sources with actual or potential controlled emissions, while operating at design capacity, equal to or greater than 100 metric per year of any regulated air pollutant.

In Compliance - Those sources which are meeting all applicable requirements.

In Violation - Those sources which are not in compliance with one or more emission limitation and which are not in compliance with enforceable compliance schedules.

Meeting Schedule - Sources not in compliance with one or more emission limitations but which are in compliance with the enforceable compliance schedule. (While this category generally consists of violating sources, it includes sources on delayed compliance orders which, because of Section 113(d)(11), could be alleged to be in compliance with the applicable SIP.

(d) Permitting of Stationary Sources

Permits are issued to ensure that new or modified sources install the necessary control equipment to meet standards that are generally more stringent than standards for existing sources. The requirements for new sources vary depending upon whether the source is an attainment area or a nonattainment area.

Some agencies issue a permit to construct followed by a permit to operate. While some, however, issue a combined construction/operating permit and then charge a fee for processing the application and for renewing the operating permit. Operating permits are renewed periodically, generally every one to five years. State and/or local agencies reviewed or issued nearly 20,000 permits for PSD Sources, Part D (non-attainment area) sources and other major and minor sources in 1987. This number constitutes a small percentage of all the sources permitted by state and local agencies. PSD sources generally are located in pristine areas. NSPS and NESHAPS requirements apply in all areas.

By 1987, approximately 94% of the current NSPS and 95% of the current NESHAPS had been delegated to states.

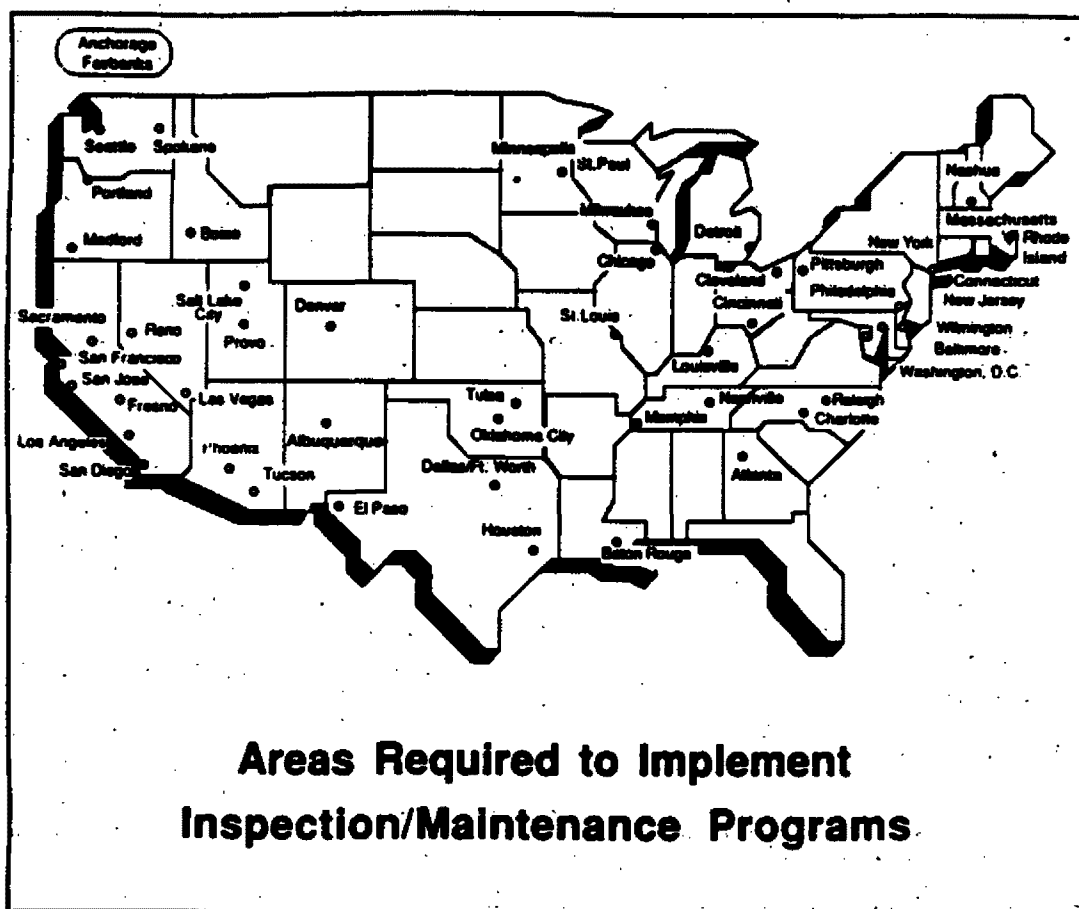
Approximately 11% of all grantee 105 resources went to cover 105 related permitting activity in FY 1987.

(e) Program Accomplishments in Control of Mobile Source Pollution

The Federal mobile source control program, which addresses approximately 50% of air pollution emissions, has six major elements. These are: new vehicle/engine certification; selective enforcement audit; recall program; emissions warranties; fuels/tampering enforcement; and inspection/maintenance. While gains from the mobile source control program are primarily due to Federal actions, programs like anti-fuel switching and tampering and inspection/maintenance activities are often initiated and supported by the Section 105 state and local assistance program.

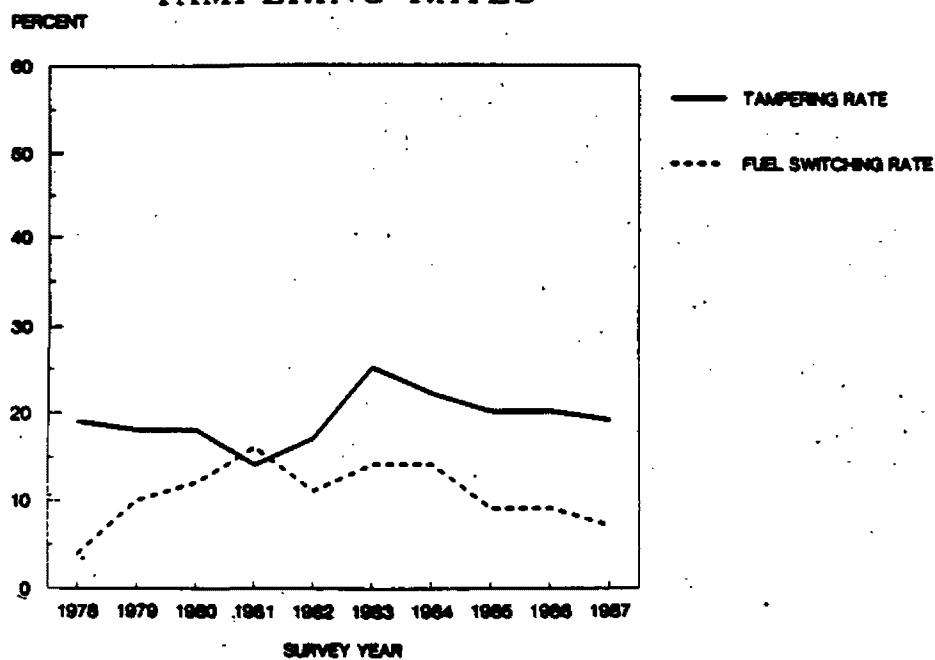
Currently there are I/M programs covering 64 urbanized areas and 33 states. Four I/M programs were started prior to 1981 and 12 more were started in 1981-83, with 22 additional programs have been started since then. One new program is scheduled for start-up during 1988 and two more are currently being considered by state legislatures. These programs impact more than 50 million vehicles and affect more than 100 million people. Figure 15 shows those areas of the nation required to implement I/M programs.

Figure 15 \*



\* Rhode Island's I/M program is not required as part of its attainment demonstration and no emission reduction credit is claimed for it in the State's SIP.

Figure 16  
TAMPERING RATES



Currently, there are 45 state and local tampering and fuel-switching programs in place. The first program was started in 1975, 17 were added in 1982-85, 11 were added in 1986, 9 were added in 1987, and 6 were added in 1988. These programs are critical given that tampering and misfueling of vehicles causes significant increases in pollutant emissions, and circumvents the mobile source emission control program as well. Figure 16 depicts tampering/misfueling rates from 1978 through 1987.

In addition to supporting the I/M startup costs, EPA has provided Section 105 grant funds to state and local governments to supplement other aspects of the I/M programs. The funds are used primarily to support the following activities: staffing needs, equipment, surveys, training, and public awareness. Combined with other aspects of the Federal motor vehicle control program, I/M, anti-tampering and anti-fuel switching activities have resulted in nearly a 40% reduction in violative organic compounds from highway vehicles from the period of 1978 through 1986.

(f) Emerging Program Areas

In addition to revising strategies to deal with continued nonattainment problems for criteria pollutants such as ozone, new programs continue to be developed in response to emerging problems. These problems include: acid transport and deposition, which may require additional reductions in sulfur dioxide emissions beyond levels prescribed for attainment of the ambient standard; protection of visibility in sensitive areas, which may require additional control of particulate matter in some areas; exposure to indoor air pollutants, which may be more of a health hazard than normal outdoor exposure; and toxic air pollutants, which have been receiving increased Federal, state and local attention in the last five years. Assessment of the exact impact on state and local agency operations of these problems as yet to be done but the added burden is considered to be enormous.

In the absence of a Federal mandate in many of these areas some state and local governments have taken the initiative by committing their own funds to assess and contain these problems. Air toxics is a good example. EPA's primary approach for controlling toxic air pollutants was established under Section 112 (NESHAPs) of the 1977 Act. Subsequently, EPA acknowledged that these efforts alone were not sufficient to address these problems. In June 1985, EPA announced its strategy for the control of both routine and accidental releases of toxic air pollutants. The national air toxics strategy takes a two-pronged approach to the complex and diverse air toxics problem. The first of these is the continued development of the NESHAPs program; the second consists of several important activities to be performed at the state and local level.



EPA's goal is to establish state and local agencies' roles in: 1) accepting delegation and enforcing NESHAPs; 2) identifying, evaluating, and mitigating (as necessary) point sources of local concerns not addressed by NESHAPs; 3) addressing urban problems arising from complex multi-source, multi-pollutant interactions; and 4) enhancing program capabilities to conduct applicable activities in the first three areas and to facilitate implementation of other programs specific to the needs of each state or community.

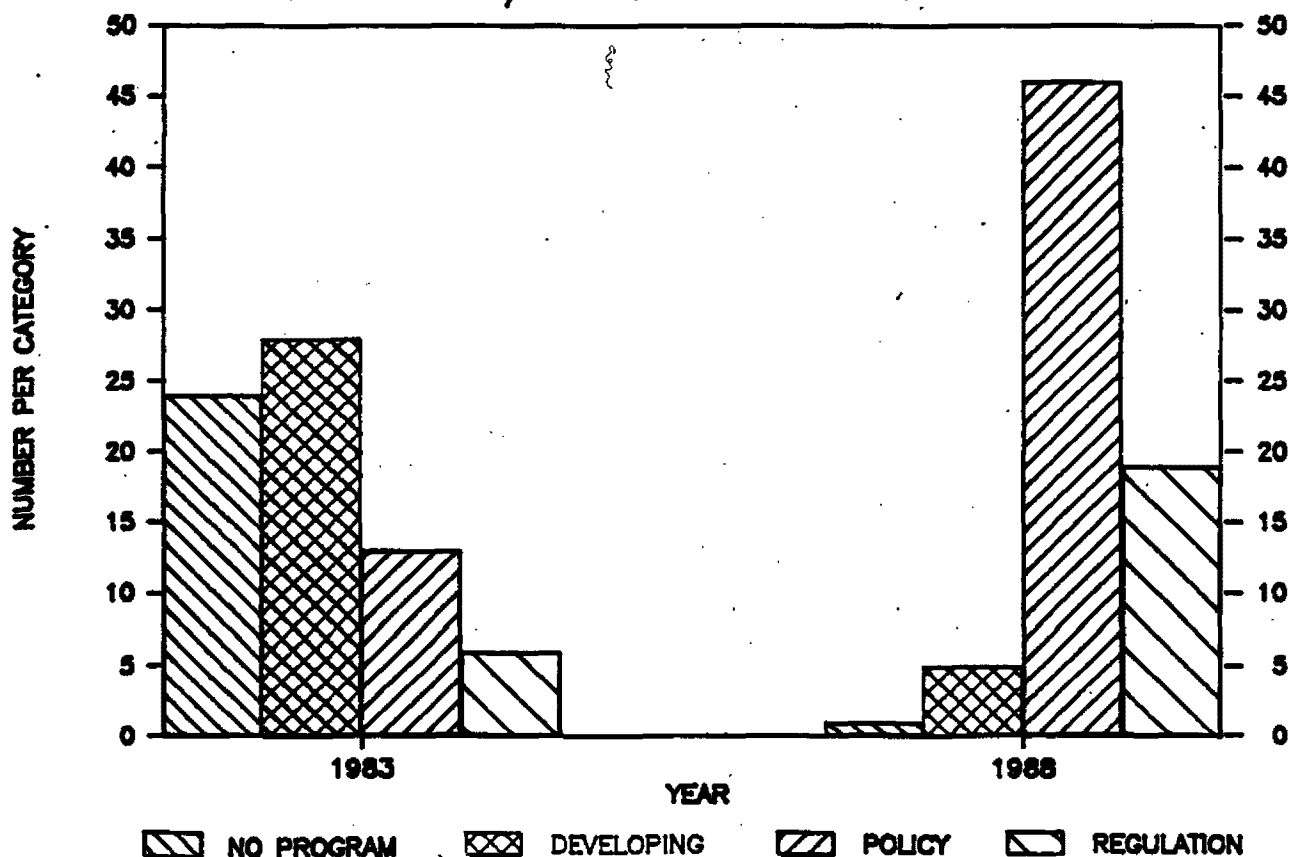
To achieve this goal the amount of Section 105 grant funds targeted to air toxics activity rose from \$3.0 million in 1985 and \$6.3 million in 1986, to \$10.5 million in 1987. About \$6.5 million of the air toxics grants are being focused on building state and local air toxics capabilities each year. This enhancement activity is the principal means to accomplish the overall goal. In general, this activity consists of setting grant priorities that: 1) promote the development of state and local programs that are responsive to both local air toxics concerns and to national priorities; 2) provide technical support to build necessary state and local capabilities; and 3) monitor the evolution of air toxics programs and measure their effectiveness.

During 1987, progress was made toward meeting this goal. Multi-year development plans (MYDPs) were encouraged to develop and conduct the above-mentioned activities related to the national strategy. These plans contain specific performance milestones established as part of grant negotiations. In response, EPA has now received 70 MYDPs from 48 states and 22 local agencies. In all, the amount of state and local program development has more than doubled since 1983 (see Figure 17). In FY 1989, EPA will continue to stress the implementation of previously accepted commitments, the adoption of new MYDP milestones by state and local agencies, and the integration of air toxics activities with ongoing particulate matter/ozone state implementation plan activities.

The monitoring and assessment of the magnitude of current exposures to air toxics in metropolitan areas is primarily a state and local responsibility. For 1987 and 1988, \$750,000 was directed toward support of these special analyses. Initially, 30 areas with populations over one million people have been targeted for some level of assessment. These efforts may include ambient monitoring, source/emission inventory analyses, and risk assessment. For example, 19 toxic air quality sampling sites in 18 urban areas are now collecting data as part of EPA's Urban Toxic Air Pollutant Sampling Program. In addition, analyses are being performed to further evaluate the seriousness of the urban air toxics problem in five selected cities. A data base analysis software package is being evaluated for use by state and local agencies for such purposes.

For 1986 through 1988, \$400,000 of Section 105 funds were targeted to implement certain national High Risk Point Source (HRPS) initiatives. Initial evaluation of the initiatives program suggests that it has been quite successful in accomplishing additional control. Approximately 70% of the cases resulted in more control. The program has also been popular with participating agencies. Fourteen of the 15 state and local agencies surveyed considered the program beneficial.

Figure 17  
DEVELOPMENT OF AIR TOXICS PROGRAMS  
AT THE STATE/LOCAL LEVEL: 1983-1988



## CHAPTER 3

### EPA's BUDGET AND SECTION 105 GRANTS PROCESS

#### Purpose:

This chapter discusses the annual budget development process and the subsequent development of policy guidance for the use of annually appropriated Section 105 grant funds. It is within this budget and grants development process that the demands of increased air program responsibilities and costs are reconciled with limited resources and competing priorities.

The chapter presents a generic 'cradle to grave' description of the grants process from the formulation of national program priorities to the final financial accounting of a completed grant year. The elements discussed are: the setting of national priorities including the development of operating and grants guidance; the allocation of grant funds to the Regions and from the Regions to its grantees; the negotiation of grantee agreements and the development of workplans; and Regional oversight and evaluation of grantee performance. This comprehensive description is provided in order to fully outline the variety of factors affecting the annual award of Section 105 grants to state and local recipients.

#### A General Description of the Process for Setting National Priorities

To understand and appreciate the complexities of decisions affecting the use of grants, it is first necessary to describe the EPA's planning, budgeting and management process of which assistance to state and local agencies is an integral component. It is within the budget process where national priorities affecting air grant program expenditures are formally initiated.

The Section 105 Air Grants process is a part of OAR's and budget development cycle. This budget/grants process encompasses actions carried out by various EPA offices, both within Headquarters and the Regions. For descriptive purposes, the process can be divided into four principal phases. These are:

- o Formulation of request for inclusion in the President's budget;
- o Congressional budget review and appropriation;
- o Development of operating plan and grants guidance; and
- o Implementation and oversight of state and local grant agreements.

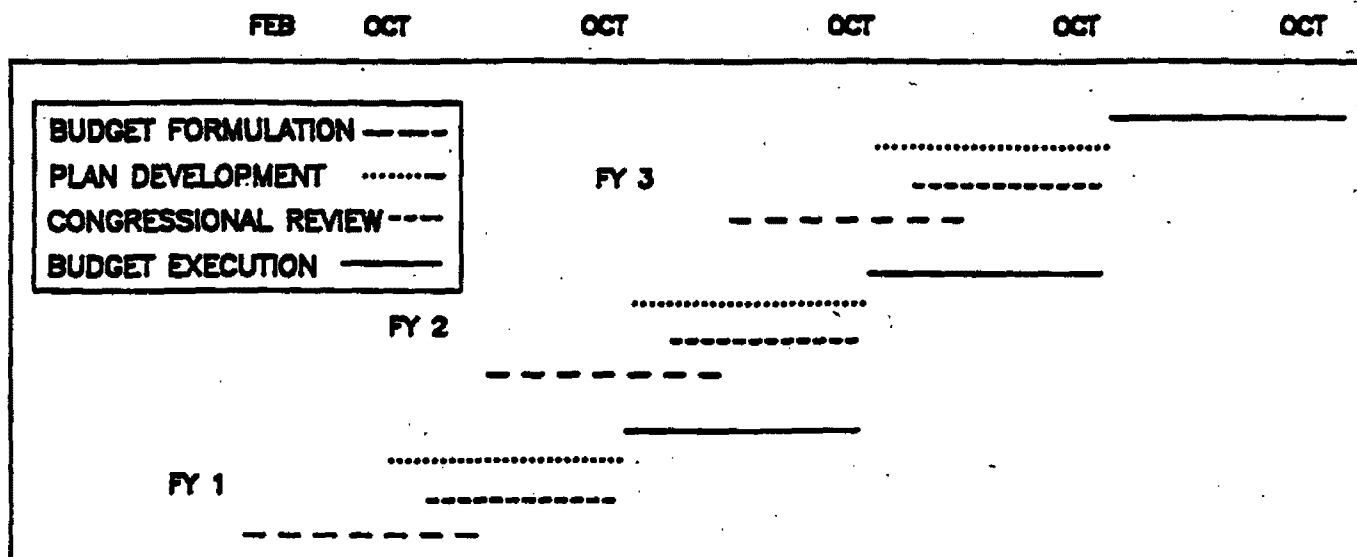
Inherent to the overall process is the continual feedback and adjustment of the EPA's priorities and programs.

### Development of the Budget

At EPA, budgeting for air grants, similar to other Agency resources, is a cyclical activity that begins well over two years prior to the start of a particular fiscal year in question and continues through the obligation and expenditure of funds. Due to the length and complexity of the process, EPA must work concurrently on as many as three annual cycles at once—a new cycle beginning before the preceding one has been completed (see Figure 18).<sup>4</sup>

In January of each year the President submits a proposed budget for the upcoming fiscal year which begins on October 1. EPA's portion represents more than a year's work and reflects extensive consultation within the Agency and with the OMB. EPA begins the formal budget development process in February of the preceding year and submits a proposed budget to OMB in early September.

**Figure 18 THE FOUR OVERLAPPING PHASES OF THE BUDGET PROCESS**



4. Appendix B outlines in more detail the life cycle of one grant year, in this case FY 1990, starting at the stage when that year's priorities are first formulated (late 1987), through to the point when a final accounting of the use of the funds is submitted (early 1991). From cradle to grave, this process may cover nearly 40 months.

Two Regional Offices are designated as the lead and the back-up Regions to represent all of the Regions' input to the development and review of OAR's budget and grant proposals. Recently, OAR took steps to obtain earlier input on its national program and grant priorities from both state and local agencies and the EPA Regional Offices. For fiscal year 1990 for example, several months in advance of the formal February initiation of the budget process, OAR held informal consultations with STAPPA-ALAPCO.

#### EPA's Spring Planning Meeting

Since 1985, senior Agency managers have held a three-day Spring planning meeting, an integral part of EPA's overall strategic planning process, to discuss plans and priorities for the coming budget development cycle. The exact format and direction of these meetings has varied each year. In FY 1990 for example, each program was asked to identify three to five priorities for inclusion in an Administrator's priority list. Recently, additional analyses in support of the planning meeting decision, such as the Regional Ranking of Environmental Priorities and the Comparative Analysis of Risk, have lent further credence to the high priority attached to air quality issues relative to other environmental concerns.

#### External Review

After the April meeting, usually in May, the Administrator and the Assistant Administrators (also known as national program managers) usually meet with external groups, such as STAPPA-ALAPCO and the State-EPA Committee, to discuss the results of the Agency sessions and to obtain further state input. After additional reviews with the program offices, the Administrator issues a refined Agency Priority List which provides advance notice to Headquarters, Regional Offices and states on where emphasis will be placed and as a focus for subsequent Agency budget guidance, and plan activities.

#### OAR Priority-Setting

OAR's own internal process for priority-setting for the Spring planning meeting and the subsequent discussions with the Administrator, involves numerous actors: the Assistant Administrator (AA), Deputy Assistant Administrator, Program Office Directors, Regional Office Division Directors, and Office of Program Management Operations (OPMO) staff. Detailed proposals for priority activities generally originate at the staff level of the program offices.

The AA considers the elements of the various program offices' submissions in light of their relative priority and the likelihood of available funds. The AA must then decide on the air and radiation

priorities for the upcoming fiscal year, including air grants funding, and defend this request, relative to other Agency priorities, throughout the remainder of the EPA budget process. The interactive process of request, passback and appeal continues throughout each level of the budget process.

#### OMB's Role

After internal Agency budget decisions have been made, the air and radiation program budget, including the Section 105 state and local assistance portion, is submitted to OMB, usually on September 1. While EPA interaction with OMB on the Section 105 portion of the budget has generally been routine, OMB may still raise issues on Section 105 assistance such as overall program effectiveness or funding alternatives.

OMB reviews the EPA budget and makes passback recommendations to the AA and the EPA Comptroller's Office. When OMB concurs on the OAR/Section 105 request it is included in the Administration budget which the President submits to the Congress in early January.

#### Budget Review and Appropriation by Congress

Congressional review of the EPA portion of the President's budget begins in late January or early February. While the focus of the review remains with the Appropriations Committees, many additional committees and subcommittees may be involved throughout the budget review phase. EPA managers are responsible for preparing back-up and briefing materials for Congress, briefing Congressional staff, and testifying at committee and subcommittee hearings.<sup>5</sup> Representatives of state and local air pollution control agencies may also testify at these hearings on the air grant request, as well as other parts of EPA's budget. Oversight hearings usually occur in March or April.

Normally when subcommittee and committee reviews are completed, an appropriations bill is approved by the House Appropriations Committee in May and sent to the House floor for approval, and then to the Senate in June. Since air pollution control involves politically sensitive areas, occasionally Section 105 matters are taken to the House floor.<sup>6</sup>

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5. These Committees or Subcommittees include: Senate Appropriations Committee; Senate Committee on Environment and Public Works; House Appropriations Committee/Subcommittee on HUD and Independent Agencies; and House Energy and Commerce Committee/Subcommittee on Health and Environment and Subcommittee on Oversight and Investigation.
  6. For example, the possibility of CAA sanctions for areas that could not meet the 1982 attainment deadline led to additional House prohibitions on EPA appropriations in June of 1983.

By September, a joint budget resolution should have been passed, followed by a HUD/Independent Agencies' Appropriations bill which would then be sent to the White House for the President's signature. The EPA Comptroller then receives a warrant from the Treasury Department and approved apportionments from OMB. The Comptroller then releases Advices of Allowance to OAR and the Regions. The Regions can then award Section 105 funds to those grantees with approved grant agreements.

For the past several years, however, Congress and the President have not been able to reconcile their budgetary differences prior to the beginning of the new fiscal year. In these cases, the Agency faces the cessation of its operations. Under a continuing resolution, the President authorizes interim authority for the Agency to incur a designated percentage of obligations and to release a limited amount of assistance funds.<sup>7</sup> In these situations the EPA Regional Offices, depending upon their recipients' needs and sound management practices, determine how to award this constrained level of assistance.

#### Development of the Operating Plan and Grants Guidance

As EPA begins one Federal fiscal year in October, it concurrently initiates a planning process for the following fiscal year. One of the major elements of this process is the development of the Agency's annual operating guidance. The operating guidance builds upon the results of the Agency's annual Spring planning session. It reflects OAR's priority activities and serves as the principal guide for the negotiation of grantee work programs and the allocation of grants.

The air and radiation portion of the operating guidance is assembled by OPMD, in consultation with the program offices and with input from the Regional Offices and representatives from state and local agencies. OPMD initiates the operating guidance process by distributing a draft guidance package in mid-October to the program, Regional Offices, and to STAPPA/ALAPCO. Contained in this package are the Deputy Administrator's call letter, the priority activities list, an overall operating and grants guidance development schedule, and a draft outline of the operating guidance.

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7. For example, in FY 1986 the Agency was authorized by the President to continue operations for 45 days into the fiscal year at 12.5%, or 1/8 of the Agency's FY-1985 resource levels.

Between November and February OPMD distributes draft operating guidance and a list of grants priorities to the OAR program offices, Regional Offices and STAPPA-ALAPCO. Following these consultations, by March 1, the Deputy Administrator conducts a final review of the operating guidance prior to its release and distribution. By mid-March a final draft of the grants guidance and Regional allocation is distributed for review by the Regional Offices and STAPPA-ALAPCO, with comments due by April. The final detailed grants guidance and regional allocation is generally released by early April. All supplementary program guidance from the program offices to the grant recipients must be given to the Regions by the first week of April.

While this schedule has generally been adhered to over the last several years, the potential for disruption and delay is ever present. For example, cutbacks in funding due to the Gramm-Rudman-Hollings budget deficit initiative delayed the release of the final FY 1987 grants guidance and allocation for four months. Because the operating and grants guidance are necessarily prepared six months before the Agency receives the approval of its appropriation from Congress, any changes Congress may make in the budget, particularly decreases or redistributions, can be problematic for the Programs, Regions and grantees. The timeliness of the issuance of program guidance is also a concern. In the past, guidance on air toxics and continuous emission monitoring have been released well after the issuance of the allocation memorandum. Late guidance complicates Regional-State relations and may necessitate the renegotiation of grant agreements.

#### Provision of Regional Guidance to Grant Recipients

As Regions receive the draft and final versions of the operating and grants guidance they forward this information to their state and local agencies. Regional Offices also begin their internal process for drafting their own Regional guidance and determining grantee allotments. This generally begins around January or February each year.

Headquarters and the Regional Offices have found that the guidance is most effective if all of the appropriate air elements (e.g., enforcement, monitoring, toxics, etc.) are involved in its formulation and review. For example, OAR has recently taken steps for FY 1989 to more effectively integrate the Compliance Program's own guidance and expectations into the formal guidance process.

The Regions normally involve all of their appropriate air elements in the formulation of Regional guidance as well as the review of grantee workplans and assessments of grantee performance. Some Regions do this informally while others utilize formal division-level review groups. Usually the Air Management Division compiles the various offices' input and integrates it into the Regional guidance.



Regional guidance and consultation with grantees may take one of several forms. Many Regional Offices have found it advantageous to hold early Spring meetings (April or May) with their state air and/or environmental agency directors to discuss the operating and grants guidance, grant priorities, planning targets and allocation rationale. States have appreciated this greater degree of openness.<sup>8</sup>

Many Regional Offices now also prepare a formal Regional guidance document or narrative statement of priorities. The Regional guidance typically includes: an interpretation and elaboration of the national operating guidance as it applies to individual states within the Region; applicable Strategic Planning and Management System (SPMS)<sup>9</sup> commitments; additional grantee-specific guidance outlining Regional priorities; current or prior year activities which must be completed; other problems, issues, or matters the grantee should consider or address during the preparation of the workplan; and any special needs or areas eligible for discretionary support.

#### Grant Principles and Policy Considerations

The Performance-Based Assistance Policy (PBAP), jointly developed by EPA and a committee of state environmental directors, was issued on May 31, 1985 in order to provide greater uniformity to the process of developing and managing Agency assistance agreements. The PBAP outlined mutual expectations and responsibilities for the negotiation, assessment and reward of grantee performance. The PBAP directed that the national priorities identified in the Agency's annual guidance be aggressively negotiated and quantifiably addressed in each grantee's work program and that overall grantee performance be tracked to ensure their accomplishment.

To effectuate this requirement, OAR targeted specific grant funds as high priority activities in FY 1986. Since additional funding was not forthcoming, a redistribution of a finite level of grant funds and a selective disinvestment of certain established activities became necessary. State and local agencies proposed to the AA that funding for high priority activities and the increasing costs of core program operations be balanced against the potential savings of completed activities and disinvestments.

8. The need for openness in the grants process was reiterated by a March 26, 1987 memorandum from the Director of OPMD to the Regional Air Division Directors. See also STAPPA-ALAPCO memo to J. Craig Potter, January 22, 1988.
9. The SPMS is an internal EPA management accountability and performance system utilized by Headquarters and Regional Offices to set goals, objectives, commitments and measure progress obtained in EPA operations. It is directly influenced by the operating and grants guidance requirements and as such is also of significance to grantees.

The AA responded by developing a set of principles for the allocation and use of Section 105 grant funds. These included:

- A continuation of EPA support for activities that constitute the foundation or infrastructure of the air program (e.g., inspections, enforcement, monitoring, etc.);
- The retention of EPA flexibility to adjust grants to address high priority activities, within certain limitations; and
- The acceleration of the process of priority-setting and allocation of grants with greater and more timely involvement of the Regional Offices and state/locals prior to the signing of the appropriation bills into law.

It was further agreed that approximately 8% of the national allocation could be targeted to annual priority activities and this would be subject to a maximum 3% reduction per Region due to any redistributions occurring.

While air and radiation responsibilities have continued to rise, funding levels have remained the same or decreased each year. This has severely tested the feasibility of strictly adhering to these allocation principles. The process and criteria for the allocation of grant funds has become the subject of heightened controversy and debate. This has also caused OAR, STAPPA-ALAPCO, and participating state and local agencies to initiate a study of the costs of operating state and local air agency programs referred to in the previous chapter. The study is intended to: better define how much is being spent on what activities, understand more quantitatively the resource impact of new programs, and assist in the identification of further disinvestment opportunities.

#### The Allocation of Funds to the Regions

The flexibility provided by the Act in allocating Section 105 grant funds has allowed EPA to consider more equitable and effective methods for meeting the various and changing mandates of the Act and the Agency's air management priorities. Historically, the national air program has been one of rapidly changing requirements and priorities with various approaches to allocation having been considered. Over the last 15 years allocation schemes have attempted to maintain a balance between: (a) providing an adequate financial infrastructure for state and local air control agencies; and (b) supporting important new EPA program initiatives.

Most EPA media programs apply a well defined, rather simple mathematical formula to allocate and distribute appropriated funds to the Regions and individual states. OAR employs a somewhat different approach due to the dynamic nature and history of the program. The CAA stipulated

that no state may receive more than 10% of the appropriation and that a minimum allocation of one-half of one percent of the appropriation should be made available to each state. The Act recommended three factors (population, actual and potential air pollution problems, and financial need) be considered in establishing regulations to award funds to grantees. The Act did not define or suggest relative weights.

Figure 19 concisely summarizes the variety of factors that have influenced Section 105 allocation decisions within Headquarters since 1971. The table lists the allocation year or years, the annual amount allocated, the allocation scheme or rationale used, the policy factors affecting the allocation scheme, and the priority funding areas.

#### Regional Approaches to Allocation to Grantees

After receipt of the Headquarter's annual grant allocation to the Regional Offices, each Region provides its grantees with an indication of their anticipated planning targets for the coming fiscal year. The planning target represents the amount of financial assistance which the Region recommends the state consider in developing its application and work program.

With the advent of the PBAP and subsequent guidance from OAR,<sup>10</sup> the allocation and negotiation process has tended to be more open with Regions fully explaining their approach for determining any proposed funding levels to their grantees.

While Headquarters allows the Regions to have full latitude in making their agency-by-agency funding determinations, the national allocation scheme and the individual program offices' goals largely influence the allocation rationale employed by the Regions. However, Regions still adjust the areas of emphasis for their grantees based upon the applicability of each high priority activity, any Regional environmental exigencies, grantee prior performance, etc. The Regions may also find it necessary to periodically revise their allocation rationales.

Generally, all Regions follow an approach of distinguishing base and high priority funding categories and dollars for their grantees. Only one Region does not differentiate its funds this way, preferring instead to have its grantees address high priority work as part of their ongoing base grant award. While the Regions place most of their emphasis on high

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10. See "Unilateral EPA Decisions on Use of Air Grant Monies," J. Potter to RAs, Nov. 3, 1986; and "Open Process on Regional Distribution and Use of Air Grant Funds," W.R. Cunningham to Regional DDs, March 26, 1987.

Figure 19

Section 105 Allocation Schemes Since 1971

<u>Fiscal Year</u>	<u>Amount per year</u>	<u>Allocation Scheme</u>	<u>Policy Factors</u>	<u>Priority Areas</u>
1971-1973	\$ 34 M to 50.6 M	Historic funding levels and policy factors.	Resource needs projected for 1970/71 SIPs and by state population and number of sources.	Emission inventories and SIP development
1974	\$51 M	Grant negotiation results based upon: 1) state population 2) number of manufacturing companies 3) number of motor vehicles 4) capital expenditures for manufacturing equipment 5) number of priority I regions 6) number of PSD areas 7) number of I/M areas	Same as above plus implementation of SIP activities.	SIP Implementation
1975-77	\$ 51.5 to \$ 56.5 M	90% same as FY74 with 10% distributed on the number of metropolitan areas required to develop maintenance programs	Given increased funding base level increases are allocated proportionately while high priority activities are distributively according to specific factors	Maintenance programs, SIP replanning
1978-79	\$ 75 to \$ 80 M	Zero based budgeting (ZBB) used for 20% of funds; increase over existing base for all grantees with additional 10 % to complex nonattainment problems	Survey to establish relative needs in base activities; increases allocated according to review of national priorities and development and use of specific allocation rationale and quantitative factors	CAAA 1977 responsibilities Pb SIP development, NE corridor data collection, Region 8 Indian Tribes, I/M
1980	\$ 82.8 M	Allocation increase based on national priorities and tasks	Increase in funds allocated to national priorities using specific regional quantitative factors	\$ 11 M for national priorities including 1982 ozone/CO SIPs and I/M
1981	\$ 87.7 M	Same as above with specific factors for distribution of annual allocation	For purchase of NAMS/SLAMS monitoring equipment, population of urban non-attainment areas used; proportional distribution of \$4.9 M for PSD and ambient monitoring facilities	\$ 12 M for ozone SIPs, anti-tampering & misfueling
1982	\$ 87.7 M	1981 levels maintained	Beginning of status quo \$ 105 funding levels	1982 SIP elements
1983	\$ 84.7 M	Regions distributed 97% of FY-1982 levels in same proportion to absorb a \$ 3 M reduction	One-time Congressional action to limit perceived forward funding capability within \$105 program; Proportional distribution of cuts	Follow up work on post-1982 ozone/CO policy
1984	\$ 87.7 M	Allocations return to FY 82 levels.	Regional allocations frozen	Post-1982 SIP efforts
1985	\$ 90.7 M	Allocation follows FY 82 levels with \$ 3 M addition devoted to state acid rain programs.	Inter-regional allocations used, additional awards reserved for stated high priority activity	State acid rain program development
1986	\$ 95.7 M	Reinstated practice of identifying specific priorities employing individualized allocation rationale	EPA Performance-Based Grants Policy issued, resume regional reprogramming and reallocation practice for high priority activities  Gramm-Rudman required 4.3 % budget reduction to be applied equally across all Regions	\$ 12 M ( 5 new + 7 reprogrammed) for priorities of air toxics, asbestos d/r, stack height SIPs, PM10 monitor purchase, anti-tampering; also do Class B VOC inventory
	\$ 95 M	\$ 7.25 M targeted and redistributed for new and changing priorities	After consultation with STAPPA/ALAPCO agreement was reached to limit redistributions to 8% of appropriations for this and future years	\$ 7.5 M for air toxics and ozone strategies
1987			Decrease due to regional redistribution limited to 5% maximum for any one region	
	\$ 93.3. M	2% general grant reduction due to Gramm-Rudman; done proportionally to effect state/local grantees equally	Criteria for cuts Included: - consultation with STAPPA/ALAPCO - limit environmental impacts - minimize effects on regional grant allocations made - minimize effects on state/local core activities. - no additional interregional redistributions	Ozone, CO, PM10, SO2 air toxics
1988				

Source: "Air Grant Allocations"; August 17, 1987; Draft Paper by Greg Glahn; OAQPS.

priority activity, base funds are still very much subject to negotiation. Grantees have indicated that identifying a base funding level allows them to plan and staff their programs with a greater degree of confidence and consistency.

Each Regional Office differs in how it determines its allocation of grant funds to its individual recipients. Discussion of several different approaches follows.

Example 1

Upon its receipt of the annual grant priorities and allocation memo from the Assistant Administrator, this Region takes its total Regional allocation and deducts that portion or percentage to be attributed for special purposes and any agreed-upon national level-of-effort contracts including any support for STAPPA-ALAPCO. The remaining balance is the amount available for distribution to the grantees for base and high priority activities. No other funding is to be held in reserve for competition among grantees.

The Region then takes each grantee's traditional percentage of the Region's total available funding (which has been developed over time using the historical allocation criteria), and multiplies this times the balance to allocate funds per grantee for their base and existing priority activities.

The Region then examines the annual allocation memo content and determines if each of the redistributive high priorities indicated will take place within the Region during that fiscal year. The Regional Office eliminates from high priority consideration any activities that will not be conducted by any of the Region's states. For those activities to be conducted, the Regional Office differentiates whether this activity occurs as either a base or a redistributed high priority activity. This step is necessary since it is possible that an EPA high priority activity maybe already being carried out as part of a grantee's base program.

After determining its applicable high priority activities, the Regional Office distributes the high priority funding amount allocated to it by the AA's annual allocation memo. Since it is normally the case that there is not enough high priority funds available to perform all high priority activities at their optimum level some of these activities must be reduced, eliminated, or further disinvestments must be extracted from base activities. The Region distributes the funds within each high priority category by grantee, according to a variety of factors including: the population affected, number of sources agency need and capability, overall equity, and other appropriate considerations. The Region provides an explanation of its allocation approach during early meetings with State Directors and staff prior to the initiation of the formal grant negotiations.

### Example 2

Another Region allocates its portion of the grant funds on the basis of a combination of traditional and pure performance-based approaches. Once the Region receives its Regional allocation from Headquarters, several adjustments are made. These include: an apportionment of funds for Indian Tribes, a set aside to cover the costs of anticipated federal promulgation activity; and funds for national-level contract assistance activity agreed upon by all the Region's grantees (e.g., support for STAPPA-ALAPCO and the purchase of equipment filters).

The Region makes several more adjustments to effectuate the performance aspects of its allocation approach and to allocate the funds for national high priority activities designated by Headquarters. It apportions 10% of the total Regional allocation for redistribution among grantees based on state workload needs in designated major program areas where increased demands or inadequacies are apparent. A maximum percentage limitation is placed on the amount of funds that may be reduced from any of the states' total allocations, however.

The Region also apportions another 5% of the Regional total for allocation to grantees on a performance-criteria basis for several priority areas. Performance funds are targeted to grantees on the basis of their historical funding percentages. Grantees must then meet a series of qualitative and quantitative measures of performance with the degree of achievement tied to the award of a particular percentage of the grantee's targeted funds. Any undistributed portion of the performance allocation is returned to the Region for redistribution.

The Region also places a limitation on the percentage of funds that may be carried over. Previous year's funds in excess of this limitation are pooled and then redistributed to all the grantees on a proportional basis for the following fiscal year.

### Example 3

This Region must accommodate grantees with fiscal and grant periods which vary from that of EPA. To do so, the Region has a two-stage allocation. The first stage is in July to coincide with the start of the state fiscal year and generally covers base program activities. The second is in November or December and addresses national high priority activities and any other necessary adjustments. This staged allocation is necessary because the development of grantee workplans and applications occurs prior to the finalization of EPA's Operating Guidance in March. Regional guidance to the states in this instance is sent in January rather than April.

The Region considers any recommended allocation targets and the annual allocation amount released by Headquarters in its April guidance memorandum. The Region apportions 95% of the total Regional allocation for base activities among its grantees on a historical basis.

When new fiscal year funds are received in November or December the Region initiates its second phase allocation, awarding the remaining 5% of the funds (or the percentage equal to the high priority amount identified in the Headquarters annual allocation memo) along with any carry over, to the grantees to address the new national high priority performance activities.

Proposals received from states are viewed and approved based upon conformance with the performance-based allocations. Proposals which address legitimate emergencies and shortfalls are also reviewed and acted upon at this time. The Region's grantees play a unique role in this aspect of the allocation process. A committee of representatives from the Region's four state agencies and two major local agencies reviews each of the grantee proposals for use of the high priority funds. The committee ranks those projects according to their relative merit and benefit to the region. While the Region retains and occasionally exercises its veto power, the committee's selections generally coincide with national priorities.

#### Other Considerations in the Allocation of Funds to Grantees

In addressing base program and national priority objectives during the allocation of grant funds there are several additional factors each Region must consider: statutory limitations on assistance award amounts and percentages, special grantees, and special assistance and contract support. These are discussed below.

##### (a) Maximum and Minimum Amounts Allowed for Grantees

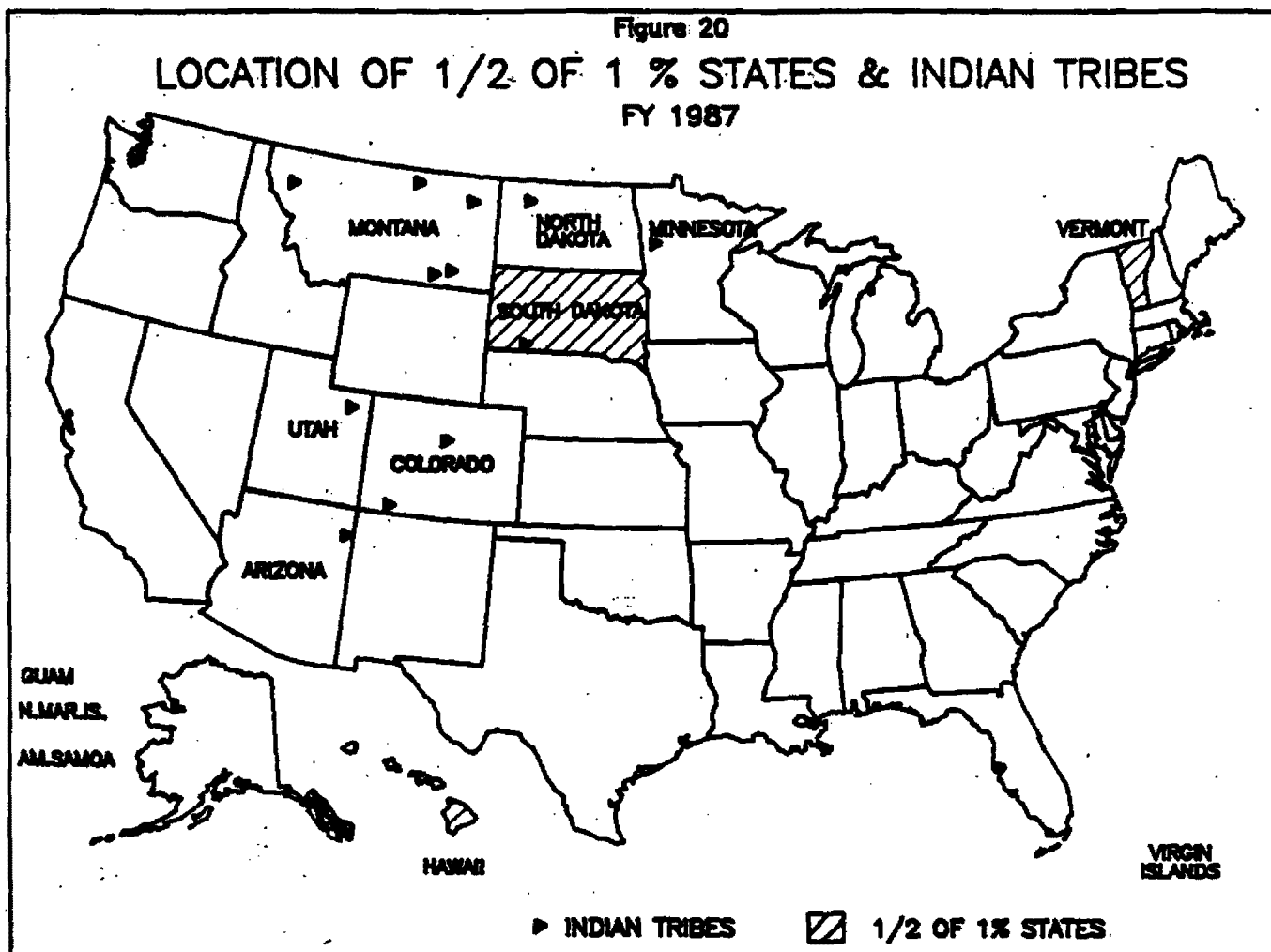
Section 105(c) states that not more than 10% nor less than one-half of 1% of the total annual national Section 105 allocation shall be granted for air pollution control programs in any one state. While this obviously puts a cap on the total amount of assistance the more populated and problem-plagued states can receive the primary concern of this provision is that EPA must make available to the smaller grantees at least one-half of 1% of the total national allocation.

While this 1/2 of 1% is a minimum allotment it is not an automatic entitlement. In order to qualify for this level of funding the state must: (1) submit an approvable grant workplan indicating that all of the funds applied for will be utilized for legitimate Section 105 purposes by the grantee; and (2) meet the requirements for the non-Federal percentage contribution contained in 105(a) and maintenance of effort in 105(b).

Whether a state is a one-half of 1% recipient cannot be determined until its assistance agreement and award amount are approved. If a state has an agreement approved for the receipt of less than one-half of 1% then the balance of the one-half of 1% allotment can be redistributed by the Region to the other grantees or for other appropriate purposes. When funding is limited and a grantee, which formerly had not utilized its full one-half of 1% allotment, applies for and receives the full amount, this has the effect of reducing the 105 allocations of the other grantees.

(b) Indian Tribes

Several Regions also award grant support to Indian Tribal governments to carry out air pollution control efforts on their tribal lands. Recently the number of Tribal requests for assistance have been increasing. Locations of one-half of 1% grantees and Tribal recipients are shown in Figure 20. Indian tribal Section 105 grants have generally focused on training, monitoring support, and other preliminary air program development activities.





In November 1984 EPA issued a policy for administering environmental programs on Tribal lands. The principal tenet of the policy is the recognition of Indian self-government and the establishment of an EPA - Tribal governments relationship. EPA's Office of Federal Activities coordinates the Agency's Indian Policy for all of the media programs, including OAR.

Prior to the issuance of EPA's Indian Policy, all Section 105 support was provided for training to assist various Tribal governments in air quality monitoring and enforcement. Since 1985, 11 tribal air pollution agencies have demonstrated adequate authority to develop air quality programs and have been awarded air program grants. In FY 1988 the total amount of Section 105 Indian funding, awarded for both training and air program development, was \$731,000.

Since Federal law or Tribal laws control Indian reservations, state law is generally inapplicable to Indians on Indian reservations. Accordingly, SIPs are not enforceable against Indians on Indian lands. Nevertheless, states are free to work out cooperative agreements with tribes. The State of Montana, for example, has conducted extensive air program evaluation and has provided technical support to Indian tribes.

(c) Special Assistance

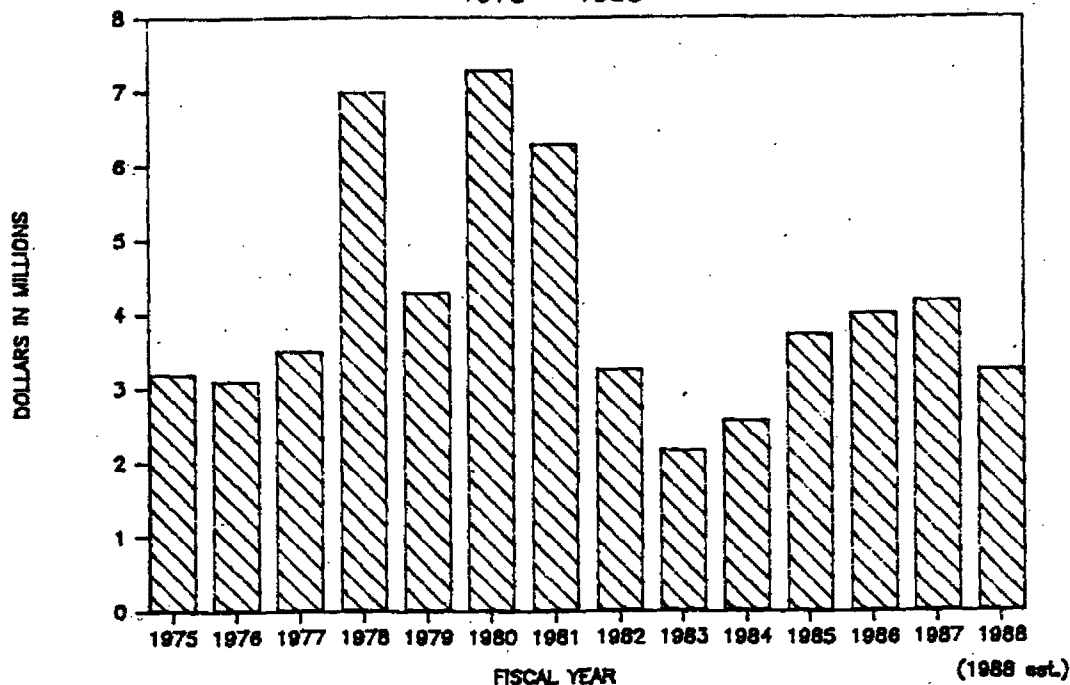
Grant recipients may also use a portion of their allocated grant funds for special assistance activity provided by EPA in the form of interagency agreements, university, and other training grants and level of effort (LOE) contractual assistance. This has been particularly helpful for recipients faced with unfamiliar air pollution problems without the appropriate staff expertise, and insufficient time or resources to carry out the needed work.

From 1979 through 1987, nearly \$50 million, or about 5% of that period's total allocation, had been obligated through the special contractor support mechanism. Support levels were greatest in the years immediately after passage of the CAAA of 1977. Recent levels have been lower and can fluctuate depending upon the certainty of the priorities to be carried out (see Figure 21).

The mechanism for this assistance is through national LOE contracts maintained by OAQPS and administered through EPA certified project officers in the Regions and Headquarter's program offices. National LOE contractors offer ready accessibility and state of the art expertise.

During grantee negotiations the Regional Offices will consult with their grantees on the nature and degree of contract assistance required. EPA and the recipient may agree on the work, the recipient may request it or EPA may unilaterally identify the need for contractual assistance to do the work.

Figure 21  
SPECIAL 105 ASSISTANCE (LOE) TO GRANTEES  
1975 - 1988



Funding of an LOE contract item is done through direct transfer of a portion of the recipient's Section 105 grant to EPA or through a special Section 105 set aside account maintained by the Regional Office. A recipient may select a contractor's support through the Regional Office by submitting a request for services in the form of a task order. After detailing the number of hours of assistance required or the scope of services, the LOE request can be processed in a short time span.

In the past, EPA has also unilaterally targeted a portion of the overall Section 105 allocation for use in support of national LOE contracts intended to benefit all grant recipients. These included: group rate purchase of sampler filter paper, support to the STAPPA-ALAPCO Secretariat, codification of SIPs, emissions and compliance data handling, acid rain sampling, special toxics monitoring, and special ozone studies. In many cases, state and local agencies were able to achieve significant economies of scale on equipment purchases made under national LOE contracts.

However, as grant funds have grown more scarce, state and local agencies have questioned this EPA practice. Currently these funds are no longer unilaterally held back by Regional Offices. As part of its grant agreement each recipient must now identify its contractual projects and the amount of grant funds to go to the national LOE effort. Grantees may also request transfers of funds during the grant period, of course. Appendix C summarizes how each Region handles its LOE assistance with its grantees and a typical schedule for the targeting of such activities.

### Grant Negotiations

Negotiated Section 105 assistance agreements must address national environmental goals while promoting and sustaining effective state and local programs. Since there will always be disagreement on the best way to achieve this, grant negotiations will remain one of the more controversial aspects of the Section 105 grant management process.

As we noted earlier, the PEAP, effective in FY 1986, was jointly developed by EPA and the States to provide a more consistent Agency-wide approach to administering assistance agreements, including their negotiation, oversight and resolution. The policy retains considerable flexibility for Regions to tailor assistance agreements unique to each grantee.

Just as each Region's environmental concerns, Region-specific guidance, and allocation schemes vary, so do their approaches to grant negotiation. The variations have grown less distinct over the last several years, particularly in the areas of negotiation schedules, sharing information with grantees, and required work program elements. This section discusses these aspects of the negotiation process as well as: work program format, assistance limitations, State-EPA Agreements (SEAs) and consolidated grants, varying grantee budget periods and treatment of local pass-through agencies.

### Schedules

With the exception of those situations where grantees are on different award years and those Regions utilizing the SEA process, the schedule for negotiation, submission and approval of assistance agreements and grant workplans is relatively uniform. Regions forward final operating guidance in March and Regional guidance and grantee planning targets in April or May. Early May meetings occur to discuss the upcoming requirements with detailed negotiations beginning in June. Consultation occurs throughout the period of July and August when grantees submit draft workplans. The Regions generally approve workplans in August or September.

### Negotiations Approach

While negotiation schedules may be relatively uniform, negotiation styles vary according to a variety of factors. These include: historical Federal-state relationships, variance in Federal and state priorities, management personalities, staff capabilities, past grantee performance, and perceived EPA funding leverage vis-a-vis the grantee's contribution. These factors tend to: (a) influence the degree of prescription each Region feels is necessary in negotiating with its grantees, and (b) moderate the influence that guidance developed at the national level will have on negotiations.

Since the advent of the PBAP, the majority of Regional Offices are seen as being more accessible in work plan negotiation. Nevertheless, while the more timely receipt of operating and grants guidance and a greater precision in expectations, commitments and outputs may facilitate grantee tracking and evaluation, this cannot eliminate all potential disagreement in the negotiation process.

After EPA and grantee senior management discuss the annual guidance and priorities, agreeing on specific program objectives, their staffs proceed in drafting the details of the grant work plan. Some Regional Offices use their Regional guidance to fashion either a generic work program, a narrative or a priority list common to all grantees, and then add sections specific to each grantee's situation. This product is then transmitted to the grantee via hard copy or on a computer disk. The grantee can then review and modify this product according to its priorities and concerns and return it to the Regional Office.

#### Grant Work Programs

Section 35.130 of the October 12, 1982 State and Local Assistance Regulations states that the work program or work plan, as part of the application for financial assistance, is the basis for the management and evaluation of performance under the assistance award. The work program should focus on what products are to be accomplished and not simply on how the grantees' air program operates.

The work program must specify: the work years and amount and source of funding estimated to be needed for each program element (including state match and level of effort); outputs committed to under each program element, including any outputs required under an authorization or delegation agreement; a schedule for accomplishment of the outputs; and an identification of the agency responsible for each of the elements and outputs. Outputs should be measurable commitments, reflective to the extent possible of real environmental results, and expressed in terms compatible with EPA information systems. Work programs should also reflect a grantee's past performance.

While all grantees meet the minimum work program content requirements, there is a wide variance in work program formats and their level of detail both within and among all the Regions. Some Regions provide their grantees with relatively standardized formats to fill out each year, reserving some portion for grantee specific information. Other Regions are content with different grantee formats as long as the necessary information is included and the requirements are met. Many grantees use their work program formats as internal management documents in an approach consistent with their overall state operating procedures.

Pursuant to changes brought about by the October 12, 1982 regulations, and with the effectuation of the PBAP, grantees were also requested to describe in their work program the full range of air activities they carry out aside from those funded with Section 105 funds.

#### Performance Conditions

During the negotiation process the Region may identify certain circumstances, which require that some limitation be placed upon the grantee's receipt of a portion of its total allotment. These circumstances may include: fulfillment of previous unmet commitments, likelihood of refusal of a required activity, fulfillment of predetermined performance criteria,; prolonged past poor performance, or inability to assume responsibility for a required activity. In these cases, the Region will first attempt to negotiate a resolution of the performance issue. If a resolution cannot be reached, the Regional Office informs the grantee of the nature of the limitation. Approaches to grant limitations may include the following techniques:

- (a) set aside - withholding that portion of the Section 105 allocation for use by EPA or a LOE contractor for an activity that is required by litigation or statute that the grantee refuses or is unable to do, and for which EPA is likely to have liability to promulgate;
- (b) scheduled disbursement - scheduling the release of funds targeted to a required activity but only after the grantee accomplishes certain objectives or conditions;
- (c) performance award - allocation after demonstrated performance according to predetermined criteria where the quantitative award level is tied directly to quantitative or qualitative measures of performance;
- (d) grant conditions - usually, formal grant conditions are used to highlight the necessity of meeting general administrative or fiscal requirements associated with the receipt of federal assistance.

#### Substituted Activities

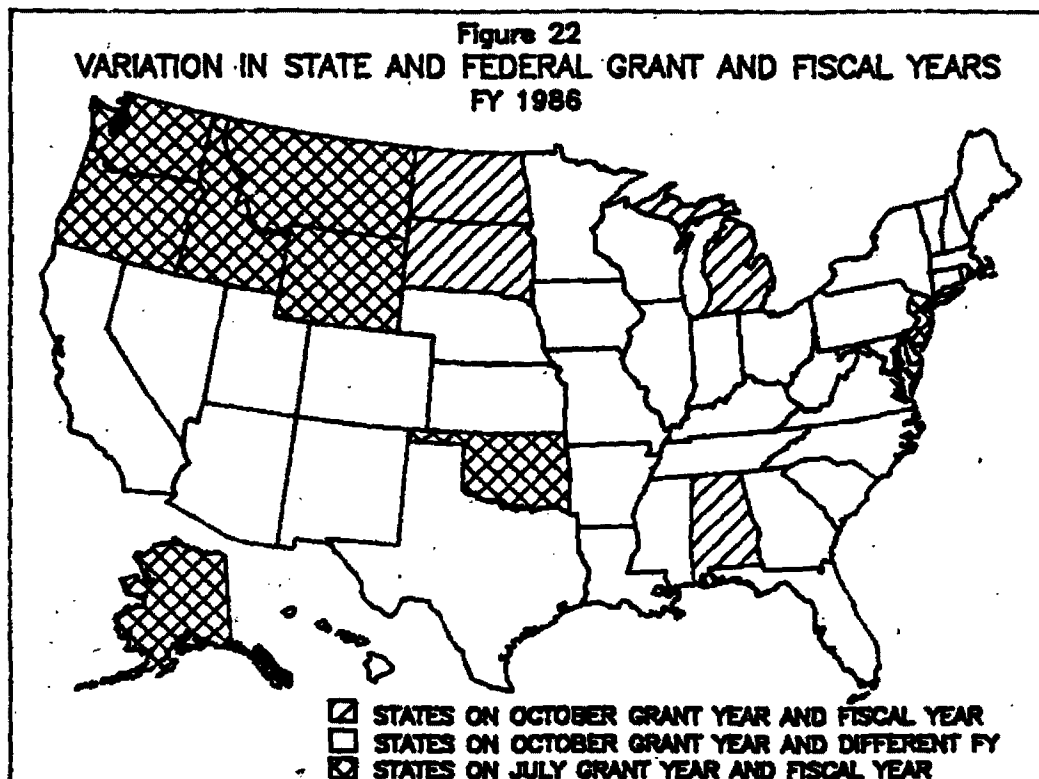
Pursuant to the PBAP, if a grantee declines to commit to a high priority activity in deference to another area or activity which it determines will produce greater environmental benefits, then this activity may be appropriately substituted with Regional concurrence. The appropriate mix of national, state or local priorities will vary from work program to work program according to the unique features of each grantee's air program. Regions exercise their judgement in negotiating what combination of activities will provide the greatest environmental benefit with those resources available after addressing EPA's national priorities.

### Negotiations and the State-EPA Agreement

Some Regions and their grantees manage their environmental programs according to a SEA approach, which stresses a formal consolidation of assistance activity across all environmental media programs. Under the SEA approach, Section 105 is but one of as many as eight assistance programs whose processes must be coordinated to produce a timely, integrated assistance work program. For those few Regions where the air grants process is subordinate to the SEA, delays in one media program's negotiation potentially may delay the award of funds for the others. Therefore, under the SEA approach, each program has an added degree of pressure to resolve its negotiations. Additionally, personnel from offices other than Air can directly influence air negotiations.

### Varying State and Local Budget Periods

The State and Local Assistance regulations (40 CFR 35.135) allow a grantee to choose their budget period in consultation with and subject to the approval of the Regional Administrator. Of the 50 states, the District of Columbia and two territories, only four states operate on the same grant year and budget year schedule as EPA. Forty-one states and territories operate on a different fiscal year than EPA but operate their Section 105 grant program on the basis of EPA's October through September schedule. Eight states have different fiscal years and grant periods (July through June) necessitating that the Region accommodate their schedule (see Figure 22). This means that the issuance of operating and Regional grant



guidance to states and locals, the negotiation and review of individual grantee work plans, and the tracking and documentation of grantee performance must be accommodated at different times for different grantees during the course of the Federal fiscal year.

#### Pass-Through of Grants

The enactment of the 1970 amendments to the CAA established the major framework for the SIP process. States were given the primary responsibility for the implementation of most of the regulatory requirements of the Act. Since that time, the states have increasingly played the major role in both planning and carrying out the majority of air pollution control activities, including the principal recipient role in the air grants process. State responsibilities were reemphasized and expanded in the 1977 amendments of the Act. In most Regions, EPA involvement with grantees in implementing the Act and managing the grants process centers on the state air agency as the primary responsible entity. However, local agencies still play a significant and important role, as evidenced by the 1977 Act amendments and with the emergence of many of the newer environmental problems which are particularly evident at the community scale.

No significant increase in the number of air quality agencies has occurred in the past decade and none are anticipated. One possible exception is the expected increase in the number of Indian Tribal governments receiving air grant support. Other limited exceptions may include the increased involvement of certain local agencies in implementing mandatory automobile inspection/maintenance programs and the support of local agencies in certain areas where a state is not willing, capable, or best suited to carry out a major regulatory program.

Numerous states and several Regions have developed and are employing mechanisms for the pass-through of air grant funds from the state to the local agencies in lieu of a direct EPA grant. This has been done to increase coordination within a state and improve the efficiency of the entire grants process. Currently, approximately 72 local agencies and Indian Tribes receive direct grant funding from EPA under Section 105. Additionally, nearly 50 other agencies receive pass-through funding. Regardless of the funding mechanisms employed by a Region for support of local agencies (direct or indirect), it is critical to the effective use of limited grant funds that the responsibilities of the Region, the state, and the local agencies be clearly defined and documented in the grant work plans and/or the state/local agreements required by the air grant regulations.

## Program Evaluation and Performance Resolution

### Regional Approaches to Grant Evaluation

Requirements and guidance for the evaluation of recipient program performance are contained in the Agency's Regulations on State and Local Assistance (40 CFR 35.150), the EPA Policy on Oversight of Delegated Programs (April 4, 1984), and the National Air Audit System guidance.

Pursuant to these requirements, each Regional Office, in consultation with the grant applicants, has developed a process for evaluating the recipients' performance. The Region includes a plan and schedule for the evaluation of performance in the assistance agreement. The plan outlines the scope of the review and the areas to be focused upon by the Regional Office. The plan should identify at least one on-site review per year, detailed performance measures (specific measurable outputs of acceptable quality) due at particular milestones, and grantee reporting requirements to EPA.

The Regional Office evaluates recipient performance and progress towards completion of the outputs contained in the approved workplan according to the schedule in the assistance agreement. The Regional Office may also examine other aspects of a grantee's program (procedures, processes, policies) to identify problems and their solutions. The Region provides the findings of its evaluations to the recipient and includes them in an official assistance file. If the evaluation reveals that the recipient is not achieving one or more of the provisions of the assistance agreement, the Region first attempts to resolve the situation through negotiation. If agreement is not reached, the Region may pursue additional corrective action and may impose any of the sanctions in 40 CFR Part 30 and, for grants awarded on or after October 1, 1988, 40 CFR Part 31.

### Tracking Progress

Each Region's evaluation process varies but common to most all Regional Office is: (a) the tracking of a recipient's programmatic progress on a quarterly basis, and (b) a formal evaluation of performance conducted during a mid-year or end-of-year review on-site with the grantee (see Figure 23).

Regions and grantees usually use the work plan section containing the commitments, outputs and milestones as the basis for quarterly tracking. Regional Offices tend to focus their attention primarily on high priority items and areas where grantee performance has been lagging. Grantees submit quarterly progress reports which are then reviewed against the workplan commitments and the Region's working knowledge of the grantee's



## Figure 23

Element	REGION									
	1	2	3	4	5	6	7	8	9	10
Monthly meetings w/grantees		X		X		Periodic	Periodic	When possible	X	
Quarterly tracking and reporting	X	Computer-Based	X	X	Emphasis on 2 & 4 qtrs; Tracks NRRS deficiencies	X	X	X	X	Computer-Based
Quarterly RO internal staff meetings					X					
Emphasizes continual rather than quarterly over-sight					X		X			X
Mid-year on-site evaluation	X	X	X	X		X		X		X
Mid-year report	X	X	X	X		X		X		X
Uses mid-year results to influence upcoming year negotiations	X		X		X	X		X	X	X
End of year on-site evaluation		On occasion		Varies from once every 1-4 years	PV 1 Results inspect PV 2	X	X		X	EPA Operations Offices conduct
End of year report	X	X	X	X		X	X	X		X
Internal RO Tracking System for Senior Management Review								X		X

progress. Many Regions send 'tickler' letters and status reports reminding grantees of upcoming outputs due or commitments missed. The PBAP indicates that states (also meaning all similar interstate and local grantees) are responsible for notifying EPA in a timely manner of problems they experience in trying to accomplish their outputs. Similarly, EPA is responsible for promptly notifying grantees of their inability to supply any promised support.

In addition to tracking grantee performance quarterly, the majority of Regions conduct formal mid-year or end-of-year on-site evaluations with their grantees. This evaluation is agreed-upon as part of the assistance agreement and grantees are usually prepared in advance for this review. The evaluation is usually preceded by an internal EPA staff review to brief the evaluation team and involves the Air Division Director, Branch Chiefs, EPA state project officer, grant coordinator and representative staff from other air office elements such as enforcement, monitoring and planning. Representatives from the grants and financial management divisions often attend these meetings, as well.

#### On-Site Evaluation

Depending upon senior management's degree of involvement and the availability of resources, the evaluation team may consist of the Director, Branch Chief, project manager and other air office element staff. This team will usually visit each grantee for a period of two to four days. The team will review accomplishment of commitment outputs and cover areas such as: compliance status and data files, SIP accomplishments, rule adoption, delegated program status, etc. The review usually focuses on high priority objectives.

The review is meant to be as constructive as possible. Areas where further EPA assistance is required may be identified. The Regional Office follows-up the evaluation with a letter outlining its findings and identifying corrective actions the grantee must take prior to the close of the grant period. Some Regions will incorporate the results of a mid-year review into the discussion of the subsequent fiscal year's assistance agreement since those negotiations may be occurring concurrently.

Regional Offices also conduct an end-of-the-year evaluation which usually takes the form of a written report documenting overall progress on any necessary correction noted by the mid-year assessment. This is also forwarded to the grantee. A notice of the availability of the evaluation results is to be made available to the public pursuant to 40 CFR 56.7.

### National Air Audits

Regional Offices also conduct program audits of state and local agencies as part of the National Air Audit System (NAAS). National air audits were initiated in FY 1984 to identify obstacles to state or local agency effectiveness and to help EPA more appropriately refine its national program. The audit system was developed jointly by representatives from state and local governments and EPA, and initially covered the program areas of air quality planning, new source review, compliance assurance, air monitoring, and motor vehicle inspection and maintenance. The publication of national NAAS guidance by Headquarters and the conduct of the audits occurs no more frequently than biennially.

The audits are conducted on-site at state or local agency offices by teams composed primarily of Regional Office personnel. The audit usually includes: a preliminary meeting with key agency staff to discuss audit goals and procedures; a discussion of the individual audit area questionnaires with the applicable personnel; a review of agency files to verify implementation and documentation; and an exit interview with the state or local agency management to discuss the preliminary results.

Individual state or local agency audit reports are then drafted by Regional staff and reviewed by the audited agency. The Regional Office makes any necessary changes and returns the final to the audited Agency. The audited agencies are expected to initiate actions necessary to address the problems identified in the audits. EPA uses the individual state reports as a basis to prepare a national report and to review and adjust its priorities and resources to better support state and local needs, and achieve national environmental goals. Some Regions do use the occasion of annual grant negotiations with their grantees to follow-up on the deficiencies identified in their national air audits.

### Performance Resolution

When a Regional Office's evaluation uncovers a performance problem and determines its cause, EPA and the grantee must act on those findings and take corrective action. Regional Offices generally assume a constructive, cooperative posture in working with grantees to establish remedial strategies. The quality of EPA grantee staff relationships is an extremely important determinant in the resolution of performance issues. Short of the imposition of sanctions, Regional Offices may take such corrective actions as: providing technical assistance, training or additional resources, increasing the number and/or frequency of reporting and oversight requirements, requesting a shift of state resources, or otherwise renegotiating the assistance agreement (see Figure 24).

**Figure 24**  
**REGIONAL APPROACHES TO IMPROVING**  
**GRANTEE PERFORMANCE — FY 1987**

Approach	1	2	3	4	5
Adjusted schedule of award for serious performance problems	X	RO can use obligation authority to limit LOC drawdowns			X
Conditioning of subsequent year funds for previous nonperformance	X	X	X	RO escalates before taking action	X
Use of carry-over (unobligated) funds	Unobligated funds without justifiable purpose go into a competitive pot	Incidence of unobligated funds is infrequent	Used to fund high priority projects through supplemental pot	Carry-over discouraged with limitation on X; if amount is significant competitive proposals entertained	Grantees allowed a maximum of 4%; any excess is redistributed
Set-aside of funds for failure to accept delegated program or high priority activity (for use by IPA and/or its contractor)		Utilizes set-aside particularly for unmet asbestos work			Set aside estimated EPA expenses necessary for FIP or contractor action
Workload and performance allocation					X
Forward funding	X	X	X	X	
Phased allocation to accommodate grantee fiscal years		X			

Figure 24 (cont.)

6	7	8	9	10
X				X
X	Does not withhold based funds; may condition receipt of supplementals	X	X	X
RO retains carry-over and exercise its discretion in reward	Discourages carry-over; excess is subject to redistribution	Discourages carry-over of funds	Prior to PBAP, took 20% of allocation for competitive proposals; now considering use of supplemental incentives	Carry-over not included; uses S/L Advisory Committee to assist in awarding high priority and excess funds
Formerly withheld larger % of funds but now constrains carry-over and LOE funds		X		X
X				
				X

One of the major intentions of the PBAP was to establish a constructive approach to the resolution of performance problems. It established procedures for the escalation and resolution of disputes involving grant negotiations and performance in an attempt to avoid the imposition of sanctions. OAR issued more detailed procedural guidance implementing the PBAP resolution provisions on December 1, 1987. The procedures emphasize the resolution of grant disputes at the lowest possible level. If necessary, the disputed issue is raised through the management hierarchy of both the grantee and the Regional Office until the matter can be resolved. If not resolved, the Regional Administrator contacts the State Environmental Director or other appropriate official, in an attempt to reach agreement on the corrective action and to discuss any contemplated sanctions. The Regional Administrator may also advise the AA and, if necessary, the Governor.

As with corrective action, any decision to impose a sanction is based on the Region's particular experience with a given grantee. The Regional Administrator determines when a problem may be significant enough to warrant such action and the appropriate type of sanction to apply. Sanction options available to EPA are detailed in the agency's General Regulation for Assistance Programs (40 CFR Part 30) and include: stop-work actions, suspension or termination of agreement for cause, agreement annulment, other appropriate judicial or administrative actions, restrictive disbursement schedules both for current and conditioned future award years, and withholding of payment.

The AA also issued OAR's Policy and Procedures for Withholding Grant Funds on June 19, 1987. The policy covers several major withholding situations: recovering funds already awarded, withholding grant awards for past performance, withholding funds for failure to accept a high priority activity, and withholding funds for failure to accept a Regional priority. The Regional Offices prefer not to have to impose sanctions and generally apply those which only defer that portion of funds for the activities in question until the matter is resolved.

The Region must also see that the responsibility for any state environmental program dealing with national requirements continues after the imposition of a sanction, and must take steps to see that crucial program operations are sustained and required outputs completed. Under Part 35.155, this may entail the withholding of funds from a grantee to cover EPA's costs for having to carry-out a Federal program required by law in the absence of an acceptable state program in that state.

Under 40 CFR 30 Subpart L, and for grants awarded on or after October 1, 1988, 40 CFR 31 Subpart F, formal procedures for resolution of disputes concerning assistance agreements and review of the imposition of

grant sanctions are detailed. These procedures provide the opportunity for a grantee to document the grounds for any objections to the imposition of a sanction, and for EPA to review its decision and address the state's objections on the basis of a written record.

#### Performance Incentives:

Pursuant to the PBAP, when a grantee fulfills their commitments or demonstrates exemplary performance, EPA should take steps to acknowledge these achievements at the conclusion of the evaluation or the assistance agreement period. One of the most effective mechanisms available to EPA to do this is through publicizing state or local program success. Those successful grantee actions which should serve as model practices are often highlighted by Regional Offices.

EPA can also institute other rewards for grantee achievements as appropriate and available. These include reduction of grantee oversight, reporting and inspection to the minimum necessary for effective national program management, and the offering of financial incentives such as supplemental funding or greater flexibility in project funding.

#### Grantee Financial Integrity: Statutory and Administrative Requirements

In order to receive or continue to receive Section 105 air grants all recipients must satisfy certain statutory and administrative requirements. All recipients must maintain financial management systems that consistently apply, accepted accounting principles, and practices that ensure accurate, complete, and current accounting of their financial transactions. Adequate records and supporting documentation must be maintained showing the source and use of all funds, and actual versus budgeted object class amounts. Records must be accessible to EPA for audit purposes. Organization-wide audits must be conducted at least every other year and a systematic approach to resolving audit findings must be in place. All recipients must periodically report their progress and are required to supply financial status reports which close-out the award for each grant period.

These requirements are detailed in the provisions contained in EPA's General Regulation for Assistance Programs (40 CFR 30); and Section 311(a) and (b) of the 1977 CAAA. The more prominent provisions are briefly outlined in Figure 25 on the following page.

Figure 25  
Selected Statutory and Administrative Requirements  
Affecting the Section 105 Air Grant Program \*

<u>Citation</u>	<u>Content</u>
CAA, Section 311 (a), (b)	(a) Record-keeping for audit purposes (b) EPA and Comptroller access for audit purposes
40 CFR 30 410	Allowable costs (OMB Circular A-87)
412	Proper use of direct/indirect cost rates
501	Record keeping and retention requirements
502	EPA access to records
505(a), (b)	(a) Progress reporting (b) Financial status reporting (SF-269)
510	Sound financial management system based on accepted accounting principles
525	Treatment of program income
Subpart H	Grant closeout
I	Noncompliance measures
J	Deviations
40 CFR 35 205	Maximum Federal share:
210(a); (b)	(a) Annual maintenance of effort (b) Nonsupplanting of non-Federal dollars
215	Limitations: (a) Ability to develop a comprehensive SIP (b) Intergovernmental consultation (c) Public hearing on disapproval, termination or annulment

\* Does not reflect changes of new 40 CFR 31



In addition to general administrative requirements for grants assistance EPA and its recipients are subject to statutory and regulatory provisions specific to the Section 105 air grants program. These are contained in Section 105 of the CAA and are detailed in the Agency's regulations for State and Local Assistance in 40 CFR 35. Other regulations dealing with financial assistance are covered 40 CFR 32 (Grants Disbarment and Suspension), 40 CFR 45 (Training), and 40 CFR 46 (Fellowships). A new, 40 CFR 31, effective October 1, 1988, superseded certain EPA general assistance regulations contained in 40 CFR Parts 30 and 33.

#### Maintenance of Effort

It was the intent of Congress that sound air pollution control programs be established and maintained by state and local governments and that states should progressively assume more programmatic and fiscal responsibility for this effort. To assure this, Congress included requirements that the non-Federal financial level of effort be continually maintained or exceeded, and that Federal funds not supplant non-Federal funds which would otherwise be used. Congress also recognized that some flexibility should be afforded recipients in meeting these requirements because of changing economic circumstances and occurrences in costs, and that none of these provisions should penalize the recipients.

The MOE requirement contained in Section 105 (b), and further discussed in 40 CFR 35.105 and 205, requires that a recipient not decrease its annual non-federal level of recurrent expenditures from the preceding fiscal year's level. Recurrent expenditures are defined as those expenses associated with a continuing environmental program. All expenditures, except those for equipment purchases with a unit acquisition cost of \$5,000 or more, are considered recurrent unless justified by the applicant as unique and approved as such by the Regional Administrator in the assistance award.

If a grant recipient inappropriately decreases its annual non-Federal level of recurrent expenditures, the Administrator is directed not to award the grant to the recipient for that year.<sup>11</sup> The only time a reduction in a grantees MOE is allowable is when the Administrator, after notice and opportunity for a public hearing, determines that a reduction of the grantee's matching contribution for the non-Federal level of effort is attributable to a nonselective reduction in expenditures of all executive branch agencies of the applicable unit of government.

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11. See "Clarification of Section 105 Maintenance of Effort Requirements"; OPMD and GAD; September 12, 1988.

### Financial Status Reporting

Regional Offices must assure that their grantees' assistance levels and project expenditures are documented in final, end-of-year grantee financial status reports. An end-of-year FSR is required no later than 90 days after the close of the applicable grant period. In its final FSR the recipient must settle its financial account for any funds which are unexpended, payable to EPA or disallowed. Use of program income must also be resolved. A FSR is not considered final until all obligations are liquidated. While FSRs purport to account for all grantee transactions, FSR amounts are not absolutely verifiable without a detailed financial review or audit.

### Auditing

Responsibilities and procedures for audit of recipients of EPA financial assistance are spelled out in Chapter 38 of EPA's February 10, 1986 Assistance Administration Manual.

EPA is authorized to audit the financially assisted activities of any of its recipient organizations. While it is Federal policy to place major reliance on a recipient's own audits (as long as they are carried out in accordance with applicable Federal audit standards) EPA may request any additional audits it feels are necessary to assure a grantee's financial integrity. The award official may request an audit as a prerequisite to making an award of assistance, during the active project period, following its completion, or for continuing program grants such as Section 105—following an annual budget period.

The Office of the Assistant Inspector General for Audits provides, arranges and/or monitors the audit of EPA's financial assistance activities. EPA award officials must submit requests for audit of state or local government recipients directly to their Divisional Office of the Inspector General (OIG). The OIG determines overall audit priority on the basis of available resources and apparent need. Regional Administrators and Assistant Administrators are the principal action officials for audit matters. They must work with the OIG in conducting, responding to, and resolving audit matters including the collection of disallowances from recipients.

Recipients are responsible for having an A-128 organization-wide ("single agency") audit conducted at least every other year. These audits must be independent, i.e., the auditors must be separate and independent of the recipient organization being audited. An organization-wide audit is a broad audit of a recipient organization that covers all Federally assisted

projects and activities. The A-128 is intended to minimize Federal presence while satisfying individual and collective audit requirements of all Federal agencies. However, its depth and scope are not adequate to track special terms and conditions characteristic of a continuing environmental program nor does it provide the level of detail necessary for examining specific accounting transactions and funding use. More detailed audits may be necessary. The OIG may also monitor the adequacy of the A-128 'single agency' audits.

The Grants or Financial Management Division of EPA Regional Offices also conducts financial and compliance audits. These determine whether the financial statement of the audited recipient fairly reflects the true financial position and results of financial operations; whether the recipient has complied with applicable laws and regulations; and whether claimed costs are allowable. Direct cost rates, internal control and procurement systems may also be audited. The Regional Air Management and Grants Administration Division may also conduct joint or concurrent evaluations of grantee programmatic and fiscal performance interrelating the results of each to form a comprehensive assessment and approach for resolution of deficiencies.



## CHAPTER 4

### CRITICAL REVIEW OF THE 105 PROCESS WITH SUGGESTIONS FOR IMPROVEMENT

#### Purpose

Whereas Chapter 3 provided a description of how the 105 grant process operates this chapter provides a critique of the present program and process based upon extensive interviews held with each Regional Office, the primary program offices, and approximately 20 state and local agencies. General findings and suggestions for improvements are also incorporated. The discussion is organized around six areas: (a) Regional Office organization, (b) priority-setting, (c) grant negotiations and work programs, (d) allocation of funds, (e) program evaluation and grantee performance resolution; and finally, (f) a brief discussion highlighting noteworthy practices and procedures carried out by the Regions and their grantees.

#### Regional Office Organization

Some Regions have reorganized their air program operations within the last several years. As part of that reorganization, numerous Regions strengthened their grants management and oversight functions reflecting the increased attention being devoted to productivity and fiscal integrity.

The functional arrangement of Regional air grant operations has been shaped by a variety of factors. These include: the volume and proximity of grantees, the presence of local agencies, the degree of reliance upon the State-EPA Agreement process, and senior air management preference. Generally, those Regions with a greater number of grantees have project officers or grants coordinators for each of their grantees. These personnel usually serve in an 'umbrella' capacity coordinating, informing and consulting with Regional technical staff and Grants Administration on grantee operations. Several of the smaller Regions rely upon a grants coordinator within the Air Program to work with individual grantee project officers, air technical staff and Grants Administration staff. For those few Regions relying primarily upon the SEA approach, the roles of other offices in the management and administration of grants and grant issues, namely the Grants Administration Division and the Policy and Management Office, are more pronounced.

Regional grants coordinators and project officers have stressed the importance of senior Regional management involvement to encourage not only grantee productivity but improve horizontal and vertical staff communication and enhance morale. In general, we found that the most productive

Regional grant programs were those where senior management took an active interest in grants issues and viewed grant program requirements as strategic leverage in accomplishing air program objectives. Grants may play less of a role in influencing grantee performance in some Regions, however, since the balance of the Federal-state relationship may be dependent upon larger factors (i.e., the degree of self-sufficiency of the state or local program).

Above all we found that the interpersonal, negotiation and technical skills of the Regions' air grants staff had much to do with the degree of grantee cooperation and productivity. Both Regional and state and local personnel interviewed echoed this observation. All Regions strive to avoid and resolve grants disputes at the lowest possible level, of course.

#### Determination of Program Priorities

Generally speaking, EPA's priority-setting has largely been influenced by considerations of the extent of various environmental problems and prevailing popular and legislative perceptions. Correspondingly, individual media and program offices promote those program areas with high visibility and the potential to sustain continuing levels of resource support.

However, in 1986 EPA embarked upon a comparative analysis of overall environmental and human health risks associated with over 30 types of problems. The analysis showed that the relative order of risk did not coincide with how the Agency was expending its resources and that several air pollution problems ranking high in risk were not receiving funding support commensurate with that risk.<sup>12</sup>

For the Air program, constraints on funding, and the absence of a clear legislative mandate for emerging areas, have limited the ability to target state and local assistance funds to all of the highest risk program areas. Within present statutory limitations, however, the Air program has targeted funds to the highest priority problems according to the largest extent of the population affected by the greatest degree of risk.

There is general agreement on broad program priorities among Headquarters, the Regions, and state and local agencies. Differences that arise center on the degree of emphasis afforded each competing priority and a discontinuity in sustaining a financial commitment to them. This discontinuity often occurs because there is inadequate funding for an expanding list of priorities that may vary from year to year.

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12. See "Unfinished Business: A Comparative Assessment of Environmental Problems", Overview Report; February 1987; U. S. Environmental Protection Agency.

### Regional Critique of the Priority Setting Process

While Headquarters can only do so much in pursuing additional funding or updated legislation, it has made extensive efforts to better explain the myths, realities and complexities of the priority-setting and allocation process to Regions and to state and local agencies. When the Air Resources Study interviews first began over a year ago, many respondents indicated they did not understand how national priorities were set or how to influence them. Some indicated they misunderstood the Agency's Spring planning meeting to be the initial step in the discussion and formulation of priorities rather than the media programs' affirmation of them for the Administrator. OAR's internal priority-setting process actually begins well before the Administrator's annual Spring planning meeting.

Headquarters has also taken steps to more intimately involve the Regions in discussions on workload allocations, development of operating and grants guidance, and the inclusion of Regional priorities. While Regions have indicated that there are more formal opportunities for their input, some feel their role is confined to consultation and not of direct influence. This criticism is applied to much of the Agency's decision-making, and reflects the inherent organizational tension created by EPA's highly decentralized Regional Office and centralized Headquarters' policy-making office structures. While there is validity to the Regional criticisms, program offices maintain that ultimately one decision point must be responsible for issues affecting the entire country. This "tension" can be anticipated to continue particularly in times of competing priorities and limited resources.

From Headquarters standpoint the lead region concept has facilitated Regional input in the area of budgeting and grants. Working with one representative entity has been much simpler administratively than dealing with ten. Some Regions noted weaknesses in the approach, however. They were not critical of the particular Regional Office in the lead but rather the overall effect of further delimiting an individual Region's direct influence. It was observed, however, that a Region's influence was proportional to its activism and that the lead region approach did not constrain any Region from making its point. Nevertheless, several Regional Offices felt that a majority Regional Office position was always needed in order to alter Headquarters thinking. It was observed that being the lead region for grants was, at times, a resource intensive task. One suggestion was that the Regions and OAR consider providing additional or pooled FTE compensation for a lead region involved in a particularly demanding program area.

### Views on Programmatic Emphasis

In addition to concerns about the process for priority-setting, Regional Offices had specific criticisms about programmatic areas of emphasis and the subsequent targeting of Section 105 funds. For example, several Regions commented that the Air Program is constantly in a reactive mode rather than a preventive one. Emphasis and resources tend to be concentrated on correcting nonattainment problems and not on prevention or maintenance. Criticisms pointed to slippage in the NSR program, consideration of PSD as a possible disinvestment, and a redirection of resources needed for the tightening of current SIP regulations to other priorities. Several Regions perceived an inherent bias in allocation decisions towards large urban nonattainment areas. As a result, 'clean' areas experiencing growth may be more likely to slip into nonattainment status. Some state and local agencies commented that areas like growth and land use planning, indirect source review and other preventive and maintenance strategies, receive no consideration in allocation decisions. As a result, some grantees direct a portion of their non-105 resources to support these activities.

It was apparent in some Regions that, given limited funds, by necessity among the first areas considered to be cut or deferred were maintenance and prevention activities. EPA has taken some recent steps in this area, however (e.g., by bolstering its new source review efforts).

Several Regions indicated that a problem like  $PM_{10}$ , which occurs in some but not all of the Regions, was not being given adequate consideration because it was not a national issue. Since those criticisms were first raised,  $PM_{10}$  activities have been funded in five of the Regions. However, questions remain as to whether differing state and local requirements could be better met with a more extensive regional tailoring of a portion of the national allocation priorities.

It was also suggested that program priorities and targeting of resources reflect those programs with the largest environmental payoff. Some Regions were already doing inter- and intra-program analyses of comparative risk at their own levels in order to better determine how to allocate Regional resources, given current constraints.

### Concerns About Changing Role and Purpose of the Section 105 Program

Regions were not only concerned with how Section 105 priorities were set but also with how the overall identity and purpose of the Section 105 program might be changing, given the change in fiscal circumstances and the potential shifts in Federal and state responsibilities. The Air Program has accepted the concept of an offset equation - that additional work and



increased operating costs must be offset by increased funds or disinvestments, but the Air Program was still perceived by Regions and grantees as sending dual signals that both the base program activities and all high priority activities need to be accomplished.

The disinvestments initially suggested were seen as a having been achieved or falling far short of freeing up the necessary amount of funds to enable a meaningful undertaking of new responsibilities. Further changes have given the Regional Office some additional flexibility but have raised questions as to whether the expanded redistribution of funds to high priority activities threatens air program "infrastructure" activities. As a result some Regions, which had argued for flexibility, have demonstrated a reluctance to allow a withdrawal from activities which they consider essential to ongoing program operations. Grantees, likewise, have demonstrated an opposition to suggestions for disinvesting in areas which are highly visible, popular or mandated at the state or local level.

Various limitations to the disinvestments approach have been pointed out. For example: (a) program offices, while recognizing the need for disinvestment, have still insisted that all their requirements be met; (b) disinvestments are not allowed across major program areas (i.e., from enforcement into planning) thereby severely constraining the utility of the approach; (c) there is no overall Headquarters coordination of the disinvestments approach; (d) there is no logical comparison of suggested disinvestment cost savings to the costs of new activities; (e) the easiest cuts have been made making further choices extremely difficult; and (f) there are unnecessary distinctions made between certain "base" and "priority" activities (in areas like ozone) which distort allocation decisions.

The whole issue of redistribution has prompted some within the Air Program to raise fundamental questions as to what the Section 105 program should focus on and what it can accomplish. Should it focus on maintenance of the base? On promoting high priority objectives? On providing technical assistance or enforcing existing requirements, etc.? Many respondents expressed a hope that the joint EPA/STAPPA-ALAPCO analysis of the costs of state and local air operations could provide additional insight to help answer these questions.

#### Grant Recipient Critiques of Priority Setting

We found variation in state and local agency reactions to the disinvestments concept. While some of the state and local agencies interviewed felt that EPA needed to be more precise in defining specific programs, others favored wide latitude in negotiations with their Region. Most felt that disinvestments needed to be redistributed across and not simply within program element areas.

We also found that when EPA and the grant recipient failed to agree on certain technical and policy issues emanating from new responsibilities, or from current problems like continuing widespread ozone nonattainment, this policy dispute was transmitted into the grants arena negatively creating additional tension in grant negotiations.

Some grant recipients felt that provisions for consideration of state substituted control strategies and measures were not taken seriously by EPA. Some respondents, including some Regional Office staff, still feel the priority-setting process is too heavily EPA oriented.

State and local agencies indicated that, generally, 105 funds directed to high national priorities have only been at a threshold level and have not been adequate to support the development of a substantial control program. They also indicated a reluctance to commit significant state and local funds to activities which did not have a clear national mandate, or to which EPA had not defined its program direction. Several agencies complained that high priority funds and supplemental grants were used to spark a state's involvement in one grant year but EPA priorities would change the next leaving the state with this effort solely as its responsibility.

Many of the state and local agencies interviewed also did not understand how the process for setting national priorities transpires. While most agencies agreed that national priorities paralleled their own, some exceptions were noted. In the western portion of the country, a view was expressed that there is bias towards large urban areas ozone non-attainment problems at the expense of pristine and developing areas, and problems more prevalent in the west like  $PM_{10}$  and carbon monoxide.

Most all state and local agencies felt the overall grants process was more open, with more opportunities for their input, and a greater EPA receptiveness to their views.

Most, but not all, recipients rely upon STAPPA-ALAPCO to represent their views on national air issues. Pursuant to the Federal Advisory Committee Act, EPA always avails itself to a variety and balance of views. For example, several grantees, while welcoming the mechanism of the State-EPA Committee, felt it could be better utilized. They felt the Committee members need to be equipped with more detailed briefing materials, on a more timely basis, so that more meaningful discussions can be held with the States prior to consultations with EPA. State and local air agencies must also make a concerted effort to see their views are adequately transmitted through their state administrative hierarchy to the Committee.

Some states noted that, with the EPA's lack of a specific mandate for a national control program in emerging areas like air toxics, the Air Program has turned more towards the provision of technical assistance and guidance, and the encouragement of state and local agency initiatives and

participation in information clearinghouses. Several agencies also suggested that if states were being asked to be the proving ground in emerging areas then they should have a greater partnership role in consulting on the development and conduct of EPA's research agenda.

One of the most crucial concerns of state and local agencies is program continuity and the certainty of funding. Respondents remarked that EPA's marginal redistributions at the national level can have more profound impacts at the recipient level, particularly in smaller agencies. Most agencies cannot hire or retrain personnel or shift resources as rapidly as EPA Headquarters envisions. Grantees indicated that it may take an additional one to two years before grantees are in a position to adequately respond to a modification in national priorities or a redistribution of resources. To overcome this problem, respondents have urged that OAR adopt a more formalized multi-year approach to the planning and programming of its activities. This issue is discussed in more detail in an ensuing chapter.

#### Allocation Of Grant Funds

In the past, the allocation of grant funds, particularly Headquarters allocation to the Regions, has been one of the more controversial and least understood of all grants topics. In the last several years, OAR has taken numerous administrative steps to not only more fully explain allocation decisions but to more actively involve Regional Offices and grantees in the development of priorities and distribution factors.

Both before and after the advent of the PBAP, the Air Program differentiated its national Section 105 allocation according to base and high priority funding, redistributing the funds accordingly.<sup>13</sup> In previous years redistribution has not been a significant problem since it has occurred in years of a net funding increase. Recently with a decreasing or stable level of funding, redistribution has meant: (a) taking from the base amount to fund high priorities, or (b) annually shifting dollars within a high priority on the basis of a change in strategic or geographic emphasis. This has resulted in some Regions experiencing a net loss of grant funds and exacerbated the problems perceived with the current approach.

Even minor adjustments of dollars can cause some difficulty. For example, one year Regional allotments were announced with rounded totals. One Region proceeded to inform grantees of their target allotments based on this rounded total. When the actual total was finalized it was slightly less than the original target. The Region then had to go back and inform its grantees of the necessary reduction, many of which were already operating at the margin.

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13. See August 3, 1984, G. Emison to J. Hidinger; and July 11, 1984 H. Laing to J. Cannon memoranda.

### Allocation Scheme

Allocation of funds is not an easy task as the Regions themselves have discovered. Several Regions noted that they had recently reexamined their own grantee allocation schemes and had encountered difficulties in reconciling the results of a logical analysis with pragmatic considerations of grantee equity, need, and performance. Criticisms of the allocation outcome depend on whether the Regional Office or the grantee sees itself as a winner or loser. There will be winners and losers in any readjustment of the allocation scheme (given the same level of funding) and the outcome of any readjustment is uncertain. As a result, Regional Offices have shown a reluctance to tamper with the status quo.

Headquarters faces these same dilemmas. The 1974 scheme was logical for its time period (see Appendix D) but the validity of several of the factors used in the 1974 rationale has diminished and several others are duplicative. Nevertheless several Regions maintained that, to confidently reflect the air quality conditions of the 1990s, a comprehensive reanalysis of the allocation rationale was necessary. Increases in recent years have been allocated on the basis of individualized rationales and quantitative distribution factors. Some Regions have noted that the current allocation approach:

- o does not adequately account for multi-regional scale, though not nationwide, problems;
- o targets funds to the most populated areas at the expense of growing areas or "threshold" attainment areas and not on the basis of the problem in the Region as a whole; and
- o does not target funds on the basis of the degree of grantees' capability to produce results transferable to other less well-equipped agencies.

Despite a lack of consensus on this issue, some Regions have recommended that the allocation scheme reflect more Regional Office input, be updated regularly, and have any resulting changes gradually phased-in. Some Regional Offices are also concerned with statutorily imposed factors affecting Regional allocations to grantees. These include: limitations on the maximum and minimum allowable percentages of the total national grant allocation available to any one grantee; maximum allowable Federal funding percentages for planning versus maintenance types of activities; and funds for Indian Tribal governments.

### Maximum and Minimum Percentages for Grantee Allotments

Ten percent of the national allocation is the maximum amount allowable to any one state. None of the larger states receive more than 6% of the total national appropriation. While some of these states could request up to the 10% level, awarding any one of them such an amount would cause immediate disruption to the other grantees. These larger states generally fund their programs at a much higher non-Federal funding percentage than do the rest. If the statute was modified to reduce the maximum percentage available to any one grantee to 5%, then two or three states would be affected. At a maximum 4% level, eight states would be affected.

As we noted earlier, the statute requires that at least one-half of 1% of the overall Congressional appropriation for state and local assistance be made available to each state for application purposes. When funding is limited and a grantee which had formerly not utilized its full one-half of 1% allotment now applies and qualifies for its full allotment, this has the effect of reducing the funds available for allocation to other grantees. This "natural" reduction to the other grantees can occur independent of a Region's policy decisions on allocation of its overall allotment. Since 1985, the number of states not utilizing their full minimum allotment has decreased from six to three.

Still the one-half of 1% is not an entitlement. The grantee's assistance application must merit the funds and must be appropriately matched. EPA also has the authority to reduce a state grant below the one-half of 1% level if the state's work program is inconsistent with the priorities detailed in EPA's guidance.<sup>14</sup>

### Negotiation of Assistance Agreements And Work Programs

#### Schedule

Most all respondents indicated that the expedited schedule for the development and dissemination of operating and grants guidance has been a noticeable improvement in facilitating grant negotiations. However, since development and release of operating and grants guidance precedes Congressional mark-up and appropriation by several months, any further acceleration of the guidance would increase the possibility that its content would not match the eventual appropriation's purposes. This would necessitate additional renegotiations and adjustments.

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14. See OGC memo to OPMD, "Reduction of the State of Vermont's Air Program Grant," September 19, 1986.

A grantee requires at least a minimum of two full months (from the receipt of the annual grants guidance and allocation memo) to negotiate a work plan acceptable to it and to EPA. Grantees cited the receipt of late supplemental guidance (post-April 1) from Headquarters program offices, (including items emanating from SPMS requirements) as problematic to grant negotiations, particularly to grantees on different fiscal years, and not in keeping with the principles laid out by the PBAP. Regional Offices were placed in a difficult negotiatory stance with their grantees when air toxics and continuous emission monitoring guidance was released late in FY 1986. However, this was primarily attributable to a late Congressional mark-up and appropriation.

There is now a relatively predictable, uniform schedule for dissemination of guidance, conduct of negotiations, and signing of grant agreements, nationwide. Exceptions to a timely process are: major delays in receipt of the Congressional appropriation, delays resulting from significant EPA-grantee work program disputes, and where a grantee is on a different grant period than EPA.

The acceleration of the operating and grants guidance has had only a minimal impact on Regions with grantees on different grant periods. Depending upon the Regional Office, variances in EPA and grantee grant periods can complicate grant negotiations and oversight of performance. Regions which accommodate the grantee's grant period must split their fiscal year allocations and must anticipate or work on the basis of a draft of the operating and grants guidance. Some Regions, to better assure EPA high priorities will be met, have formalized the supplemental release of funds at the point at which EPA and grantees grant periods can converge. While varying fiscal or grant years do not appear to be a major problem, there is great potential for complication in the negotiation, funding and tracking of necessary program commitments. A Regional Office's oversight capability, particularly of larger grantees, is diminished when required to work "between years" with anticipated or draft requirements which may continually need to be revised.

Several Regions' grant negotiations are subordinate to the State-EPA agreement process which uses a consolidated assistance agreement. Depending upon the Region, delays in negotiation and resolution in one media can delay the entire award. In the case of a potentially lengthy delay, the Regional Administrator may allow unilateral media awards to be made.

#### Balance of Views in Negotiation

Reflecting the impact of the PBAP, negotiations between Regions and grantees have been more cooperative. This includes the mechanics of the process, explanation of and comment on allocation rationales, and negotiation of realistic outputs. Some Regions view the PBAP as having simply reinforced and legitimized their approach to grantee negotiations.

Despite the PBAP and the Section 301 Regional consistency guidance, the tenor of negotiations varies both across Regions and within Regions; from grantee to grantee. This is due to a variety of factors such as: historical state-Federal relationships, past grantee performance, perceived federal funding leverage, personalities, and staff capabilities. The PBAP recognized that air quality control program approaches vary widely and left latitude for flexible interpretation and application. While EPA Headquarters outlines broad grants policies, procedures and requirements, it is the Regional Offices, by necessity, which effectively manage the grant program and provide guidance to recipients on what needs to be accomplished.

With these considerations in mind, EPA has produced grant guidance intended to foster uniform and equitable treatment of grantees, including the withholding of grant funds and the escalation and resolution of grant negotiation and performance disputes.<sup>15</sup> This guidance complements grant regulations and grant requirements currently in place.<sup>16</sup>

#### Resolution of Differences

The Regional Offices prefer to resolve grant work program negotiation disputes at the lowest possible level. Only a small percentage of the total amount of grant dollars available are ever subject to dispute (usually less than 1 to 3% per Region).

Some states indicated their influence on grants and program priority matters was greater now than three or four years ago. Other recipients, and some Regional Office staff, still feel the negotiation process is too EPA-oriented particularly in light of the decreasing percentage that the Federal 105 contribution constitutes. While a certain amount of natural intergovernmental tension can be expected in areas where priorities and recommended approaches may vary, a lack of Federal direction in some program areas, combined with a changing balance in relative percentage contribution, exacerbates this situation. On the other hand numerous respondents, including grantees, also commented that EPA had every right to expect results oriented performance from its grantees since Section 105 is not an entitlement program and the environmental priorities of the grantees normally parallel those of EPA.

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15. See "Procedures for Resolving Grant Negotiation Issues"; J. Craig Potter to Regional Administrators; December 1, 1987.

16. EPA Grant Assistance Regulations, 40 CFR Parts 30, 31, 33 and 35.

While state and Federal priorities are usually parallel, grantees oppose any Regional practice of requiring them to implement an air program activity which is neither required by the CAA nor contained in the operating guidance. Grantees also opposed what they described as an occasional EPA practice of inducing grantee participation in a new activity, with a supplemental award and subsequently incorporating that as part of the grantee's annual performance requirement, without providing sustained funding. They pointed out that this has contributed to their desire and practice of excluding funds they devote to those air activities outside the 105 assistance agreement which are not clearly within the authority of the present CAA. Grantees have been critical of EPA's insistence that nonfederal funds be devoted to a program or activity for which the Agency's direction, policy, intent, and authority, are not clearly defined or are uncertain.

#### Grant Work Programs

While there are still inadequacies, the advent of the PBAP has brought overall improvements to Section 105 work program content with more specific, realistic and measurable outputs and agreed-upon milestones. The weakest work programs were those which were heavy in objectives and process description and light on actual outputs and commitments.

While some Regions produce a standardized narrative of annual requirements pertaining to all their grantees, most Regions accommodate their grantees' own work program formats. As noted earlier, many agencies utilize their work program formats as their internal management documents reflecting a longstanding or uniform state agency administrative approach.

Work program development is one area where Regional Offices and grantees have been or may be able to increase their productivity by saving time and resources. Some ROs compose a schematic of a state's 105 program for the year and transmit this via flexible computer disk to the grantee. The grantee amends it and returns the disk to the Region. Subsequent transmittals and discussions may occur. The work program document is eventually agreed upon and easily produced. Approximately half of the Regional Offices now use or will soon convert to a computer-based format. The remainder of Regional Offices, subject to automatic data processing budgetary limitations, have been encouraged to convert to this format as soon as practicable.



In the past many work programs accounted for only a portion of the entire grant award. Only priority activities were discussed and little documentation was provided on base activities. This contributed to a perception that Section 105 was an entitlement program and not a performance program. Presently, Regional Offices and grantees are making better efforts to see that the work program describes specific tasks, projects or programs related to all funds in the grant award. Nevertheless, for economy's sake, Regional Offices tend to focus their attention regarding funding accountability on national high priority activities; activities associated with litigation and promulgation; Regional priorities and the previous year's unmet commitments.

In the assistance agreement the anticipated level of overall expenditures is often differentiated by object class. The majority of costs (75-80%) in work programs are estimated to be attributable to personnel and fringe benefits. Many grantees are now accounting for their costs by time and activity in order to satisfy their own internal state or local fiscal management requirements. Several grantees viewed this as a valuable exercise since it provides useful management information on resource expenditures and improves their internal management.

Many Regional Offices indicated that their primary concern was that required outputs be accomplished. How the grantees spent their funds was of secondary importance. Regions wished to avoid having to micro-manage Section 105 grant funds. However, numerous Regions indicated that when grantees fail to accomplish required outputs a primary explanation is that not enough time and resources are available. Many Regions are thus caught in a paradoxical situation - not wishing to micro-manage on one hand but unable to confidently pursue specific disinvestments or reprogramming due to a lack of insightful information on the other. Many respondents hoped that the survey of the costs of operating state and local air agencies could provide much of the detailed information that Regions normally forego requesting from their grantees. The timeliness of the completion of this survey and the assessments of the results are still in question, however.

Part of the reluctance shown by Headquarters and the Regions to identify specific activity costs is due to an underlying belief that the program or activity might be seriously underfunded by EPA (that EPA is asking too much to be done with too little funding), or by an underlying fear that grantees will abuse the opportunity to overestimate the actual costs of carrying out air program activities and unjustifiably receive more 105 funds. This, of course, would constitute a supplanting of non-Federal funds with Federal funds - a situation specifically prohibited by the Act and the grant assistance regulations.

Grantees also exhibited some trepidation about including a description of their overall air program activity with their Section 105 work program. The PBAP and EPA's October 12, 1982 grant regulations urge inclusion of the description of all activity even if dollars need only be identified for those activities supported by Section 105 funding. Several Regions regularly request this information of their grantees but have not received an overwhelming response. Initial responses to the survey of recipient agency 105 program costs have been a bit more enlightening (see Figure 26). Nevertheless, grantees fear that EPA will require them to include all their air activity funds in their maintenance of effort level thereby reducing their flexibility and enabling EPA to redirect their funding.

EPA maintains that it must document what activities can and cannot be accomplished given the limited amount of funding available. To better make a case for additional resources or to properly target resources or to identify additional needed statutory authority, the Air Program finds it is essential to know what other air activity is being carried out and how this further burdens state and local agencies.

**Figure 26**  
**A SELECTED LIST OF ACTIVITIES CONSIDERED**  
**BY SOME GRANTEES TO BE OUTSIDE THE 105 PROGRAM**

<u>ACTIVITY</u>	<u>AGENCY</u>
• Air toxics monitoring	NJ, RI
• Air toxics enforcement	NJ, RI
• Stage II	NJ
• Selected air quality planning	NJ, Lane RCG
• Anti-tampering	Tampa
• Woodburning	Colorado
• Open burning/visibility	Tampa, Lane
• Asbestos school program	Colorado
• Noise	Tampa
• High altitude & alternative fuels	Colorado
• Public information	Tampa
• Complaint handling	NJ
• TSP monitoring	Tampa
• Private monitoring	NY
• Air/RCRA support	Alabama, NY
• Superfund air monitoring	NY

Source: State and Local Air Activities Pilot Survey ;1987.  
Activities listed are for FY 1986. Certain of these activities  
may now be contained within these agencies' 105 work programs.

### Program Evaluation and Performance Resolution

While the OIG criticized some Regional Offices for their inconsistency in evaluation of grantee performance (e.g., tracking only high priority items, no annual on-site visits, vague commitments, failure to follow-up and rectify previous performance problems, etc.) this occurred prior to the institution of the PBAP in FY 1986.

Over the last several years the PBAP and the OIG audits of selected Regional Office's management of the Section 105 grants program have fostered a more uniform approach among the Regions in evaluation of grantee performance. These developments have also encouraged the submittal of work programs with more specific outputs and milestones which, in turn, facilitate program tracking and evaluation.

Most Regional Offices rely upon quarterly grantee progress reports and on-site mid year evaluations for the bulk of their oversight. The Regions often use the work program section containing grantee commitments, measures, outputs and schedules as its tracking document. There is a trend among Regions to utilize computer-based quarterly tracking status reports. These are periodically forwarded to grantees as reminders of completed, missed or upcoming products. Some grantees have indicated that EPA's tracking has enhanced their own efforts to better manage their programs. Grantee reaction on the burden of EPA reporting requirements was varied, however. Some felt there were too many reporting requirements while others noted that their Region had made a conscious effort to reduce any unnecessary reporting and oversight.

Several respondents felt EPA should conduct less oversight and provide more technical assistance. They indicated that added EPA investment in technical assistance and training would make EPA requirements more palatable and reduce the need, depending upon the grantee's record of performance, for extensive oversight.

Examples of grantee reporting requirements to EPA are shown in Figure 27. Grantees must report on various program office requirements on a quarterly, monthly, semi-annual or annual basis. We examined the performance workload of what could be considered to be an average grantee. The reporting required of the grantee numbered over 450 separate occurrences. While some of these are perfunctory updates (some compliance data system, or CDS, entries, for example) this figure represents approximately two reports per working day of the year. This points out not only the reporting demands grantees face but the complexities of managing an ever-burgeoning Air Program. While there is some inconsistency in application of reporting requirements nationwide, EPA does not view its requirements as being unreasonable given the importance of some of the reporting areas, the past performance of certain grantees, and continuing problems of nonattainment.

Figure 27

## Sample of Reporting Requirements for One Grant Year

	M	Q	B	A	O
Request NSPS delegation				x	
Submit new NSPS/NESHAP			x		
NSPS/PSD determination		x			
NESHAP Reg determination		x			
Permit processing status	x				
CDS: construct./start up	x				
CEM waivers/exemptions		x			
CDS: BACT/LAER rpts.		x			
NESHAP permit applic.		x			
CDS inspection schedule				x	
VOC workplan					x
EPA inspection agreement					x
CDS: stack test/CEM cert.	x				
CDS: scheduled tests	x				
CDS: inspections	x				
Report citizen complaints	x				
CDS: compli. status- all	x				
CDS: comp. stack/CEM tst.	x				
CDS: enf/prmt schd status	x				
EPA ref.complaints status	x				
CDS update	x				
Workplan progress dates	x				
State plan of action		x			
CDS: enf. statistics		x			
CDS: fines, fed fac, stk tsst, notif		x			
CDS: list of all NOV's	x				
CDS: violations	x				
Sign. viol. (SV)- no actn	x				
Enf. action plans	x				
Investig. in progress	x				
CDS: enf actn initiated	x				
CDS: enf actn completed		x			
All enf actn completed		x			
SV: in comp/on schd		x			
All variances	x				
CDS: update CEM inventory		x			
Qrtly emissions rpts		x			
Sum. rpt: EERs-CEMs		x			
CDS: CEM rptg		x			
NESHAPs vinyl chl. rpt.		x			
Demo/reno revisions			x		
CDS: NESHAP d/r info	x				
EPA ref. invest. status	x				
Public emplye asbest. wk.	x				
Asbestos remvl notif	x				
List potenti HAP sources					x
Finalize HAP sources					x
Initial strategy devlpmt					x
Air toxics (AT) NSR				x	
AT Emsn Invntry				x	
High Risk strtgy devlpmt					x



The mid-year, on-site evaluation is usually the chief vehicle that Regions rely upon to assess grantee performance and take any corrective action. Usually the site visit is preceded by a Regional Staff meeting involving air and grants elements where the grantee's overall performance is discussed and deficient areas identified. While Regions tend to place greater emphasis on assessing progress in high priority activities, routine program operations are also assessed. The PEAP states that all grant dollars should be treated equally and are subject to performance expectations. Some recipients mistakenly assumed that since an activity was not noted as being of high priority it was necessarily less important in terms of accountability.

Not all Regions conduct mid-year on-site evaluations. Those Regions which do not tend to have the most number of grantees. These Regions attempt to conduct a continual grantee oversight through ongoing tracking and continual EPA project officer contact. Depending upon proximity, Regional staff will meet quarterly or more frequently with their grantees. All Regions produce an end-of-year evaluation of their grantees' performance. These usually take the form of written reports which document overall progress and any corrective actions taken to address mid-year problems.

Regional Offices vary in how they take advantage of mid-year evaluations and relate these to their overall approach to planning and evaluation. For example, only a few Regions coordinate and interrelate NAAs with Section 105 grant evaluations since they feel these evaluations focus on different aspects of the grantees' program operations. NAAs tend to focus on the qualitative aspects of major program areas while grant evaluations generally focus on particular outputs. These two activities generally occur on different schedules. However, several Regional Offices indicated that they include certain of the identified NAAs deficiencies as grant work program items to be corrected in the following year. NAAs activity has recently been slowed with the delay in receipt of NAAs guidance from Headquarters. Nevertheless, most Regional Offices who conduct mid-year evaluations will take advantage of their occurrence to influence grant negotiations for the next fiscal year.

It was also apparent that over the last five years, because of increasing responsibilities and limited growth in funding, Regional Offices often have reduced emphasis on grantee performance evaluation, tracking and accountability in order to obtain needed disinvestments. The OIG audits, however, may have encouraged a reversal of this trend.

### Corrective Action

As we noted earlier, Regional Offices generally wish to avoid having to impose corrective action and instead resolve performance problems at the lowest possible staff level. While a work program is viewed by most Regional Offices as a contract like document, Regional Offices generally exercise discretion and flexibility before initiating any corrective action.

A few Regional Offices view any withholding of grants as counter-productive and reflect this in their approach to negotiations. Consequently grants do not serve to leverage grantee performance in these Regions. During grant negotiations most Regions pursue a course of conditioning a subsequent year's award to correct a current year's problem if negotiation and technical assistance prove unproductive.

Some Regional Offices view the PBAP's escalation procedures as overly time-consuming and restrictive. Despite the perceived limitations of the PBAP, most Regional Offices still employ a variety of mechanisms to influence, encourage, reward or sustain grantee performance. These include:

- o varying degrees of flexibility and constraint in carry-over of unexpended funds;<sup>17</sup>
- o adjusted schedule of award;
- o supplemental awards;
- o valuations of Federal promulgation liability;
- o use of LOE contract assistance;
- o forward funding;
- o set asides; and
- o performance and workload allocations.

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17. Regional Office practices on the use of carry-over funds are subject to guidance issued by EPA's Office of the Comptroller. See Comptroller Policy Announcement No.88-09, "Disposition of Unobligated Balances of Assistance Awards"; May 6, 1988.

Some Regions now anticipate a grantee's unwillingness or inability to carry-out certain required activities. They set aside the appropriate funds for use by the grantee upon its acceptance of the activity or for use by EPA or its contractor if there is a continued failure of the grantee to commit to the required activity. Tolerances among Regional Offices for the correction of grantee non-performance vary from one to two years, depending upon the severity of the issue. One Region awards a small portion of its grantees' allocations on an after-the-fact assessment of their performance, according to explicit evaluation criteria spelled out in advance. While this approach is still developing and may contain some inherent subjectivity, it comes closest to a pure performance based rationale for the award of funds.

### Enhancing Grantee Performance

#### Performance Incentives

Incentives have not been pursued with great zeal because they are viewed primarily in terms of increased funding. Given the number of competing priorities, surplus funds are presently not available at any level that would enable a financial incentive scheme to be viable. Grantees may also show a reluctance to accept supplemental funding because they do not wish to get locked into a program activity which they view as a pilot or exploratory effort that EPA may not fully commit to but may expect the grantee to continue. However, we found most Regions have made it explicitly clear when an activity is of a supplemental nature.

Incentives may also be provided in other forms, of course. These include: reduced reporting, reduced oversight, and flexibility in disinvestments. However, the demands of program and Regional Offices in light of continuing nonattainment problems, past grantee performance plus executive, and legislative branch budget pressures thus far have discouraged any formalized OAR-wide approach to grantee incentives.

#### Provision of Technical Assistance

Performance enhancements need not be limited to financial rewards or flexible programmatic requirements. Interview respondents also indicated that grant recipients were more receptive to EPA requirements when accompanied by adequate resources and technical assistance. The Administrator's Task Force on Technology Transfer and Training reiterated this point.<sup>18</sup> The task force also noted that as environmental improvement programs have

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18. See "Final Report of the Administrator's Task Force on Technology Transfer and Training", December 2, 1987.



matured more direct responsibility has been shifting to Regional Offices and to State and Local agencies. The task force urged that EPA look beyond its traditional focus on regulation and enforcement and place a renewed emphasis on training, technical assistance, and technology transfer.

In a recent report on training needs for Section 105 recipients<sup>19</sup>, STAPPA-ALAPCO indicated training is a crucial form of Federal support that state and local agencies cannot entirely provide for themselves due to a lack of resources and developed dependency on EPA's earlier CAA training efforts. Accordingly without Federal assistance, state and local agencies have found it difficult to prepare newly hired personnel for competent performance and to keep experienced technical and scientific personnel abreast of regulatory revisions and newly adopted requirements.

Section 103 of the CAA, requires EPA to provide and promote training on the causes, effects, extent, prevention and control of air pollution. This training has been offered gratis for personnel of air pollution control agencies, and at a reasonable fee for public and other nonprofit entities. In the early 1970's, EPA initiated manpower development and academic training programs for state and local agency capacity building. Through its Air Pollution Training Institute (APTI) and University Area Training Centers, EPA also offered special short courses and self-study courses.

Over the years, however, funding for EPA's training program has declined from a high of \$1.8 million in FY 1972 to zero funds in FY 1988 (see Figure 28). Training assistance could normally be expected to diminish as state and local programs mature. Additional complex air pollution problems have emerged, however, compounding the need for a wider dissemination of information, knowledge and improved skills to state and local personnel. These problems include: continued O<sub>3</sub> and CO nonattainment PM<sub>10</sub>, air toxics, acid deposition, stratospheric ozone depletion, indoor air, and cross-media pollution.

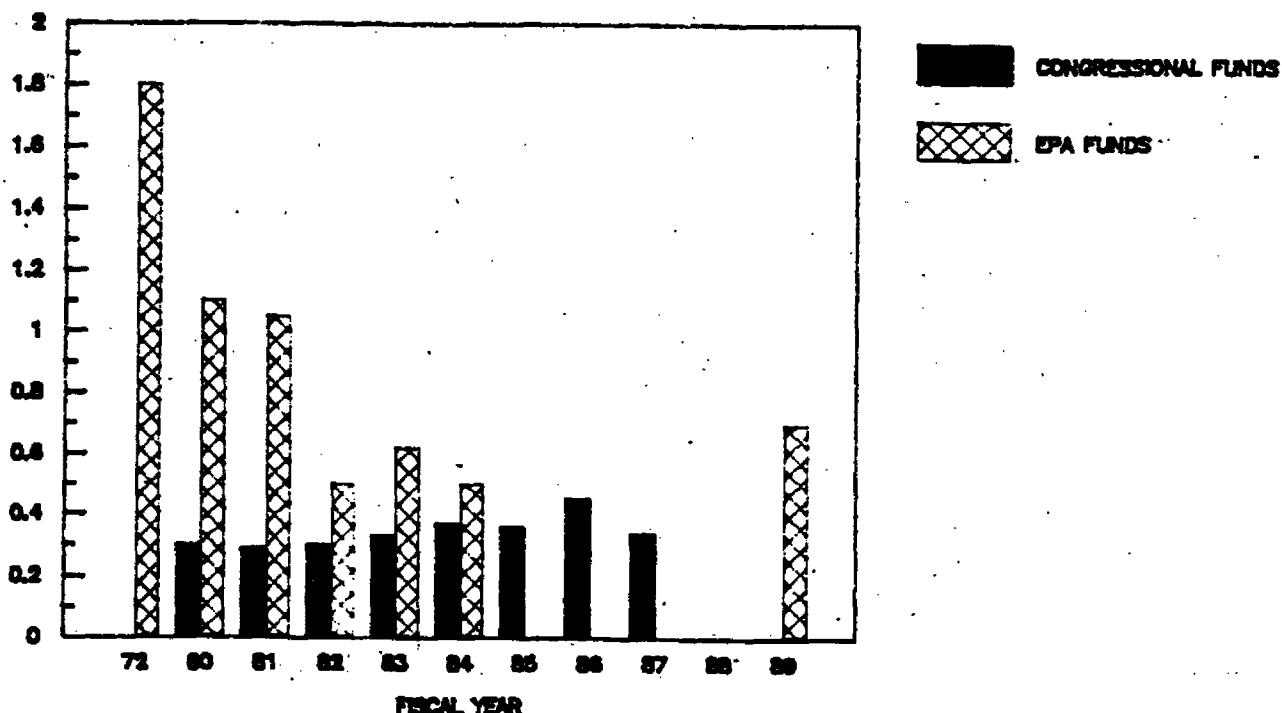
The APTI has identified a number of existing courses which need revision to more appropriately reflect changed regulations, procedures and advancements in technology. These include: introductory air pollution control courses, courses on dispersion modeling, field enforcement, source sampling for particulates and gases, atmospheric sampling, microscopy, hazardous waste incineration, quality assurance for emission measurements, monitoring site selection, etc. The cost for addressing current inadequacies has been estimated to be approximately \$2.5 million.

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19. See "Training Needs for State and Local Air Pollution Control Programs"; STAPPA-ALAPCO; April 20, 1988.

Figure 28  
AIR POLLUTION TRAINING INSTITUTE FUNDING

MILLIONS OF DOLLARS



STAPPA-ALAPCO has also called for the development of a national level state and local technical coordination program utilizing information clearinghouses and technical workshops. The Air Program has already been providing a considerable degree of technology transfer and training assistance for some time but has not identified a formal structured approach to do so. However, the Air Program's FY 1989 budget submission specifically outlines state and local program capacity building and technology transfer assistance requests. OAR anticipates receiving \$700,000 for state and local training assistance in FY 1989.

#### Utilization of EPA Staff Expertise

In the past, EPA has employed the use of Intergovernmental Personnel Act (IPA) and state assignee programs whereby EPA and other qualified personnel would be temporarily assigned to a state or local agency to provide direct on-staff expertise. As resources have tightened, use of this mechanism has dwindled. Since FY 1982, less than 50 EPA Headquarters and Regional Office personnel, involved in air program activity, have worked at the state or local level. These persons have brought to these

agencies the benefits of their expertise and have returned with a broadened outlook of intergovernmental air program operations. During the course of the ARS interviews, numerous respondents, particularly state and local air agency directors and staff, indicated that some form of a revitalized state assignee or personnel exchange program should be promoted and expanded to help transfer knowledge and improve intergovernmental understanding. One Region and its state and local agencies have expanded their efforts in this area by exchanging Regional office and state and local personnel in key positions for a period of several months to a year.

#### Exemplary Regional Office Practices and Procedures

Air Resources Study interviews conducted during the fall of 1987, documented numerous exemplary Regional approaches to managing various aspects of the Section 105 program. There are different geographic and environmental circumstances and challenges facing each EPA Regional Office in managing the Section 105 program. As a result, there are inherently different Regional approaches striving for efficient management of the grant program. These examples from across the country may prove useful in assisting other EPA Regional Offices to adopt similar approaches in their grants management efforts. All key aspects of the grant management process, from providing effective grants guidance to insuring grantee financial integrity, are represented in this listing of exemplary practices.

The Regions currently carrying out these practices are noted in parentheses.

##### (a) Grants Guidance

- o Issuance of a manual for both internal and external use covering Regional Office organization, policies and procedures for the administration of the Section 105 air grant program (II, III, IV, X)

##### (b) Allocation

- o Documentation to grantees of the justification of how the Region allocates grant funds to them (II-VII, X); the opportunity for grantees to comment on alternative allocation scenarios for all grantees within the Region (IV, X); and Regional reexamination and periodic update of its allocation assumptions and factors (I, VII, X)

- o Regional assurance that national air program priorities are addressed by use of a two step (base and high priority) allocation procedure which reconciles the variable grant periods of its grantees with the release of EPA's annual operating and grants guidance (VI, X)
- o Use of a committee of grant recipients to advise and select with the Region the appropriate programs to be funded with high priority dollars. These programs are judged to provide the greatest air quality benefits for the Region as a whole (X)

(c) Negotiation

- o Use of early spring pre-negotiation meetings between the Regional Office Air division director and state and local air directors to discuss issues, priorities and funding targets, etc. (virtually all Regional Offices)
- o Grantees detail the amount of resources needed, the resources available and the resulting shortfall for each objective for the coming year allowing for more realistic planning and negotiation of workplans between themselves and EPA (II)

(d) Work Programs

- o Composition of standardized grantee work program (with allowances made for tailoring grantee specific activities and requirements) using a personal computer based, spreadsheet format and a computer disk for transmittal and interactive editing (I, III, IV)
- o Encouragement of grantees to include a description of all of their air program activity within their Section 105 work programs (IV, VI, X)

(e) Tracking and Evaluation

- o Provision to grantees of a detailed summary of air grant program reporting requirements for the year at the same time that Regional grants guidance and the target allotments are issued (I, IV)
- o Compilation of grantee reporting requirements on a personal computer based tracking form which is then regularly forwarded to grantees, along with "tickler" letters to document outputs that are submitted, missed or upcoming (I, VI)
- o Formalized grantee performance review involving the Regional air program senior management (I, V, VIII, X)

- o Internal management tracking system for air branch chiefs covering air grants status (I, VIII)
- o Linking program deficiencies identified in national air audit system evaluations to mandatory air grant performance conditions for the ensuing grant period (IV, X) specifically attempting to time and coordinate grant evaluations with NAAS audits (VII)

(f) Improving Performance

- o Selected use of explicit criteria linking objective measures of performance to corresponding levels of 'earned' grant funds - essentially a pure application of the PEAP (V)
- o Judicious use of the adjusted schedule of award approach to encourage grantee assumption of responsibilities and grantee performance (I, VI)

(g) Grantee Support

- o All of the Region's grantees contribute at least 40% of their air program funding (II-VI, IX); Region keeps abreast of its grantees' permit fee activity (VI, X)

(h) Grantee Financial Integrity

- o Well integrated working relationship between Regional program and fiscal staff (I, III, V, VIII); fiscal staff accompanies program staff on grantee site evaluations (III, VIII); fiscal/grants office has trained accountant-auditor as part of its staff (III)
- o Region's fiscal staff conducts workshops on proper fiscal and grants administrative procedures for state and local agency financial officers; formally reviews new grant and fiscal requirements with its air grantees (I)

OAR plans on continually compiling and disseminating information on exemplary Regional Office and recipient grants management practices throughout the year, as well as during the air grant coordinators' annual meeting.



## CHAPTER 5

### ASSURING FINANCIAL INTEGRITY

#### Background

Each recipient of Federal Section 105 grant assistance is obligated to maintain a sound financial management system which will allow a verifiable accounting of the proper use of these funds. This chapter discusses the fiscal accountability aspects of the Section 105 program. As such, it focuses on concerns raised in audits recently conducted by the OIG of selected Regional Offices' administration and management of their Section 105 grants.

The OIG initiated an audit of the Section 105 Air Grant Program in late 1984, at the request of a former AA for Air and Radiation. The AA's request was made after reviewing the results of a major OIG audit of the Water Program and reports by the GAO and OIG, suggesting that certain air grantees may not have been meeting their LOE requirements for the continued receipt of Section 105 funds. The OIG, after reviewing background documentation, which included a June 1985 OPMD state and local Air Resources Study, performed a pilot audit of Region VII and subsequently performed audits of four additional Regional Offices (II, III, IV and IX).

The OIG focused its examination on the adequacy of Regional Office administration in three areas: (a) implementing EPA policies, procedures and controls for the award, monitoring and evaluation of the grants; (b) ensuring compliance with grantee maintenance of effort requirements; and (c) assessing the accuracy, completeness and reliability of grantee financial status reports.

Basically the OIG audits found that certain Regional Offices were having difficulty assuring that their grantees were meeting their required MOEs (appropriate amount of funds contributed by a recipient in order to receive its Federal award). A variety of grantee practices, both intentional and unintentional, were identified as causing grantee failure to meet the MOE. The OIG also felt that the then current approaches used by Regional for grant tracking and reporting did not enable an accurate assessment of the performance and accounting integrity of their grantees, without having to have a detailed audit performed. The OIG also criticized the vagueness of many grant workplan commitments, and the lack of relationship between commitments, expenditures and output. Figure 29 provides a general summary of the major OIG findings.<sup>20</sup>

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20. A more detailed summary of the OIG and results is contained in an April 17, 1987 memorandum from OPMD to the Regional Air Grant Coordinators.

Figure 29  
Summary of Major OIG Criticisms  
By EPA Regional Office

<u>OIG Criticism</u>	<u>Region</u>				
	II	III	IV	VII	IX
Failure of Regional Office to ensure that grantees continue to meet their maintenance of effort	x	x	x	x	x
Inadequacy of Regional Office's monitoring and evaluation of grantee performance	x	x	x	x	x
Lack of maintenance of basic accounting (disbursement) controls	-	-	-	-	x
Questionable validity of grant awards	-	-	x	-	x

In May 1987, OAR and GAD jointly formed a task force to address numerous concerns surrounding the administration of the Section 105 air grant program, including those raised by the OIG audits. Representatives from the Air and Grants Offices in all ten Regions also comprised the task force. The task force produced a series of papers which examined numerous air grants administration issues and posed possible solutions.

On September 1, 1987, auditors from the OIG met with representatives from the Office of Air and Radiation (OAR), Grants Administration Division (GAD) and the Office of the General Counsel (OGC). The outcome of the OIG audits of five Regions' administration of the Section 105 air grants program was discussed, as well as other issues the group felt merited national attention.

At that time OAR also summarized the status of the ARS. The ARS had also identified the same national issues raised by the OIG audits. These issues were examined more thoroughly in a series of interviews held with the ten Regional Offices, Headquarters program offices and selected state and local grantees.

As a result of these discussions OAR and GAD have issued additional guidance and clarification on key provisions of one major area of concern covering numerous inconsistencies -- the proper interpretation and application of the maintenance of effort requirements. The discussion which



follows outlines the major issues highlighted by the OIG audits and the air resources interviews, and describes the corrective actions taken or the remaining problems and suggestions for their resolution.

#### Adequacy of Negotiated Workplans

The OIG identified instances where certain grantees' work plans lacked specificity as to expected outputs and where some grantees failed to complete agreed upon commitments. The audits also noted where a Region had not taken action to rectify these situations.

The ARS examined each Region's approach to the negotiation of grantee cooperative agreements and work plans, as well as the mechanisms used to assure grantee performance. It must be noted, that the OIG audits and criticisms pertained to the fiscal years prior to 1986 when the Air Program first adopted the Agency's May 31, 1985 PBAP.

The PBAP was specifically designed to improve overall grantee and EPA performance by clearly defining each party's negotiation protocol and performance expectations. The PBAP placed increased emphasis on negotiation of realistic work plans containing firm commitments, and measurable outputs according to a specific schedule. Every Region had either made changes to embrace the PBAP, or demonstrated how it had reinforced its current practices that conformed to PBAP principles. Virtually every Region felt that adoption of the PBAP had fostered improved grantee work plans. As a result, these work plans better articulated performance expectations and made the evaluation of performance much more straight forward.

Regions pointed out that the quantification of some workplan tasks and outputs was necessarily imprecise since the degree to which these activities could occur would not be ascertainable at the time the grant agreement was being negotiated. There were a few instances where certain grantees' work plans were still somewhat objective oriented rather than output oriented. For these problem situations the Regions expressed a strong desire to exchange information on the approaches each was using in order to continually improve the negotiation process and work plan contents of their grantees. To this end, the Regional Offices continue to exchange what they feel to be exemplary work plans.

In addition to this Regional exchange of information, the Air Program also held a Regional Air Grant Coordinators' meeting and technical workshop in March 1988. Ways to further improve the negotiation, development, contents and accountability of grantee agreements and workplans were discussed.

One suggestion, the utility of adopting a standardized grantee workplan format for use nationwide, was raised as a possible method to ensure national consistency. This was opposed, however, for practical reasons since many grantees use formats which conform to their own state administrative requirements and needs. Regional Offices felt they could deal with varying formats as long as the information needed by EPA was clearly identified.

There was a consensus that the provisions of the PBAP had addressed the OIG's concerns regarding work plan adequacy. As we noted earlier, we have found that overall grantee work plan quality and specificity has improved noticeably in the last two years. Of course, Regional Offices must continue to press for clear, specific, and measurable work plans and this will likely be a continuing topic of interest at annual Regional Grant Coordinators meetings.

#### Assurance of Maintenance Of Effort

A majority of the overall OIG criticisms were related to the second major category of concern - assurances that grantees were meeting their maintenance of effort (MOE) requirements.<sup>21</sup> Essentially the MOE provision requires that the grant recipient not decrease its annual non-Federal level of recurring expenditures from the preceding fiscal year's level, with certain exceptions. Within the MOE category were two issues: (1) the proper definition of the MOE, which is affected by multiple factors, each with varying interpretations, and (2) adequate Regional Office and state and local procedures to ensure the MOE was being met.

Each concern was examined as part of the ARS and the Air Grants Audit Task Force effort. Issues addressed included:

- differing planning versus maintenance percentages and impact upon grantee contributions;
- varying interpretations and applications of the definition of nonrecurrent expenditures;
- non-selective reductions in economically hard-pressed areas;
- treatment of local funds as part of a state's matching contribution;
- certification and verification of the MOE; and the
- adequacy of financial status reports.

The growth of non-105 air activities was also raised. This topic is discussed in the next chapter.

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21. MOE is also known in the Air Program as the continuing eligibility level or continuing level of eligibility (CEL). For consistency's sake it will be referred to as the MOE.

### Planning Versus Maintenance Costs

Section 105 (a)(1)(A-C) of the CAA defines the maximum Federal share of funding for state and local air pollution control programs as 60% for maintaining an established program, and 75% for planning or developing an air quality program for those recipients carrying out a SIP.

The OIG found instances where "established" programs were receiving a greater than 60% Federal contribution. This occurred primarily in three Regions containing small states or states with troubled economies, or where environmental issues were of a low priority. EPA was contributing the bulk of Air Program support in these states because these states' legislatures had shown a willingness to allow the return of Air Program responsibilities to EPA if they were forced to contribute a greater percentage match. From EPA's past experience, it is clear that the cost of Federal administration of a state 105 air program is significantly more expensive if a state were to do it..<sup>22</sup>

In FY 1986, analysis showed that perhaps \$1.0 to 1.5 million in grants was awarded above the 60% level (not including the 1/2 of 1% states). This represented about 1% to 1 and 1/2% of the total national appropriation (see Figure 30).

A number of factors, both objective and subjective, have caused the evolution of different grantee funding shares in different parts of the country (see Figure 31). Further, a number of Regional Offices and grantees have argued that because the Air Program is a continually evolving environmental program with new initiatives added each year, it is impossible to differentiate maintenance versus planning or development expenditures.<sup>23</sup> Nevertheless, it is the preference of the majority of the Regional Offices to not fund grantees at more than a 60% Federal contribution regardless of the status of the activity. Nationally, the majority state and local agencies have been assuming only a slightly greater percentage share of the financial burden of their 105 Air Program as the amount of available Federal grant funds has remained stable.

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22. See Chapter 8 of the "State and Local Air Program Resources Study"; OPMD; June 1985.

23. Past OAR policy has stated that the dynamic nature of a continuing air pollution control program has precluded any practical differentiation between development and maintenance activities and hence different funding percentages. See August 31, 1984 memorandum from Jerry Emison to John Hidingier.

Figure 30  
Listing of Agencies Receiving  
Above 60% Federal Share - FY 1986

<u>Region</u>	<u>Agency</u>	<u>% Federal Share</u>	<u>Amount Above 60% Level (\$000s)</u>
I	Massachusetts	67	297
	Rhode Island	69	76
	New Hampshire	68	71
	Vermont*	70	68
VI	Oklahoma	63	70
VII	Iowa	74	149
	Polk Co.,, Iowa	65	6
	Kansas	74	131
	Kansas City***	75	43
	Topeka, Kansas	66	5
	Wichita, Kansas	69	14
	Missouri**	73	375
	Nebraska**	68	63
VIII	Montana*	63	32
	North Dakota*	75	93
	South Dakota*	74	61
	Utah	70	181
IX	Guam*	63	3
X	Idaho	75	134
Subtotal Funding Above 50% Level			\$1,872 (in \$000)
Total Minus 1/2 of 1% Recipients			\$1,675 (in \$000)

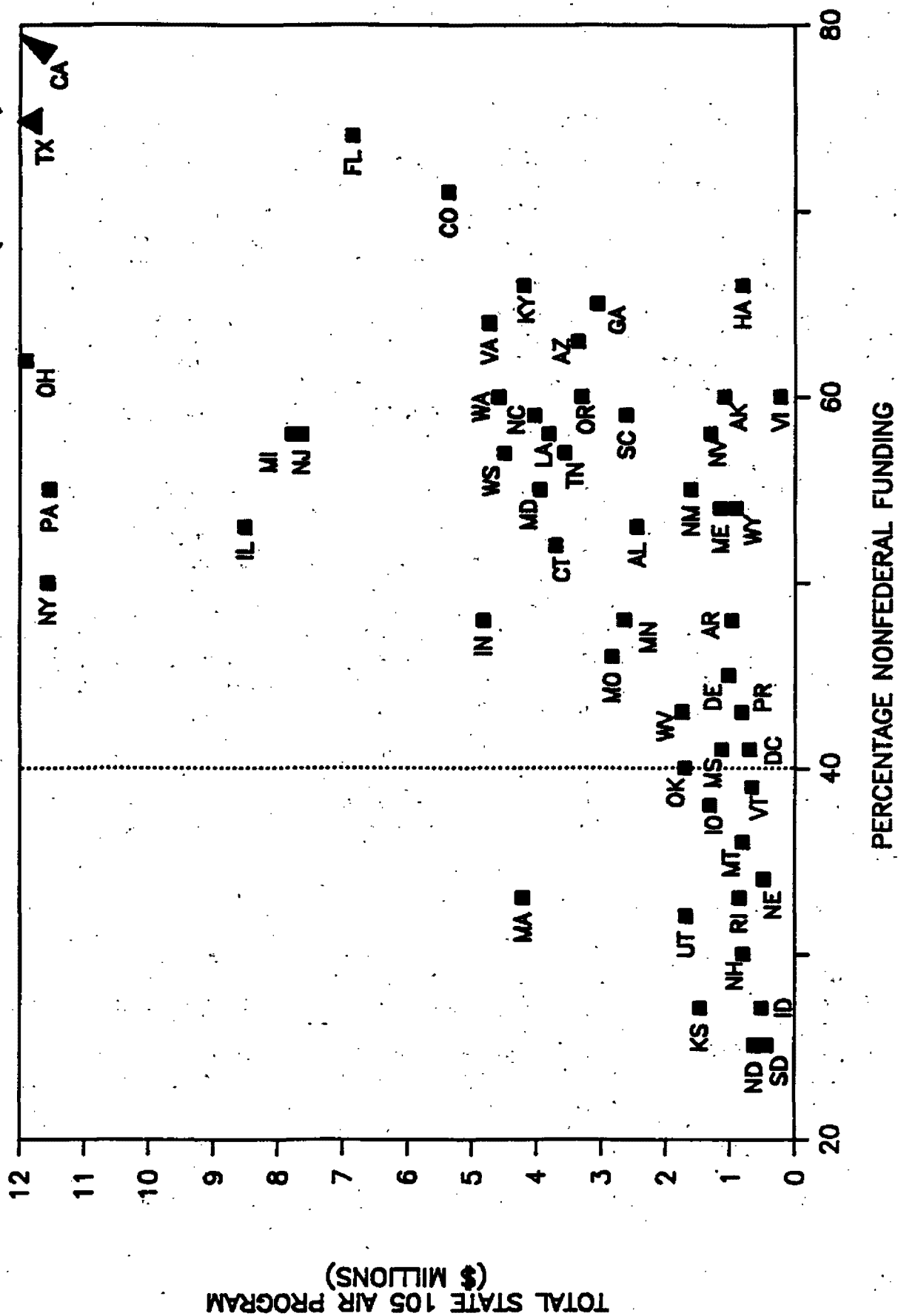
\* Denotes 1/2 of 1% recipient for that year.

\*\* During FY 1987 and FY 1988 actions were taken to raise both Missouri's and Nebraska's non-Federal percentage contributions. These are now 53% and 60% respectively.

\*\*\* Kansas City is an interstate agency pursuant to Section 106 and may receive up to 75% Federal support.

Most Regions have already taken action to correct apparent inequities by requesting that several of their affected states increase their contribution. OAR is working with the Regions to address the remaining few low match agencies.

Figure 31  
EACH STATE'S % 105 CONTRIBUTION  
RELATIVE TO ITS TOTAL 105 PROGRAM (FY 87)



### Recurrent Expenditures

Varying interpretations and the lack of documentation on non-recurrent expenditures, have contributed to MOE difficulties. Briefly, 40 CFR 35.105 defines recurrent expenditures as those expenses associated with the activities of a continuing environmental program. A grantee's Section 105 grant, approved by EPA, constitutes such a program. All expenditures, except those for equipment purchases with a unit acquisition cost of \$5,000 or more, are considered recurrent, unless justified by the applicant as unique and approved as such by the Regional Administrator, in the assistance award. Conversely, a non-recurrent expenditure, while not explicitly defined by the statute or grant regulations, may be seen as: (a) any equipment purchase costing \$5,000 or more, or (b) any expenditure approved as unique by EPA in the assistance award.

While most Regions adhere to a strict interpretation of 40 CFR 35.105, the dollar limit it imposes may be outdated depending upon the item and the grantee's situation. Owing to the nature of MOE computations, and depending upon the specific circumstances, costs incorrectly labeled recurrent or non-recurrent can knowingly or unknowingly work to the advantage or disadvantage of the recipient. Also while some expenditures may recur annually their amount may vary from year to year (such as program revenue, supplemental awards, or local agency matching appropriations). Alternatively, some expenditures may also recur periodically but still quite predictably (certain equipment purchase or contracts, for example).

Given an outdated and unspecific definition, the Regions have relied upon the discretionary aspect of the regulation to cover all of the permutations that might occur. This has engendered some inconsistency across the country, particularly in the area of "unique" nonrecurrent expenditures.

### Unique Non-recurrent Expenditures

Several areas of concern remain over what is a non-recurrent expenditure. The Regional Offices exercise some judgement and flexibility in determining what constitutes a unique expense. While some nationwide inconsistency has resulted nationwide, the Regional Offices' actions generally reflect a pragmatic approach to dealing with an area where there is little guidance and which is subject to broad interpretation. Examples of what Regional Offices have allowed as unique expenditures, and hence not subject to the definition of recurrent expenses, and not included in the MOE computation, are:

- o Unique, one-time contract efforts (i.e., special research funds);

- o One-time, supplemental funds given to a recipient by its legislature for special purposes;
- o Funds contributed by the recipient in order to receive matching one-time supplemental EPA funds (i.e., state acid deposition work);
- o Funds for special studies not lasting over three years in duration (e.g., targeted air toxics monitoring);
- o Funds contributed from local pass-through agencies or sub-grantees where: (a) their level may vary annually; or (b) there is an uncertainty as to their continuing availability. In these cases these agencies are treated as contractors by the grantee and it is assumed their contributions have never been included as part of the grantee's MOE.

Additional insight on the interpretation of unique expenses has been provided by the staff of the Office of the Regional Counsel (ORC) in Region IX. In an opinion issued to the Regional Office IX Grants Management Section on February 17, 1988 the ORC recommended that unique non-recurrent expenditures be interpreted to mean: "those specifically identified expenses, such as those identified with a task, a contract, or an activity, that would not reasonably be expected to recur in the foreseeable future, taking into account the environment in which the entity operates."<sup>24</sup>

This opinion also does not appear to conflict with any of the current allowances for unique non-recurrent expenditure listed above. Therefore, OAR has recommended that the Regions follow this interpretation of unique non-recurrent expenditures until any applicable changes to the statute or the grant regulations are made. The guidance also reiterates that all grantees should differentiate their recurrent and non-recurrent expenditures at the outset in their assistance applications. This can be done on line 23, (Remarks) of EPA form 5700-33, Part IV, of the program narrative portion of the assistance application, or on an accompanying separate sheet.

#### Nonrecurrent Equipment Costs

Another area of concern involved the \$5,000 ceiling used to differentiate recurrent equipment expenditures from non-recurrent equipment expenditures. This differentiation was included as part of the 1982 revised grant regulations (40 CFR 35) and raised the original level from \$2,500 to reflect an increase in costs from 1974.

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24. See "Section 105 Air Audits"; Region IX, ORC to Region IX Grants Management Section; February 17, 1988.

Some Regional Offices indicated that this ceiling needs to be revised again, perhaps to at least a \$10,000 level, or revised periodically, to reflect the impact of inflation. For example, a review of EPA's 1987 estimate of the updated costs of monitoring equipment revealed that unit acquisition costs for most criteria pollutant samplers are well over \$5,000. The annual capital costs of monitoring approximate \$10,000 (using a five year-life expectancy), and total annual operating expenses in some cases reach beyond \$15,000.<sup>25</sup>

Other Regional Offices and their grantees have grown accustomed to the current limit and would find its modification problematic. Certain grantees have also found themselves in situations where a raised cost ceiling would move some expenses from the non-recurrent to the recurrent category thereby artificially raising their MOE level. These expenses might also recur regularly (e.g., replacement of monitoring equipment every five years) but not annually and thereby cause fluctuations in the recipient's MOE level.

Other grantees have used the same situation to argue that certain equipment costs, even though they are over \$5,000, recur regularly and, as a recurrent expense, need to be counted towards their MOE. Recipients in this situation have planned out their future budgets to incorporate these equipment costs or endeavor to maintain a MOE level which would otherwise decline if these costs were not included.

Given the variety and complexity of grantee situations that could be altered by a change to the equipment expense ceiling, OAR guidance directs that the current \$5,000 limit be retained until the appropriateness of the of the regulation's dollar limitation and the categorization of certain equipment costs can be reassessed and revised, if necessary, by OAR and GAD.

Overall, the ARS interviews found that virtually every Region had strengthened its current procedures for identifying and verifying their grantee's non-recurrent expenditures, and had taken steps to reacquaint their grantees with the requirements.

#### Nonselective Reduction

Section 105(a) of the CAA states that a grantee's non-Federal, recurrent effort level may not decrease from a previous year's level unless the Administrator determines that a reduction in expenditures is attributable to a non-selective reduction in expenditures in the programs of

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25. See "Cost of Ambient Monitoring for Criteria Pollutants"; November 6, 1987; Monitoring and Data Analysis Division (OAQPS).



all executive branch agencies of the applicable unit of government. The explanation for this section of the statute has left much room for interpretation, however. Difficulties with defining what is a selective versus a non-selective reduction (and its concomitant impact on the MOE) have been underscored by the impact of the Gramm-Rudman-Hollings initiative and other economic forces.

The purported purpose of this provision is to allow an exemption or waiver from the MOE requirement for a state or municipality faced with severe economic hardship or fiscal insolvency. The earlier referenced February 17, 1988, Region IX ORC opinion provided an articulate and thorough discussion of the history of this provision and Congressional intent.

The ORC staff found that for an air program reduction to be considered non-selective at least three tests need to be met: (1) the Air Program itself must not have been singled out for a cut; (2) many other types of agencies (and personnel) involved in the provision of basic municipal services should also have been cut; and (3) the cuts must be made as economy measures. Once a legitimate non-selective reduction has been agreed to, the grantee's revised contribution level becomes the accepted MOE.

While several states with largely petroleum or agriculturally based economies were believed to be potential candidates for non-selective reduction, a survey of the Regional Offices indicated only a handful of such situations had ever occurred and that none were imminent. The Regional Offices generally agreed with the interpretation provided by the Region IX ORC. OAR and GAD endorsed the ORC's opinion and indicated that it should be referenced for guidance on non-selective reduction issues in the future until the statute or regulations are modified. The only additional observation was that those grantees, who face a prospective non-selective reduction situation, should notify EPA as soon as possible, preceding or during the grant award period and not after it closes, so that timely adjustments can be made.

#### State Contributions to Local Agencies

Over the last several years Regional Offices have sought ways to increase their productivity, and have found it advantageous to consolidate the number of grantees with which they must deal. Consequently, some Regional Offices now award direct grants only to the states, Indian Tribes, and the larger local agencies.

For the remaining smaller local agencies, several Regional Offices have developed a pass-through policy whereby state agencies are primarily responsible for: (a) the overall coordination and integration of these

agencies' work plans and requests for Section 105 assistance with that of the state, and (b) program oversight for these agencies. States now "pass through" Section 105 funds and the state support to these agencies to carry out approved Section 105 work plan activity that the State would do in the absence of these agencies. These agencies may also be doing work particular to their own needs and interest. Section 105 funds cannot be used to support such activity and states are asked to provide assurances that pass-through agencies (PTAs) will not use Section 105 funds to supplant local funds.

While consolidation of grantees has lessened the Regional Offices' administrative workload, it has resulted in different Regional Office applications of the MOE requirements in situations involving local PTAs. Normally a state agency's contribution to a PTA, for the express purpose of carrying out an approved Section 105 work plan activity, counts towards the state's MOE level. State agencies with local PTAs generally do not include the funds contributed by these agencies as part of the state agency's MOE. This is because funding supplied by local agency sources can be highly variable and the state cannot guarantee its level or continuation.

The above situation assumes that the state's contribution to its PTA(s) is uniform and does not complicate the state's ability to maintain its MOE. In situations involving a PTA whose annual contribution level may vary and where the state covers the PTA's 105 shortfall, difficulties in managing the MOE baseline can occur. States have reacted to this situation in two ways: (1) appropriations to the state agency and to the PTA through the state agency have been treated as two separate appropriations, or (2) the state has not included its support to the PTAs or any of the PTAs' funds as part of its MOE.

Variable PTA funding can be a problem and several states have attempted to avoid complications by certifying to EPA that if the PTA is no longer able to accomplish the required Section 105 activity, then the state will assume the responsibility. Nevertheless, EPA concluded that a state should include in its MOE any funds it contributes directly to support an approved Section 105 workplan activity -- an activity that the state would otherwise carry out in the absence of the PTA.

A state should establish with its PTAs the amount these agencies are going to receive to carry out the 105 activities in the state's approved continuing Section 105 program each year. This state support to its PTA's then becomes part of the state's MOE. A state need not include PTA contributed funding as part of the state's MOE. However, if the state does include in its MOE level those funds that a PTA contributes, then the state must continue to include those PTA funds and must maintain the appropriate MOE level.

### Grantee Certification of the Maintenance of Effort

Some Regions suggested that much of the difficulty with the MOE requirement could be avoided if EPA simply required the grantee's certifying representative (e.g., the agency's commissioner), at the time of the application for assistance, to clearly delineate the MOE level and certify that the grantee was meeting it. Certification should assure that the Federal funds being applied for would not supplant available state and/or local funds. This certification would be similar to that done for Procurement System Certification (EPA form 5700-48) and would consequently be taken more seriously by the grantee.

Few Regional Offices reported grantees who explicitly identified and certified their MOE as part of their applications. However, a majority of the Regional Offices are now requesting this in light of the OIG audit findings. Accordingly, a MOE Certification sign-off form is under development for future use by 105 recipients. Grant recipients always have an obligation to delineate their MOE level and assure that the MOE requirements are met.

### EPA Verification of the Maintenance of Effort

As noted earlier, in order for a grantee to continue to receive financial assistance it must maintain or exceed its MOE level each successive year. A grantee's MOE level should be delineated up front in its upcoming year's assistance agreement and verified by the Regional Office through a comparison with the grantee's previous year MOE level documented in that year's final Financial Status Report (FSR). Final FSRs, with some exceptions, are due no later than 90 days after the close of the grant period.

The complication in verification is that an award for an upcoming fiscal year must usually be made several months prior to the receipt of the completed year's final, closed-out FSR. So as not to jeopardize the solvency of a grantees' operations, a Region may have to award a grant on the basis of preliminary financial data. A complete assurance that the MOE has actually been met, cannot usually occur until the RO receives the previous year's final FSR -- usually already months into the new award year.

To overcome this dilemma, the guidance directs that preliminary MOE verification should compare the level of recurrent funds in the upcoming year's grant application to that of the most recent award year's level for which complete expenditure data is available from a closed-out, final FSR. The official MOE verification for the 'upcoming year' (already underway) then occurs when the final, closed-out FSR for the just completed fiscal year is submitted. The guidance instructs that awards for subsequent fiscal years not be made until a final, official verification occurs. This should assure that no time lag or gaps remain.

For example, a Region normally should receive a final FY 1989 grant application by September of 1988. At that time, for preliminary FY 1989 verification, the Region is to compare the prospective FY 1989 MOE level to the approved MOE level contained in the final FY 1987 FSR and the FY 1988 MOE amount projected in the FY 1988 assistance agreement.

The Region normally should receive the final FY 1988 FSR no later than 90 days after the close of the FY 1988 grant period, or in this case, by January 1, 1989. When the final FY 1988 FSR is submitted and closed out its MOE level can be compared to:

- (a) The FY 1987 MOE for final FY 1988 MOE verification; and
  - (b) The MOE amount projected in the FY 1989 assistance agreement for official verification of the projected FY 1989 MOE level.
- However, final verification of the FY 1989 MOE level does not occur until a final closed out FY 1989 FSR has been approved.

#### Adequacy of Programmatic and Fiscal Oversight

The OIG was critical of certain aspects of some Regions' approaches to overseeing, evaluating and rectifying their grantees' programmatic and fiscal performance.

Regarding the evaluation of programmatic performance, we noted earlier that the OIG audits were conducted prior to the institution of the Administrator's PBAP. In addition to placing renewed emphasis on negotiating realistic, measurable commitments and outputs between EPA and its grantees, the PBAP outlines additional steps EPA should take in evaluating and, if necessary, rectifying recipient performance.

The Air Resources Study interviews determined that all Regions had bolstered their oversight and evaluation functions as a result of the PBAP and the OIG audits. Many indicated that the PBAP simply reinforced their current approach. Virtually all Regions were using the mechanisms outlined by the PBAP for the correction of grantee performance including the incremental release for funds. Not all Regions, however, embraced the specific approach for programmatic evaluation recommended by the PBAP.

OAR has further clarified and bolstered the programmatic oversight and evaluation aspects of the PBAP with issuance of two additional guidance documents to the Regions and program offices: "Procedures for Withholding Grants Funds," June 19, 1987 and, (2) "Procedures for Resolving Grant Negotiation Issues," December 1, 1987.

### Need for Annual On-Site Evaluation

The OIG referenced the PBAP's objective of having every grantee undergo an annual on-site evaluation. All but two Regions performed such evaluations and those that did not were the Regions which contained the greatest number of grantees (including local agencies). These Regions were severely constrained by the lack of resources available for evaluation.

Each of these Region's approaches in evaluating grantee performance was examined to assess their adequacy. In one Region it was determined that, though a formal annual on-site visit was not performed, the Region's oversight of its grantees was probably more rigorous than many Regions which did conduct an annual on-site evaluation. Therefore, an annual on-site evaluation, does not in of itself, ensure adequate oversight. Rather, the entire approach of a Region must be examined. One other Region has redirected its resources to begin annual on-site evaluation of all its grantees. While each Region is in the best position to judge evaluation needs, an annual on-site visit, while highly desirable, may not be necessary for each grantee depending upon the grantee's overall annual performance. However, it is sound management practice to follow current guidance and conduct annual on-site 105 evaluations with each grantee. Several Regions have requested further guidance on or modification of this policy.

Region-wide adoption of computer based tracking and evaluation systems of grantee work plan and overall program performance has proven popular. At least half the Regions have instituted, or will have instituted, such a system by the end of FY 1988. Additionally, all Regions evaluate grantee work plan progress quarterly, with more frequent reporting requirements required by particular program offices. Cost information from the survey of state and local agency operations, noted earlier, may supply further data and information that can improve oversight of activities and grantee performance and facilitate identification of where corrective action may be necessary.

### Adequacy of Fiscal Tracking and Oversight

The OIG audits found instances where the grantee's MOE level could not be verified because of: (a) the untimely submission of a financial status report by a grantee; (b) the submission of an incomplete or inadequate FSR; (c) inadequate Regional Office procedures to verify FSRs; or (d) the inadequacy of the form itself in providing the needed information.

Virtually every Region, including those not audited, has strengthened its FSR practices and procedures and has clarified FSR and MOE requirements with its grantees. Only one Region reported that it was still

having difficulty receiving timely FSRs. Several Regions indicated that they had negotiated grant conditions whereby funding would be withheld until a timely and complete FSR submission was received from the grantee. However, of those grantees interviewed virtually all were submitting more timely, completed FSRs.

However, there is still inconsistency in the degree of information received on the grantees' FSRs because of the latitude afforded by the current wording of the regulation. The OIG requested that the Regional Offices collect more detailed expenditure information on the FSR. OAR has requested, as some Regional Offices now do, the collection of financial data by object class on a grantees's final FSR by each Region. While a recently revised OMB Circular A-102 indicates that Federal agencies shall not require object class information to be reported on the FSR, Federal agencies are still allowed to request information, as may be necessary, to assure the integrity of the management of the grant. In any regard, it is OAR's intent to pursue the development of an automated grants information and status tracking system for the future.

#### Adequate Financial Review

The OIG noted that the Regional Offices should conduct periodic limited financial reviews to ensure sound grants program management. Unfortunately, the OIG did not detail what constitutes an adequate limited financial review. The appropriate role and responsibilities of a Region versus the OIG in conducting audits has not been made clear.

Many of the Regional Offices conduct some form of limited financial review of their grantees but the scope and extent of these reviews varies among the Regions. One Region conducts in-depth training sessions for its state agencies' financial officers to aid them in properly administering EPA's assistance programs. Some Regions have hired additional staff with accounting and auditing expertise in order to bolster the adequacy of their grantee reviews. Generally, however, the Regions do not have the resources or expertise to conduct a financial review on the scale of the OIG audits. One impediment is the Regions' concern for their liability should their financial review fail to uncover inappropriate use of grant funds by the recipient.

For any MOE certification and verification to be truly meaningful, however, periodic grantor oversight and auditing are necessary. GAD has noted that while verification of the MOE may appear to be a rather simple exercise there are still several complicating factors:

- o Grantees' assistance applications and FSRs often do not display the projected and final MOEs respectively;

- o Interpretations of recurrent/non-recurrent costs have varied among Regional Offices in part due to a lack of guidance and training materials;
- o Regional Offices are reluctant to question state officials' certifications;
- o FSR amounts are not absolutely verifiable without a detailed financial review.

Short of conducting a detailed financial review or audit, the Regional Offices have employed various methods to check and assure that the MOE is met. For example, some Regional Offices:

- o Have each grant carry a special condition delineating the MOE and an assurance it will be met;
- o Give grantees a worksheet to calculate the MOE;
- o Require grantees to list all equipment purchase over \$5,000;
- o Use a checklist to review the FSR and MOE;
- o Use a grantee's application data to calculate a prospective MOE;
- o Direct their grantees by letter to report all nonrecurrent costs and record their MOE on the FSR; and
- o Do not approve an FSR as final until all unliquidated obligations are resolved.

As noted by GAD, current Regional procedures for conducting limited financial reviews include: mid and end-of-year reviews of letters of credit, obligations, accounting systems and recurrent expenditures; joint program and grants staff grantee site visits; joint internal staff meetings on grantee status; and tracking and resolution of unliquidated obligations.

Limited financial review is a topic for further discussion between OAR, GAD, OGC and the Regional Offices. This matter must be resolved with the OIG so that clear guidance can be provided to the Regional Offices on: (a) what constitutes a limited financial review; and (b) what audit resources and procedures can be used for verification of grantee financial integrity.





## CHAPTER 6

### THE FUTURE OF THE SECTION 105 AIR PROGRAM

The preceding chapters have described the Section 105 program's history, accomplishments and process, and critically reviewed its programmatic and fiscal aspects. This chapter examines major issues affecting the continued effectiveness of, and support for, Section 105 air program activity at the state and local level. New strategies and modifications to the current approach to managing the program are suggested. However, the chapter also looks beyond remedial management concerns to pose fundamental questions and offer varying perspectives on the future of the Section 105 air program - its needs, possible sources of financial support, relative intergovernmental responsibilities and appropriate focus.

#### Future Resource Needs

Paramount to any discussion of the future of the Section 105 program is the question of future resource needs. EPA and state and local agencies will necessarily have to look beyond the provisions of the Section 105 program in order to respond to the air pollution control needs of the 1990s. Given the current trend in Section 105 support levels, even with modest increases, it is unrealistic to expect that the air grant program could meet the projected resource demands of emerging problem areas without a significant infusion of funds from additional sources.

#### Estimates of Need

OAR has undertaken several efforts to estimate the likely future funding demands of the Air Program, both on EPA and on state and local agencies. Using OAQPS' Air Pollution Control Strategy Resource Estimator Model (APCSRE), EPA has estimated that approximately 8000 work years are currently expended by state and local agencies on Section 105 activities annually. Assuming that every base and priority activity presently listed in the model would need to be carried out, the model estimates the demand for resources at the state and local level could rise to between 10,200 to 12,000 work years - a 25 to 50% increase over current levels. The increased activities cover implementation plan development, regulation development, enforcement and compliance, administrative and planning costs, etc.

The resource model estimate only covers those activities currently defined as part of the Section 105 program. In cooperation with several other offices, OAR conducted a preliminary analysis of the resource impacts on EPA Headquarters, Regional Offices and state and local agencies of Senator George Mitchell's CAA Reauthorization Bill - S. 1894. While other legislation was offered during the 100th Congress, S. 1894 was analyzed because it was the most comprehensive proposal which might

demand the expenditure of resources at the state and local level. The Bill's five titles covered: a more extensive ozone and carbon monoxide control program; an acid deposition control and clean coal technology program; expanded control of motor vehicles and motor vehicle fuels; control of air emissions from municipal waste incineration; accelerated revision and expansion of national ambient air quality standards development; and the development and implementation of a control program for hazardous air pollutants (see Figure 32). Areas such as indoor air pollution and radon were not included.

The results of this analysis are quite preliminary. The analysis was conducted by the program offices and may not completely reflect the financial needs of the Regional Offices and the grant recipients. Resource demands can be expected to shift to the Regions and to state and local agencies in the latter years. Only the first five years following enactment are considered. This analysis also focuses on estimated resource demands in the areas of personnel and contract costs. It does not reflect a complete assessment of: expected increases due to the impact of inflation; the costs attributable to administrative overhead, land and facilities costs; and growth in employee compensation and benefits, etc.

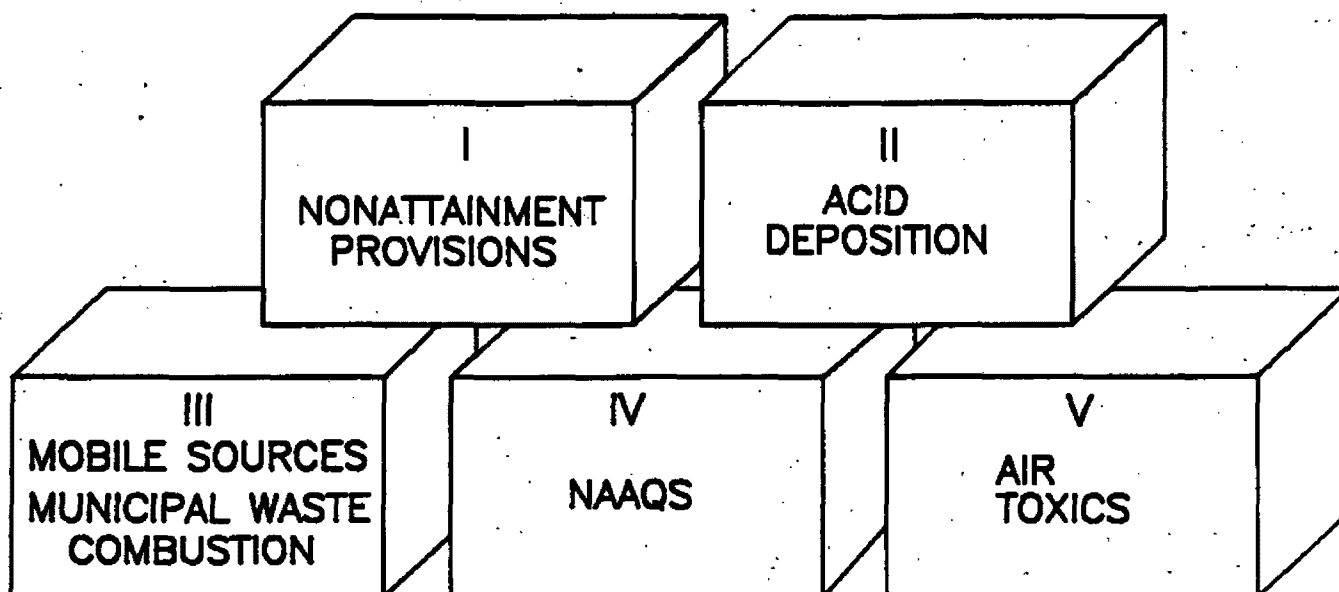
Nevertheless, a preliminary estimate of the projected incremental five year resource demand of these expanded and new program areas on EPA program offices, Regional Offices and state and local grantees shows a significant increase in overall resource needs. These preliminary estimates have just recently been reviewed by the Acting Assistant Administrator and additional resource projections will be necessary in order to apply this data and information to new CAAA proposals currently being considered by Congress.

#### Demands on Air Program Resources From Other Media

Over the last six years there has been a growing recognition of the interrelatedness of hazardous pollutants across the various environmental media. We have found that our pollution abatement efforts in one medium may also transfer pollution to another medium. There is an increased need for a better understanding and a more sophisticated approach to dealing with complex cross-media problems. As a result it is imperative that a more structured integration occur of air expertise and support with other media programs which deal with hazardous air pollutants.

This need obviously has implications on air resources. Major media program areas with potentially demanding resource impacts on air include: (a) Superfund assessment and cleanup; (b) Resource Conservation and

**Figure 32**  
**FIVE TITLES of S. 1894**



Recovery including treatment, storage and disposal facilities for hazardous wastes (TSDFs) as well as air emissions from publically-owned waste treatment works (POTWs); and (c) emergency response and toxic episodic releases.

With the exception of certain Superfund support activity for the Regional Offices beginning in FY 1987, neither the Regional Air Programs nor state and local 105 recipients have received any type of compensation or financial assistance for other media program support activity.<sup>26</sup> Furthermore the Air Program has not done an overall analysis of likely demands on its resources or those of state and local agencies due to other media programs or problems. However, one Region has done a preliminary analysis of workload factor estimates related to four other program activity areas (see Figure 33).<sup>27</sup> This analysis indicates that current demands are likely to be modest but have the potential to rise noticeably as activity in these other media areas expands.

26. See "Superfund Resource Utilization;" Wm. A. Spratlin to T. Maslany; June 13, 1988; (a preliminary estimate). Also see the FY 1989 Operating Guidance for a discussion of the use of Superfund resources for air support work.

27. From "Media Integration Air Programs Workgroup;" Region III; May 1984.

Figure 33

Workload Factor Estimates for Selected Other  
Media Program Activities Which Have Air Impacts (1984)

	<u>Workload Factor (Work week/event)</u>
<u>Superfund</u>	
Dump site Investigation	1.5
Remedial Investigation	5.3
(Work Plan)	(1.3)
(Field Work)	(4.0)
Feasibility Study	1.3
Mitigation/Evacuation Plans	2.5
Immediate Removal	2.5
<u>Resource Conservation and Recovery</u>	
Review Hazardous Waste Incinerator Design (Delegated/Non-delegated Program)	(4.0/.5)
Determine Concentrations of Hazardous Air Constituents for Exemption Requests	4.0
Review State Incinerator Regulations	1.0
Identify Other Potential RCRA Sources Requiring Permits or Permit Changes	.5
Review Impact of Land Disposal of Hazardous Wastes (Delegated/Nondelegated)	(4.0/.2) (modeled)
<u>Emergency Response</u>	
Field Activity	2.5
Obtain Meteorological Data	1.0
Modeling	0.5
Concentration Predictions	0.8
<u>Other Air Support Work</u>	
Access Combustion Sources/National Dioxin Strategy	4.0 modeling/ 1.3 general
Respond to Information and Assistance Requests	.25
Improve Air Emissions Data Base	.1

### Funding The Future

What strategic approach should be taken by EPA and state and local agencies to carry out current and additional anticipated air pollution control responsibilities given a significant shortfall in the level of resources necessary? The existing approach practiced by EPA and grant recipients over the last five years has been to continue the periodic restructuring of program priorities (i.e., the current disinvestments approach). Retaining the disinvestments approach assumes that Section 105 funding will remain stable or decrease (in real and inflation-adjusted dollars) and that more than just marginal increases in both the non-Federal and Federal sectors will not be forthcoming.

### Restructuring Program Priorities

Over the last several years, EPA and state and local agencies have been faced with a continuing dilemma of funding an increasing number of priority problems while valuable resources have either remained stable or declined. EPA and STAPPA-ALAPCO agreed to institute a disinvestments approach where additional work, and increased operating costs, were to be offset by increased funds or the disinvestment of certain activities. However, as we have previously noted, the easiest disinvestments have already been obtained.

The Regions have indicated that no uniform list of disinvestment activities nor list of required activities can adequately address the disinvestment problem given the complexities of varying grantee negotiations.<sup>28</sup> Recognizing this, Headquarters' current approach is to identify a minimum number of required national activities and allow maximum Regional and state and local flexibility in the selection of the rest of the activities in order to optimize the efforts of their respective air programs.

All parties involved, however, have shown a reluctance to disinvest from activities required by the CAA. Regions have indicated that further disinvestments cannot necessarily assure the adequate protection of public health in all areas. During the ARS interviews each Region was requested to identify: (a) areas of total and partial divestiture; (b) areas where only a marginal level of effort was able to be expended; and

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28. See "Minutes - Air Branch Chiefs Meeting of May 13-15, 1987;" Carl Walter to Air Branch Chiefs; June 13, 1987.

(c) those activities considered to be outside the purview of Section 105 (see Figure 34). Virtually no Region indicated it had completely divested required activity. However, all Regions expressed concern that further cutbacks could be or were already jeopardizing the integrity of air program operations. Partially disinvested areas that were particularly noted as being deleterious included the decline in: the overall frequency and quality of field enforcement and oversight; training, contract support and technical assistance to grantees; attention to preventive or maintenance strategies (like new source review, etc.); and infrastructure activities like emission inventory upkeep and ambient monitoring.<sup>29</sup> No respondent has been able to specifically quantify the threshold at which further reductions in the air program infrastructure will cause a complete unraveling of the overall program's ability to assure adequate protection of the public health. However, several Regions indicated they would not be able to absorb an additional 5% reduction or redistribution of their funds without sacrificing the integrity of their grantees' operations, and their ability to meet EPA requirements.

Another complicating concern has been the continued growth of air program activity outside the purview of the Section 105 program. This has occurred because of the following factors or combination of factors: (a) continued disinvestment by EPA in less problematic program areas each year in favor of more immediate, high priority activities with grantees retaining some degree of continuing responsibility; (b) grantees initiating activity in emerging program areas where there is yet to be a clear Federal mandate or where there is little or no dedicated or reliable Federal funding; (c) certain state and local agencies being able to rely upon sources of funding other than Section 105 funds to support their activities; and (d) grantees desiring greater autonomy in their program operations and not wishing to raise their maintenance of effort level, thereby subjecting more of their funds to Federal concerns at the expense of their own.

Non-105 air program activity has raised some ticklish issues. From a positive standpoint, it signals state and local initiative in the absence of federal direction and support. However, the OIG has also questioned whether this means grantees are supplanting the use of their funds with Section 105 funds. Grantees would challenge this interpretation as treading upon state and local prerogatives and priorities. No one really knows the degree of expenditures on air program activity outside the 105

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29. See Regional Responses to "Information Needed to Complete the Air Resources Study and Headquarters' Response to the OIG's Section 105 Audits," OPMD to Air Branch Chiefs; March 25, 1988.

FIGURE 3-4 REGION AND RECIPIENT DISINVESTMENTS & NON-105 ACTIVITIES

	1	2	3	4	5	6	7	8	9	10
ACTIVITIES FULLY INVESTED FROM 105 SUPPORT	(SEE BELOW)	STATE/LOCAL MONITORING UNNECESSARY FOR FEDERAL NEEDS (SEE BELOW)	(SEE BELOW)	(SEE BELOW)	(SEE BELOW)	(SEE BELOW)	(SEE BELOW)	(SEE BELOW)	(SEE BELOW)	(SEE BELOW)
ACTIVITIES CURRENTLY DUE TO HIGHER PRIORITIES OR LIMITED RESOURCES	NO COMMENT	INDOOR AIR ASBESTOS DELEGATIONS CONTINUOUS EMISSION MONITORING (CER)	OVERSIGHT INSPECTIONS NO FIELD INVESTIGATIONS 1600 SIPS OVERALL ENFORCEMENT ACTIONS (C.E.O., NWS)	ASBESTOS INSPECTIONS OVERALL INSPECTION FREQUENCY S02/TSP MONITORING 03 NETWORK ON	STATE/LOCAL PARTICIPATE MONITORING NETWORKS S02 MONITORING CORE ANALYSIS SHOULD BE MODIFIED TO NOTE AREAS OF DISINVESTMENTS	TSP MONITORING BEERS ADMIN. SIPS (110R2K) CER 111(D) SIPS M02/S02 MONITORING TRACKING UP-SETS & MAL-FUNCTIONS REDUCED IN-SPECIM FREQUENCY PER NO GUIDANCE ASBESTOS D/R INSPECTIONS	OVERALL INSPECTION FREQUENCY OVERALL MONITORING ACTIVITY HAS BEEN SCALED BACK	NO COMMENT	NONE	ACID DEPOSIT MONITOR & ANALY SPECIAL PURPOSE MONITOR CURRENT CO/03 S WORK (C TMS) FUTURE 03 PLAN DEVELOP
CURRENT LEVEL OF 105 RESOURCES AVAILABLE ONLY A MODERATE LEVEL OF INVESTMENT TO BE ACCOMPLISHED	PRIO 15N'T A MAJOR ISSUE IN REGION PREVENTIVE CONTROL STRATEGIES	PERMIT ISSUANCE AND REVIEW TMS EMISSION TRADING I/M QUALITY ASSURANCE UPDATE OF EMISSION INVENTORIES	S02 SIGNIF. VIOLATION & RESOLUTION TARGETS NSR PERMITS & OVERSIGHT TRAINING, CONTRACT & TECHNICAL SUPPORT TO GRANTEES 111(D) PLANS FOR TDS AND FLUORIDES	03 NETWORK IS BORDER-LINE ADEQUATE ASBESTOS AIR TOXICS	CORE STUDY SHOULD PROVIDE INSIGHT	ASBESTOS INSPECTIONS AIR TOXICS INSPECTIONS/ENFORCEMENT TOXICS PERMIT REVIEWS	ASBESTOS MESHAP VOC ENFORCEMENT AND COMPLIANCE INSPECTIONS ASBESTOS INSPECTIONS AND COORDINATION WITH TSCA	FORMERLY PRIO BUT THIS HAS CHANGED RECENTLY TRAINING & TECHNICAL ASSISTANCE TO S/Ls PREVENTIVE CONTROL STRATEGIES	INDIAN FUNDING NEEDS TO BE EXAMINED	AIR TOXIC TITLE II SARA DEMANDS OVERALL AQ OPERATIONS IN SOME STATES
ACTIVITIES WHICH THE AQ ALLOWS TO BE EXCLUDED OR WHICH THE RECIPIENT INDIVIDUALLY EXCLUDES FROM THE 105 PROGRAM	ACID DEPOSITION (GRASS) AIR TOXICS MONITORING AND ENFORCEMENT (CET)	STAGE II SPECIAL ACID DEPOSITION/ S02 INCURSION STUDIES SELECTED AIR TOXICS MONITORING COMPLAINT HANDLING AIR/RCRA ACTIVITY SUPERFUND MONITORING	RO IS NOT SURE SINCE THESE ARE NOT EXPLICITLY SPELLED OUT BY S/Ls	AIR TOXICS ACTIVITY TSP MONITORING 'CORE' STUDY SHOULD PROVIDE MORE INSIGHT ANTI-TAMPERING OPEN BURNING AIR/RCRA ASSISTANCE	MONITORING, PERMITTING & REGULATION OF AIR TOXICS EMERGENCY RESPONSE INDOOR AIR ACID DEPOSITION	EMERGENCY RESPONSE ALTERNATIVE FUELS R & D S/L TSP MONITORING SPECIAL PURPOSE MONITORING INCLUDING AIR TOXICS WOODBURNING AND DUST CONTROLS	NOT REALLY A MAJOR OCCURRENCE IN RD T MAPS EXCEPTION OF OIO'S MISSOURI AUDIT	ACID DEPOSITION WOOD-BURNING ASBESTOS SCHOOL PROGRAM (COLO) ENERGY PERMIT FEES	I/M IN ARIZONA OFFSHORE/ COASTAL IMPACTS OF ENERGY DEVELOPMENT (CALIF)	I/M PROGRAMS ARE CONSIDERED SELF-SUPPORTING FIELD BURNING AND OTHER FEED GENERATION PROGRAMS

(MRO3 FEELS THESE TWO CATEGORIES ARE INSEPARABLE.)

program nationwide. Various estimates have ranged between 10-25% of the total Federal/non-Federal contributions each year. The analysis of the costs of operating state and local air agencies may shed some light in this area.

The development of non-105 concerns can be traced to EPA's October 12, 1982 revisions to its financial assistance regulations which consolidated the various program grant regulations into a single 40 CFR Part 35.<sup>30</sup> Subpart A sought to clarify the limits on MOE with what constituted applicable Section 105 program activities. It allows that expenditures for activities not within the bounds of an approved Section 105 program can be excluded from the MOE calculation even if these activities are ongoing in nature.

Subsequent policy discussions within EPA generally characterized applicable Section 105 workprogram activities as, at a minimum, those recurring activities and expenditures necessary for: the implementation of national priorities; statutory or regulatory - mandated actions; and EPA programs delegated to the state for which EPA provides continuing grant support through commitments in the 105 grant work program.<sup>31</sup> Within this interpretation maximum flexibility was afforded Regions through grant negotiations with their grantees. As a result a certain degree of inconsistency has developed between Regions as to what they view as an applicable 105 expense, and among grantees, as to what has been included in the 105 work program.

A comparison of Texas and Massachusetts is a good example. With the exception of some research and development costs, Texas has for years included all of its air program activity within its 105 grant work program regardless of whether all of this activity was 105 related. Massachusetts has traditionally included only activity that it feels is specifically related to CAA Section 105 requirements. As a result, Texas' percentage of non-Federal contribution appears to be well above the national average while Massachusetts' well below it. If both agencies included only those activities common to each of their programs and to Section 105, then their relative non-Federal percentage contributions would appear to be approximately the same.

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30. See 47 FR 44946.

31. See J.R. O'Connor letter to H.J. Wortreich; December 21, 1983.



More uniformity could be achieved nationally if each grantee followed the recommendation of the PBAP. The PBAP urges every grantee to identify all of its air program activity within its Section 105 work program. However, funding for non-105 activity necessarily need not be delineated. The analysis of the costs of state and local air activities has also attempted to estimate air activity expenditures outside 105 for several reasons. From the grantees' standpoint, identifying all of the additional air quality work that is undertaken could provide convincing evidence that Section 105 assistance falls far short of helping meet state and local needs. From EPA's standpoint, the survey results can affirm that all 105 funds are being properly utilized and can aid EPA in making tough decisions about where disinvestments can occur.

Nevertheless, some persons feel the debate on appropriate Section 105 expenditures and grantee responsibility is misdirected. To them, grantees are still accountable for all statutory requirements of the CAA regardless of the limitations of negotiated Section 105 work programs (i.e., grantee responsibilities are determined by the Act and not solely by Section 105 guidance).

This thinking is also reflected in a recent proposal from the Regional Air Branch Chiefs. The Air Branch Chiefs have proposed an alternative four-step approach to the determination of disinvestments and the allocation of grants. These steps are:

- (1) joint development by EPA and STAPPA-ALAPCO of a grantee workload display system to articulate the base program;
- (2) ranking of base program activities with statutorily-mandated activities taking preference over activities solely desired by EPA;
- (3) institution of a grant funds tracking system which would determine the actual costs for each state and local agency to accomplish base program activities; and
- (4) the total Federal and non-Federal funds available to each grantee would then be targeted to a descending rank order of base priorities and according to the grantee's costs per activity (determined by a workload display system). The expected outputs could also be shown.

This ideal approach has merit whether or not EPA and state and local agencies receive additional air program funding. However, the likelihood of adoption of such an approach in the short term is clouded by a hesitancy in instituting a base workload system and the inherent weaknesses of the disinvestments approach.

It is reasonable to conclude that the disinvestments approach has a finite capability to accommodate new responsibilities, and increased costs without likely sacrificing the integrity of program operations and failing to meet statutory obligations. What alternative or supplemental strategies for support of continued air program activity are then possible?

#### Funding the Future: Additional Approaches

In addition to the current approach of restructuring program priorities, there are several approaches that could be used by EPA and state and local agencies to reconcile program demands with available resources. These approaches range from the fundamental realignment of program responsibilities, to changes in program management policies and procedures, to the aggressive pursuit of additional funding sources. While any of these approaches could be carried out independently, their impact would probably be most effective if carried out as an integrated strategy.

#### Reexamining Intergovernmental Roles and Responsibilities

The Section 105 air grant program has been in existence for over 25 years. With passage of the 1970 and 1977 CAA, state and local agencies were seen as having the primary responsibility for addressing air pollution problems at their levels. With the assumption of this responsibility, Congress also envisioned that state and local governments would eventually assume an increasing role in financial support. EPA's role was to change from direct involvement and intensive oversight to one of providing technical assistance, conducting research, providing support for emergency areas and conducting general oversight.

This has not entirely occurred, of course. New problems have emerged and existing problems have proven overly complex, with appropriate intergovernmental responsibilities not so readily distinguishable. Some interview respondents felt that the intergovernmental relationships in the air grant program are no longer maturing as Congress had originally envisioned, despite the increasing state/local dollar percentage contribution. Progressive assumption of the Air Program by all states has not occurred at the rate expected and EPA is still heavily involved in funding the "maintenance" aspects of some state and local air pollution control programs.

One view of the 105 program is that its funds are to be used to help establish a nationwide state and local air pollution control program infrastructure, and once this is accomplished then its emphasis should shift to support for the investigation of emerging air quality problems and the wider provision of training, guidance and technical assistance for them and for established program areas.

Some critics feel the Air Program now faces an identity crisis through its attempts to fund both base program activity and high priority/emerging problem areas. Some persons maintain that EPA should first fully support the base or infrastructure aspects of the Air Program then devote any remaining funds to new areas. Other persons feel that base activities should solely be a state and local responsibility, and that EPA should fund only newer emerging problem and high priority areas awarding funds more on a competitive, demonstrated-performance basis.

However, without the more detailed information it is impossible at this time to differentiate what portion of Federal funds and what portion of state and local contributions make up 'core' or base activities versus high priority and emerging problem areas. Such a differentiation also raises EPA concerns about its ability to continue to influence state and local programs should the Agency does move out of base activity areas. Even if EPA were to concentrate its resources on base activities, the degree of EPA's continued influence would still be a concern due to unclear mandates from Congress for emerging problem areas. This will continue to fostered the growth of state and local activity in program areas outside the traditional 105 program.

A fundamental question is whether EPA's future 105 role will be a peripheral or a integral one. For example, in California the state and local agencies contribute approximately 90-95% of their programs' cost. The remaining portion is funded by EPA Section 105 funds. The Region has indicated that California complains that the Section 105 funds simply cover the costs of staff time spent responding to EPA tracking and data requests. The Section 105 funds in California essentially buy EPA a "window" into the state's program but currently do not serve to strongly influence grantee action for the Regional Office.

Philadelphia also pays for about 90-95% of its program with other than Section 105 funds. Philadelphia's air pollution problems basically mirror the air pollution agenda of EPA. Since EPA has invested a good deal of research and technical assistance funds in the Philadelphia area, the Agency has been intimately involved with the City in its air pollution control efforts.

Hence, a fundamental question facing EPA is -- what is the paradigm for intergovernmental relationships under Section 105 for the future -- detached EPA oversight and provision of technical assistance or direct EPA involvement? Would it be fair and appropriate to shift more of the burden of the costs of maintaining day to day operations to state and local agencies? Is this consistent with a philosophy of a Federal-state partnership particularly when some critics have charged that certain state and local agencies have been more creative in environmental problem-solving than the Federal government?

#### Pursuit of Additional Funding

Prudence dictates that the EPA and state and local agencies cannot, and should not, totally rely upon the Section 105 air grant program for the support of their future funding needs. Even if modest increases in Section 105 grants were forthcoming a resource shortfall would still remain. Therefore, EPA and state and local governments still need to aggressively pursue other sources of support and a greater percentage recovery of their program costs. A good start would be for EPA and state and local agencies to fully utilize the funding mechanisms already available to them. Obviously this would include the application of existing permit fee provisions:

#### Existing Permit Fee Requirements

While it is obvious that the majority of state and local air pollution control agencies need additional revenues to meet their increasing responsibilities, most have yet to make full use of the permit fee provisions successfully applied in several states and required under Section 110(a) 2(K) of the 1977 CAA. Part of the responsibility for this uneven response rests with EPA since the Agency chose not to issue uniform requirements but instead general guidance. The guidance was issued several years after the CAA enactment, at a time when EPA was grappling with many other, more profound requirements of the legislation. Nevertheless, the intent of 110(a)(2)(K) is clear.

For approval of a state air quality implementation plan the CAA requires the owner and operator of each major stationary source, as a condition of receiving a required permit, to pay to the permitting authority the reasonable costs of reviewing and acting upon the application for such a permit. If the permit is approved, the source is also responsible for the costs to the permitting agency of implementing and enforcing permit terms and conditions. The statute is not specific to the type or design of fee program to be implemented. However, it does intend that the fees collected ultimately be applied by the appropriate state and local agencies for the purpose of protecting and improving air quality.

An initial analysis by OAQPS of the aggregate costs to state and local agencies in FY 1987 for routine permitting (renewals), PSD, and nonattainment area source permitting (NSR) provided an estimate a total of over \$50,000,000.<sup>32</sup> This estimate only covered sources in EPA's National Emissions Data System and hence pertained to that permitting activity covered by Section 105 funds. Independent state and local permitting activity was not included.

Preliminary survey results from the analysis of the operating costs of state and local agencies indicated that of the total 105 funds utilized by grantees approximately 11% are devoted to permitting activity. Multiplying this percentage times the total 1987 Federal and non-Federal 105 program contributions (estimated to be approximately \$283 million) yields a total of \$31.13 million for Section 105 applicable permitting. Multiplying this figure by the relative Federal and non-Federal percentage program shares (38/62) indicates that of the \$31 million-plus for permitting, EPA contributes approximately \$12 million and the non-Federal sector contributes approximately \$19 million.

A comparison of the OAQPS estimate (\$50 million), to the preliminary state and local survey results (\$31 million), indicates that grantees may be underestimating the actual costs of permitting activity on their operations. The estimate of \$12 million in Section 105 grants, expended for 105-applicable permitting activity, is conservative. This is an estimate that conceivably could be recovered by grantees and thereby free the corresponding Section 105 funds for other grantee activities.

#### - Permit Fee Task Force

In response to the need for additional state and local air program revenues and in order to come into compliance with the CAA, the AA for OAR established a task force in June of 1987, under the direction of OPMD, to examine the issues related to air permit and emission fees, explore options and report back to him with recommendations for further action.

The task force found that the purposes of permit fee programs, as envisioned by their congressional, state and local supporters, are four fold. First, they can provide a major additional source of revenue to support ongoing air permitting activities thus liberating 105 funds for newly emerging air pollution control efforts. Of most importance to industry is that state and local agencies are, as a rule, more timely and effective in their permit related activities when an established fee

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32. "Estimated Cost of Permit Reviews"; November, 1987; OAQPS (Tom Donaldson).

program and schedule are in place. Second, fee programs can make state and local air programs more self-sufficient and thus more stable in the face of sometimes volatile state funding. Third, by making a fee program a national requirement, equity among state and local agencies and the industries they regulate can be assured, and thus avoid having fee states be penalized by non-fee states in competition for industry. Fourth, by having the regulated sources bear the cost of permit programs, the program becomes more consistent with the "polluter pays" principle and the industry (and the goods and services it produces) will more accurately reflect the true public cost of its activities.

To the extent fees are proportional to the severity associated with pollution, they can provide some incentive to reduce emissions. However, permit fees will generally be far too low to significantly influence industrial behavior in this regard. Therefore, they are not intended as a substitute for emission regulations. Similarly, they are a supplement, not a substitute, to 105 funds.

#### - Progress in Development of Fee Programs.

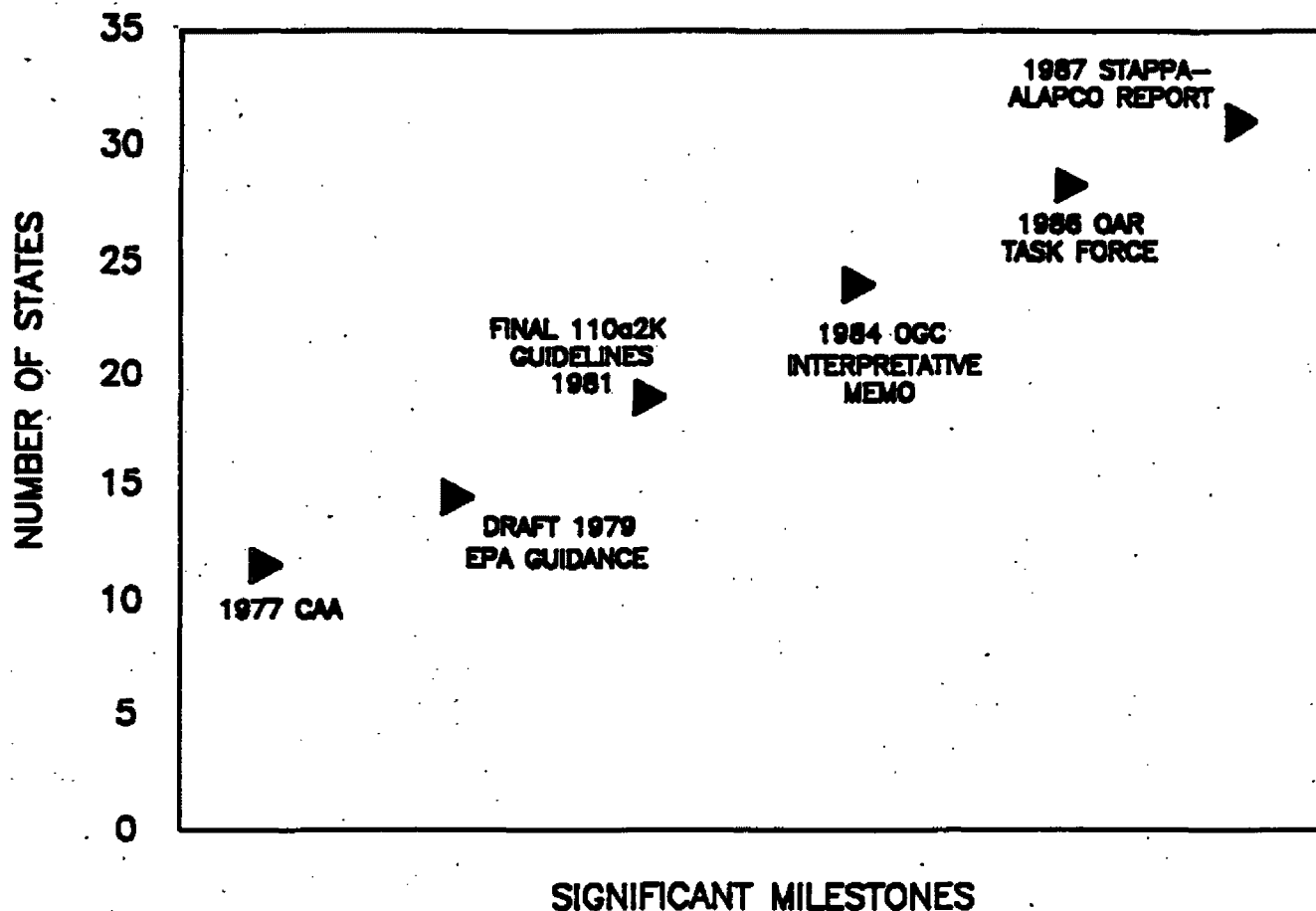
As shown in Figure 35, there has been major progress in the number of state and local agencies that have established, or have been authorized, to establish permit fee programs. Beginning with 10 state agencies that had been authorized prior to the 1977 amendments, 31 state agencies now collect fees and an additional 11 have the authority but are not yet collecting. Similarly, with regard to local agencies, 26 of the 32 local agencies responding to the STAPFA/ALAPCO 1987 survey reported that they had permit fee authorization, and 25 of those are currently exercising that authority.

Although this progress clearly is positive and many agencies have done very well, Figure 36 indicates that serious problems still remain. Nearly 11 years after this requirement was enacted, approximately 40% of the states still have no permit fee programs at all and the majority receive less than 3% of their total air pollution control budget from fees. While the average for the fee collecting states (exclusive of California) is approximately 10% of state air budgets, even this average masks major differences. Texas, for example, covers well over 50% of their air program costs through permit fees while Missouri receives only 0.5% from such sources. Failure to charge and collect fees adequate to cover the reasonable costs of administering permit programs is common both among those states that are largely self-sufficient and among those heavily dependent on 105 funds.

The task force found numerous reasons why agencies support or shrink from fee programs. Common reasons supporting a fee program were: (a) the existence of fee programs predating the Federal requirement; (b) response

Figure 35

## PROGRESS ON STATE PERMIT FEE SYSTEMS



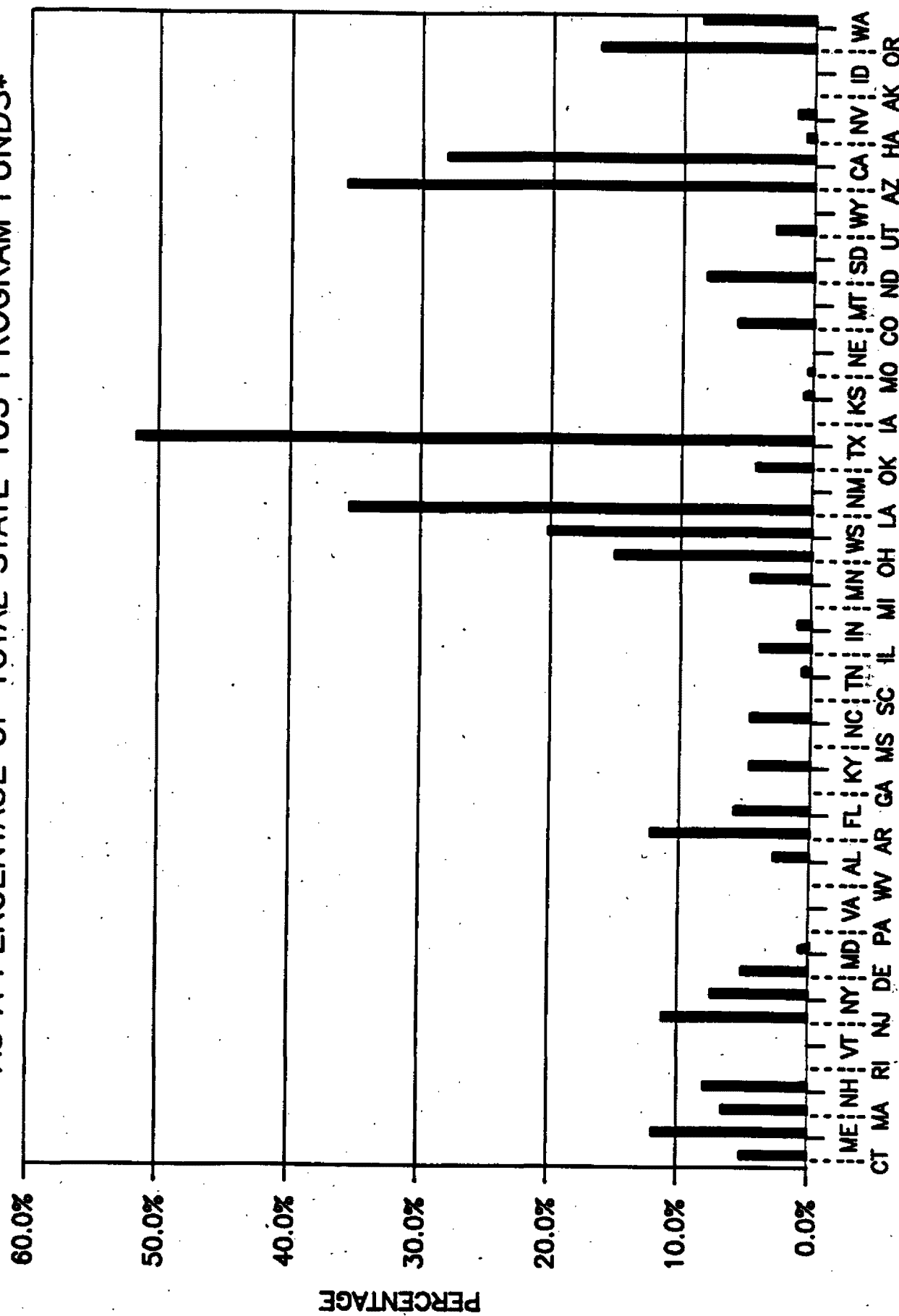
to budget balancing and reduction environments at the state and local level; (c) sentiment and response in favor of the polluter pays principle; (d) a requirement of the 1977 CAA; and (e) encouragement by the EPA.

These last two areas are the only ones really under EPA control. Regional interviews revealed that generally management and staff in the EPA Regions with strong fee programs readily knew the status of those programs.

In other Regions, Regional management referred interviewers to lower level staff who then had to research fee program status. Supportive Regions did not usually feel they were doing anything unusual with fees. Invariably fees were a topic of conversation both informally and during formal grant negotiations with their grantees.

Reasons why other states lagged behind in instituting the 110(a)(2)(K) requirements fell into three major areas. First, many agencies perceived inconsistent or conflicting signals from EPA. Most did not think EPA was serious about the requirement and some were not even aware that it was a CAA requirement. Several agencies also indicated that their state laws prohibited them from being more stringent than Federal requirements. Secondly, many agencies also expressed a fear of getting too far in front

Figure 36  
AIR PERMIT AND EMISSION FEES (FY 1986)  
AS A PERCENTAGE OF TOTAL STATE 105 PROGRAM FUNDS\*



STATES

\* (Includes all State, Federal and Local 105 contributions and fees)



or being labeled anti-business. These same respondents stressed the importance of a national regulation or policy in order to avoid putting any one state or community at a competitive disadvantage with its neighbors. Lastly, many agencies were seriously concerned that fees would be absorbed by other state agencies, or would be subject to compensating reductions by either state appropriations committees or by OMB at the Federal level.

The last concern, particularly regarding OMB, is especially important. While EPA has only limited influence over OMB, state and local agencies must be assured that it is not EPA's intent to substitute permit fees for 105 funds. Furthermore, as noted above, all agencies collecting fees found that they benefited financially even where the fee revenues were not specifically earmarked to them.

#### - Major Task Force Findings and Recommendations

The OAR permit fee task force was unanimous in its conclusion that properly implemented permit fee programs can provide major benefits. This same conclusion was shared by virtually every air agency having experience with fees. While a few of the air agencies without fees were reluctant to adopt them, every representative contacted from an organization collecting fees to any significant degree was positive about the program. Interestingly, even where fees collected go first to the general treasury and are not necessarily earmarked for the air program, experienced participants still felt that permit fees were beneficial. The normal pattern appears to be that state agencies responsible for contributing to the state treasury usually benefit at appropriation time, even where there is no legal obligation.

Other major conclusions included the following: (a) fees do not deter the location of new industry nor the retention of old; (b) there are many acceptable bases for assessing fees including, quantity of emissions, log of time and materials, and source size, age and category; (c) full recovery of costs of a permit program include the implementation of permit conditions as well as permit issuance itself; and (d) full cost recovery is required by the CAA.

The task force on State and Local Permit and Emission Fees was unanimous in the following recommendations:

- o EPA should initiate a strong program to assist and direct all state and local agencies to recover all reasonable costs associated with implementation of permit programs;
- o The focus should be on the bottom line for cost recovery and allow maximum state and local flexibility in the design and implementation of fee systems;

- o EPA should encourage that fees collected go to the respective air agencies;
- o EPA should work closely with STAPPA/ALAPCO to develop a formal policy for implementation of the Permit Fee Requirements;
- o Withholding of 105 funds and other sanctions should be used only as a last resort; and
- o The option to promulgate a national permit fee requirement, in the absence of state and local initiative to collect fees, as required by the statute, should be left open.

#### Other Fee Provisions

Grantees are not limited to the permit fee provisions of Section 110(a)2(k). Numerous state and local agencies have been operating sophisticated and progressive fee systems for years and recovering the costs of public sector services to private sector profit-making operations.

For example, the California air pollution control agencies have been leaders in the development and management of fee systems. In the face of continued nonattainment problems, the South Coast Air Quality Management District (SCAQMD) recently revised its fee schedule eliminating exemptions for certain small sources, lowering emission cut-off levels for fee applicability requirements and selectively raising existing fee amounts for other sources. The SCAQMD board, which gets 90% of its revenues from the fees on permits and penalties for permit violations, also increased its annual operating, renewal, and engineering evaluation fees. The revisions increased SCAQMD's budget from \$50 to \$63.6 million enabling the agency to hire over 100 new inspectors, engineers and enforcement personnel.

Air pollution control agencies in Florida have benefited from that state's passage several years ago of an additional \$.50 fee per motor vehicle tag to fund mobile source-related, hazardous waste and asbestos pollution control efforts. And while other agencies have complained to EPA that they cannot afford the costs of operating an asbestos clean up program and have refused to accept asbestos program delegation, a progressive local agency like the Puget Sound Air Pollution Control Agency covers the bulk of its asbestos demolition and renovation program costs with fees collected from asbestos notification and contractor certification programs.

#### Public-Private Partnerships

During the Air Resources Study interviews, Region VIII noted that major industries and utilities using coal, natural gas or petroleum, at the Region's invitation, had joined EPA, the State of Colorado and the local Chamber of Commerce, in a public-private partnership to develop a

comprehensive study to characterize the nature and sources of the Denver metropolitan area's toxic "Brown Cloud." Support for the study by area industries, including automotive concerns, was prompted by: the urgency of the problem, the shortfall of funding from EPA and the state, and a concern over culpability for the source of the problem area industries contributed approximately \$1 million in funds to the study. The study was managed by the Chamber of Commerce since neither EPA nor the state could accept funds from the private sector. EPA and the state agency have contributed technical assistance to the effort. A three member board, comprised of representatives from the Governor's Office, the Chamber of Commerce and EPA, provided oversight and direction to the study.

#### User Fee Proposals

Numerous other proposals have been discussed within EPA and OMB regarding the extension of various user fee, or polluter-pays systems which could have the potential of eventually delivering funds to cover the costs of air pollution control efforts at the state and local level. For example, in the face of continued ozone nonattainment, one proposal would have facilities that annually emit over 100 tons of volatile organic compounds (VOCs), and which are located in nonattainment areas, pay a per ton fee based upon their "allowable" emissions. Sources could pay a fee based on lower "actual" emissions if ample documentation was provided. State and local agencies could also extend their fee schedule applicability to less than 100 ton per year sources as well.

Another proposal would have electric utilities, which annually emit 1,000 or more tons of  $\text{SO}_2$  and  $\text{NO}_x$ , pay a per ton fee based upon their total emissions of these pollutants. Utilities could calculate their estimated emission fees using formulas developed by EPA and covering such factors as fuel type and quantity, fuel quality, boiler efficiency and existing control technology in place. The fee would be based on plant-wide emissions rather than individual unit emissions. The quality of emissions data for basis of the fee could improve with the eventual installation of continuous emissions monitors (CEMs).

Additionally, OMB has urged EPA to propose a competitive "marketplace" approach to controlling chlorofluorcarbon (CFC) emissions. In this approach, portions of an annually predetermined annually decreasing level of allowable CFC emissions are competitively bid upon by competing facilities for the rights to emit (i.e., manufacture the appropriate amount of the product still allowed to be produced). Assuming an expeditious reduction schedule, this concept could be extended to other pollutants and industries particularly where carcinogenic and other hazardous air pollutants are involved.

Prime candidates for permit fee or emission tax provisions are emerging air pollution problem areas where a clear Federal mandate and dedicated source of Federal funding are absent. Congress, EPA and state and local agencies may also wish to consider if a technology-forcing emission tax approach (where the more effective the controls in reducing the volume of pollution - the less tax is paid) would be appropriate for emerging program areas like air toxics emissions control.

#### Economic Incentives and Disincentives

Apart from funding a pure regulatory approach, another way to ensure or encourage compliance with air pollution control requirements is to offer various financial assistance mechanisms (incentives), or financial penalties (disincentives) to the polluters. Experience with polluter incentives and disincentives directly affecting actual air pollution emission and control has been limited in the United States. Limited application of incentives has occurred in the area of emissions banking, bubbling and trading. Disincentives have generally only involved non-compliance fines and penalties, which for reasons of program integrity and practicality, are not viewed as "planned" sources of program revenue.

European experience has been much more extensive, particularly in the area of subsidies to industry. These have included: (a) direct investment subsidies, covering part of the costs for the development of new pollution abatement technologies; (b) loans for installation of pollution abatement equipment or environmental rehabilitation, or interest subsidies to facilitate loans; (c) tax rebates, such as reductions in motor vehicle taxes for clean technology vehicles; and (d) subsidies for investment in energy - saving and low - waste technologies (i.e., encouraging the reduction of fossil fuel combustion).

Other European experience includes: levying additional taxes and surcharges on uses of certain fuels; reductions in charges for low-polluting fuels; levying of penalties and fines based upon emission rates (the rates being charged in proportion to the environmental damage caused); and the proceeds going to a fund for the development of remedial measures and clean-up activities.<sup>33</sup>

One possible proposal for air pollution control in this country, emulating the European experience, would be to have all air pollution fines and penalties collected by EPA go directly into a remedial financial

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33. See "National Strategies and Policies for Air Pollution Abatement;" United Nations and Economic Commission for Europe; 1987.

assistance fund or a National Air and Radiation Trust Fund for eventual redistribution for EPA programs and state and local pollution control activities. EPA has already established a somewhat similar approach under its cost recovery policy for the Leaking Underground Storage Tank (LUST) Program.<sup>34</sup> Other media approaches are noted below.

#### Other Media Program Approaches

EPA's Water Program recognized that the traditional grants approach to funding its Wastewater Facility Construction Grant and Non-point Source Water Pollution Grant programs could not continue indefinitely given projected costs and likely economic scenarios. As a result of Congressional action, the Water Program is shifting the costs of planning, preliminary engineering, constructing and maintaining such facilities to states by way of a state capitalization fund. The revolving capitalization fund was initiated with 80% Federal funds and 20% state funds. The State Revolving Fund appears to hold limited utility for the Air Program, however, since the Air Program does not feature a capital-intensive element such as a wastewater treatment facility. The Water Program also faces hurdles in how to continue adequate funding for non-capital intensive purposes like water quality planning.

#### Managing for the Future

The need for reassessment and clarification of the direction of the Section 105 program and of relative Federal, state and local air program roles has been suggested in the above discussion. This has been prompted, in large part, by the dilemma of ever-increasing responsibilities outstripping available resources. It is necessary, of course, to seek additional funding sources. However, in addition, there are remedial administrative and management steps that can be taken to lessen the strain of the funding dilemma. These actions might not necessarily increase funding but they may increase overall productivity and help limited dollars go farther. These steps would certainly be enhanced if the issues of program focus and future support were resolved, but their pursuit is not prevented in the absence of such resolution.

These actions include: (a) development and integration of a longer range multi-year outlook into the ongoing air and radiation program planning, budgeting and execution cycle; (b) assessing anticipated program support needs for new program responsibilities at the Federal and state and local levels and matching this need estimate with realistic resource

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34. See OSWER's "Cost Recovery Policy for Leaking Underground Storage Tank Trust Fund;" October 7, 1988; J. Winston Porter to Regional Administrators.

strategies and projections at the outset; (c) promoting to Congress and the Administration the virtues of providing appropriations on more than just an annual basis; (d) implementation of various modifications to the administrative aspects of the current CAA pertaining to grants allotment and management intended to make them less cumbersome and more equitable; and (e) improving grants tracking and oversight systems and the grants information data base. The next sections discuss these possible administrative and legislative changes in more detail.

### Multi-Year Planning

As noted earlier, a crucial concern of state and local agencies has been the continuity and certainty of EPA's program priorities and financial support. Interview respondents were critical of EPA's continual modification of its annual priorities and a corresponding inconsistency in maintaining its funding commitments. From OAR's perspective, annual adjustments are necessary to meet competing and constantly changing needs. The fact that this occurs, in a time of limited resources, further underscores the difficulty of meeting the need for flexibility versus the need for stability.

To accommodate these competing forces, many respondents urged that OAR adopt a more formalized multi-year approach to the planning, programming and funding of its activities. It was felt that this would enable recipients to better respond to EPA requirements and more effectively operate their programs (i.e., secure timely matching funds, hire and train needed staff, secure legislative authority, etc.).

By necessity, goals for reducing air pollution are multi-year in nature - overcoming ozone and carbon monoxide problems may take decades, for example. However, OAR's management of its resources, including state and local assistance, is driven by decisions based on annual Congressional appropriations rather than longer term authorizations. Annual competition among priorities often results in the deferral or diminution of funding of some program objectives for the benefit of others. This underscores a simple axiom -- as resources diminish or remain stable, and priorities increase, the amount of time it takes to complete an objective or resolve a problem lengthens. The recurrence of the same annual objectives in the Air Program's past successive operating guidance documents amply illustrates this.

The course of resource management decisions is also highly dependent on the tenure of the presiding Regional Administrators, Assistant Administrators, and Administrator. A multi-year plan, which overlaps tenures, may not be well received by incoming management if the new management perceives its control as being constrained by a previously approved multi-year plan. Interim adjustments during this period can always be made, of course.

Despite these possible impediments, OAR and other top EPA managers must pursue a more logical approach to match program goals with projected resource need and availability. Before requesting appropriations, the total costs required to adequately complete a program activity need to be assessed. These requirements must then be weighed against the possible sources and availability of funding. Funds can then be requested accordingly, and the period for completion of a major program goal can then be projected and programmed accordingly. If resource support changes or other priorities emerge (e.g., court orders, increased health risk, etc.), then the relative timeframes for completion of the activities can be adjusted. What should result is a "living", multi-year plan containing a detailed first year implementation program with total program costs and sources of funding spelled out. The ensuing years' agenda would necessarily contain less detail but would still show specific funding recommendations in the basic program areas.

There are various mechanical aspects to consider for carrying out a multi-year planning and programming cycle - discrete multi-year periods versus a rolling multi-year "window" approach. With a discrete block cycle, planning and programming would occur for a distinct multi-year period. Assessment of accomplishments, and any necessary adjustments, would occur in the final year of the multi-year cycle and would influence the formulation of the next multi-year period plan and program. Commitments would be negotiated and locked in for the entire multi-year period.

Another approach would feature more of a capital budgeting format with projected activities moving through a three or five year plan and becoming more focused as they near the implementation year (e.g., similar to the Department of Transportation's annual element portion of its three year capital improvement plan). The second year is more of a "staging" year possessing a greater likelihood of funding of the activities it contains than the upcoming "candidate" activity-years of three through five.

Another variation would feature a moving or overlapping multi-year window. In this case planning and programming would occur for a discrete multi-year period but adjustments would be made at the end of each year of the cycle. As one year is completed another moves into the implementation window and any adjustments necessary from the first year would influence the content of the "new" three to five year program plan.

Any multi-year approach must necessarily incorporate revisions to: operating guidance and grants guidance; SPMS negotiations and commitments; and ongoing strategic planning and needs analysis exercises conducted by OAR program offices (e.g., OAQPS annual "Greensboro" strategic planning sessions). The current process for formulation, development and execution of one year's budget would need to be revised to reflect multi-year considerations.

The expenditure of grant funds would still be able to occur over a two-year period. The most far-reaching implications of this approach would be for Congress to adopt a multi-year framework for appropriation of grant funds. This would require fundamental changes in the way Congress does business and obviously would not occur simply to accommodate the 105 air grant program.

If a multi-year planning cycle is adopted, grants could be negotiated for multi-year commitments. Annual Regional management reviews would allow adjustments for non-core or changing priority activities. SPMS commitments would be projected for three to five years allowing annual adjustments and retaining quarterly and annual progress reviews. Strategic planning would be required of all the program offices and an overall OAR annual strategic planning session would be held involving the program offices and the Regions. Consultation with STAPPA-ALAPCO would be retained.

Possible constraints and disadvantages associated with a multi-year approach are: incompatibility with biennial state budgets (20 states employ biennial formats); opposition to longer-term authorizations due to economic circumstances; perception of diminished federal control (possible weakening of annual accountability); and increased need for maximum federal flexibility due to diminishing resources.

Possible advantages would be that: a marriage of projected resource requirements and program goals would occur; Regional Offices and grantees would have a more stable resource commitment for base activities and longer range planning would be promoted; less SPMS micro-management would predominate; environmental results could be better assessed over a three to five year period; action-forcing events like new legislation and cross-media concerns could be better planned for; and realistic program priorities and plans could be made into the 1990s.

EPA Headquarters is still considering a more formalized approach to multi-year planning.<sup>35</sup>

#### Cost Analysis of Actions to be Implemented

All too often legislation, litigation or environmental exigencies result in additional EPA responsibilities without the Agency first being able to assess the costs of their implementation or the availability of additional resources. EPA, in turn, must distribute limited resources to state and local agencies to follow through on these new responsibilities, on some occasions not truly knowing if the available resources are

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35. See "Memorandum on Five Year Program Plans;" Office of Management Systems Evaluation; September 13, 1988.



fully adequate to allow completion of the requirement in a timely manner.

Ideally, before a new responsibility is added to the agenda of EPA and state and local agencies, a preliminary analysis of the costs to accomplish it should be determined and the necessary resources programmed accordingly. This would allow a better match of resource needs to resource availability. Resulting shortfalls and relative timeframes for completion would be more evident and would aid in multi-year planning and programming.

If resources do not exist for the activity then: (a) a dedicated source of funding should be identified; or (b) a strategy for development of supporting resources should accompany it; or (c) areas of existing activity able to be deferred or curtailed in deference to the new responsibility should be identified. Both Congress and EPA could perform such analysis as part of the development of legislation, regulation or policy for each new responsibility.

#### National Grants Management Information System

The study also determined that, other than a manual updating of annual financial obligation status by grantee, there is presently no national-scale system or data base in place which provides information specifically documenting grants accomplishments or the actual utilization of grant resources by major air program objective. Grantee close-out financial status reports, at best, may outline object class (salaries, travel, equipment, etc.) or program element (monitoring, enforcement, etc.) information. But these are usually received at least a full quarter after the end of the completed grant year, and object class information is of little value in determining how funds are spent on national air priorities.

Some persons have questioned the need for such information and oversight at the national level. Congress, however, holds the national program managers responsible for implementing the statutory requirements of the Act, and accountable for assuring that grant funds awarded to carry-out these requirements are so expended. It would also seem to be sound management practice for Headquarters, which is responsible for national resource allocation, to have a direct link to evaluation of resource utilization and accomplishment of national objectives.

These concerns highlight the dilemma of trying to strike a balance between the desire for flexibility and the need for accountability. To reconcile this dilemma, the Air Program has recently initiated efforts, utilizing Productivity Improvement Project Funds, to develop an automated grants accomplishments tracking system (and information data base) by building upon reporting and data systems already in existence at the Regional Office level. This should increase national level knowledge, enhance national level decision-making, and do so with a minimum of administrative disruption to the Regions and grantees.

### Other Administrative and Statutory Revisions

There are various actions that EPA could pursue to make selected administrative and statutory provisions dealing with Section 105 air grants less cumbersome and more equitable. These actions fall within two general categories: (1) changing how funds are appropriated for certain grant purposes; and (2) making administrative modifications to Section 105 of the current Act.

#### - Identifying Special Appropriations

In the first area for potential revision, separate appropriations for special purposes, intended for direct financial assistance to state or local air agencies, could occur apart from the overall Section 105 appropriation. These include separate appropriations for: (a) equipment purchases; (b) training funds; (c) protection of Indian Tribal lands; and (d) intermedia demands. The advantage to separate appropriations in these areas is a highlighting of their annual funding needs and removing them from continual competition for limited 105 funds. These areas are discussed in more detail below.

o **Equipment Purchases** - EPA and State and local agency equipment needs vary depending upon the enactment of new requirements and the life expectancy of equipment-in-place. As old equipment wears out, the resource needs for its replacement must compete with the continually growing demands of personnel salaries and benefits (even though resources may not increase). A separate appropriation for equipment costs would also prompt EPA and grant recipients to prepare an equipment lifecycle plan spelling out equipment purchase and replacement needs. By identifying a separate appropriation for equipment needs, the Air Program could also drop the administrative encumbrance of having to differentiate non-recurrent equipment costs as part of the maintenance of effort determination.

o **Training Funds** - As program responsibilities have grown, training assistance has diminished. While forms of technical assistance are inherently provided to grant recipients for carrying out new responsibilities, in FY 1988 neither EPA nor Congress requested that funds be devoted specifically for training purposes. Annual training needs, including those available under Section 103, need to be identified for separate appropriation. Funds could also be included for intergovernmental program assignments of EPA personnel to state and local agencies and vice versa. Pursuant to the desire to expand technology transfer activities for grantees, some form of a State assignee program could be resumed.

o Protection of Indian Tribal Lands - New proposals and ongoing projects to fund activities to protect the air quality of Indian Tribal Lands must continually compete with requests to support established and growing state and local air quality programs. Making them a separate appropriation would focus more attention on their individual merit, and remove them from competition with air pollution control agency requests. Overall coordination of air quality improvement efforts would need to be maintained with state and local governments.

o Intermedia Demands - The Air Program needs to better define the impacts on its operations of other media programs for resource support or where air program support is needed but has not been identified. A special appropriation to address intermedia demands could also be provided or compensatory resources from the appropriation sources of the other media programs could be utilized.

- Modifications to Current Administrative and Statutory Provisions

In the second category modifications to current language in Section 105's paragraphs (a), (b) and (c) could be considered which would either: shift greater financial responsibility to state and local agencies, further shift limited dollars among grantees, or simplify certain administrative encumbrances thereby encouraging grantees to contribute more of their own funds. For example:

- o In Section 105(a) the maximum Federal contribution available to grantees could be limited to 3/5 of the cost of the state/local program or 60%. Those grantees contributing less than 40% of their program's costs would be required to gradually increase their contribution by at least 3% per year until they reach a 40% level. In this case a grantee presently contributing only 25% of its program would have 5 years to raise its contribution to the 40% level.
- o Section 105(b) could be revised to incorporate updated criteria reflective of conditions of the 1990s in the calculation of the allocation of 105 funds to grantees. The half of 1% provision in Section 105(c) would be retained but the maximum amount available to any one state would be 5%, not 10%. This would have the effect of allowing the redistribution of several million dollars of 105 funds among grantees. Only a handful of grantees currently receive more than 5% of the funds (generally 6% has been the maximum).
- o The MOE requirement could be modified by either fixing a base year amount, allowing a slight range of percentage change in costs year-to-year, or adopting a grantee progressive assumption approach.

In the progressive assumption approach, state and local agencies would be required to bring their program contribution levels up to at least 40% according to the schedule previously mentioned. In another five years this contribution level would have to reach at least 50%. A grantee would not be permitted to lower its contribution level (not withstanding a non-selective reduction), and a still receive Federal funds if it were already above the applicable minimum grantee percentage contribution.

The MOE requirements could be further simplified if all equipment purchases were either entirely excluded from consideration as recurrent activity or were officially allowed to be used as either a recurrent or non-recurrent activity so that a grantee could meet its MOE each year. The original intent of the MOE requirement was to allow flexibility and not rigidity in grantee program management operations.

- o Finally, grantees could be required to describe all of their air program activity and expenditures within their 105 financial assistance work programs. More uniformity could be achieved nationally if each grantee followed the PBAP, and included a description of all of its air program activity with the Section 105 submission. From the grantees' standpoint, identifying all of its air quality work could provide convincing evidence that Section 105 falls short of helping them meet their air resource needs. EPA could also pledge not to use this information to the detriment of grantees when determining their proper MOE level.

## CHAPTER 7

### SUMMARY and RECOMMENDATIONS

#### SUMMARY

From its beginning in the 1963 CAA the Section 105 grant program has grown to award nearly \$100 million annually in state and local assistance. The combined Federal and state/local 105 contributions of \$4.8 billion since 1963 have served to promote and anchor a nationwide air pollution control infrastructure. This infrastructure has helped to reduce or prevent over 400 billion pounds of air pollutants since the program's inception. For most of the nation this 26 year old grant program serves as the financial backbone of state and local air pollution control efforts.

With such a concrete foundation and background why is it necessary to reappraise the program's conduct and course? There are several factors initiating this reappraisal. The foremost is the combined effect of static appropriation levels, and as a result, diminished buying power, with an ever-increasing agenda of air pollution problems and responsibilities. Since 105 grants can not be expected to support all of this burgeoning agenda this raises fundamental questions about: (a) the Section 105 program's focus; (b) and appropriate Federal and state and local roles, and responsibilities.

An overriding national priority is the reduction of the Federal budget deficit. Until the mid-1980s Section 105 assistance to state and local agencies and these agencies' own contributions, experienced steady, if marginal growth accompanying the growth in air program responsibilities. While there was always some changing differentiation of priorities and some redistribution of Section 105 funds, this generally occurred in times of increased funding. Few, if any, grantees and Regions experienced a net reduction in resources and most activities received some measure of funding.

In recent years, however, Section 105 levels have remained relatively constant. Even a marginal increase of 5% in the most recent fiscal year has done little to offset the approximate 15-20% erosion in real buying power of the dollar since 1982. This has proven particularly troublesome when combined with the added burdens of continued nonattainment and unforeseen emerging air pollution problems. At a time when resources have been leveling off, issues such as the control of air toxics and acid deposition, post-1987 ozone and carbon monoxide nonattainment, indoor air pollution and intermedia pollution have all been added to an already full Air Program agenda. This has lent a new appreciation for the phrase "doing more with less."

In its initial dealings with these problems, the Air Program proved remarkably resilient. Improvements in productivity were gained via reductions in staffing and refinements in monitoring and data management systems. Efforts were made to improve consultation and "open" the process thereby reducing, in part, inherent inter-jurisdictional tension. EPA and state and local agencies also adopted an approach currently in use for restructuring program priorities. This "disinvestments" approach was intended to offset increased work demands and operating costs with increases in funding, and the savings achieved from disinvestiture of selected activities..

However, it has become increasingly evident that the disinvestments approach, by itself, holds limited utility to adequately accommodate the future demands of the Air Program. The most palatable disinvestments have already been instituted. The cost savings which have been derived have reportedly failed to cover the costs of new responsibilities. Some persons have cautioned that disinvestments in some established program areas have seriously eroded the program's infrastructure and any further steps could be debilitating. To address this concern EPA and state and local agencies have undertaken an ambitious effort to determine the extent of this problem and to further identify potential disinvestments by examining the costs of operating state and local programs.

Additional information gathering efforts are often viewed as laborious and can be met with an uneven response from grantees. The Air Program finds itself in somewhat of a paradox in this regard, attempting to balance flexibility with accountability. The desire is not to conduct oversight of grantees through micro-management but rather to promote a balanced Federal-state relationship. Nevertheless, there are serious deficiencies in the Air Program's data base on the costs of program operations and on resource utilization. This information is a critical ingredient for helping make the difficult resource management decisions which will affect the future course of focus of the program.

The periodic restructuring of program priorities is not the only option available to reconcile program demands with available resources. EPA and state and local agencies need to identify and pursue other funding alternatives to supplement Section 105 funds. This includes the full utilization of funding mechanisms already available to them, specifically, the Section 110(a)(2)(k) permit fee provisions. Full implementation of these provisions has lagged, in part, to the absence of uniform national requirements. Numerous state and local agencies, however, have benefitted from these provisions and other user fee approaches, and now possess a wealth of experience worth sharing with all grantees.

Reauthorization of the CAA provides a unique opportunity for the Air Program to revisit, refine and reemphasize the current permit fee requirements as well as other potentially significant, revenue-generating, and cost recovery approaches. These could include: "dedicated" fee programs tied to specific new requirements of a reauthorized CAA; technology-forcing and rewarding emission tax rates; tax rebates and clean technology investment subsidies; creation of a trust fund which would retain for EPA and grantee use any fines and penalties levied on violating sources. Development and utilization of these potential funding sources, to supplement or eventually replace Section 105, is a prudent step for the future, particularly, if estimates of anywhere from and 50% to a near doubling of future resource requirements are accurate.

Reexamining the CAA at this time also affords the opportunity for taking constructive action in several other ways: (a) modifying certain administrative provisions of Section 105 to make them less cumbersome and more equitable for grant recipients; (b) rethinking the schedule and manner in which grant funds are appropriated and for what purposes in order to highlight special needs; and (c) utilizing new approaches to accomplishing air quality goals. This latter category includes such approaches as: promoting public private partnerships in funding air pollution research, significantly expanding technical assistance, reducing the need for regulatory controls and oversight, and periodic certification of state programs. Many of the concepts in this last category fall beyond the scope of this report, yet have significant bearing on the future of the Section 105 program, since they could produce significant cost savings.

In addition to determining the appropriate focus of the program and to pursuing additional resources, EPA can also: (a) improve its current approach to day to day management of Air Program operations; (b) reexamine and update, as appropriate, the rational basis for national allocation of grant funds; and (c) pursue a more strategic longer-term approach to program planning and budgeting.

Within the first category numerous actions can be taken which will: (1) encourage improved grantee performance; (2) improve communication throughout the grants process, making its conduct less stressful for all involved; (3) strengthen and maintain oversight to assure continued grantee financial integrity; and (4) increase overall productivity.

The rationale used by the Air Program to allocate Section 105 grant funds at the national level is based upon an allocation scheme and allocation criteria originally developed in 1974. Since that time, the factual bases for many of these criteria have changed, some of the criteria are duplicative, and many ensuing years' funding increases have been allocated either proportionally or on the basis of other quantitative factors. The national basis for allocating Section 105 funds should

therefore be reexamined to assess whether it reflects the environmental conditions of the 1990s. This reexamination should be done by EPA in consultation with state and local agencies. Should there be significant changes in the allocation results these should be phased-in gradually.

The Air Program also needs to better prepare for the future. This will require that the Air Program better match its anticipated program support needs with realistic resource strategies and projections; particularly for the support of state and local activities. The costs of implementing new responsibilities, on both EPA and state and local agencies, needs to be assessed and planned for prior to these responsibilities being assumed. While the Air Program can unilaterally conduct such assessments, it also needs to impress upon Congress the importance of doing so in the development of new legislation and programs. The Air Program also needs to integrate a longer range, multi-year outlook into its ongoing program planning, budgeting and execution cycle. The usefulness of providing funds on more than just an annual basis should be impressed upon Congress. This would facilitate multi-year planning by adding a greater certainty and continuity to air program priorities and funding.

In summary by implementing the major policy, funding and management recommendations noted above, and by elevating those major resource policy issues which reach beyond their purview, EPA and its partners in the Air Program, state and local agencies, can more confidently, effectively and efficiently carry out their responsibilities under the current or revised CAA. The major recommendations of this study are listed below and are discussed in more detail in the ensuing paragraphs.

#### RECOMMENDATIONS

The primary recommendations and conclusions of the Air Resources Study fall within 3 major categories of initiatives: policy, funding and management.

##### Policy Recommendations

- (1) EPA, state and local agencies, and Congress should determine the appropriate focus of the Section 105 program for the future, and in so doing reexamine and define the appropriate Federal, state and local programmatic and financial support roles and responsibilities.
- (2) The Air Program should examine and promote other approaches to the traditional command and control approach of "doing air pollution control business," if these will result in a more effective utilization of air resources.



### Funding Recommendations

- (3) EPA should seek legislative changes intended to remove current Section 105 administrative encumbrances, facilitate planning for the future, and highlight special appropriation needs. Additionally EPA and state and local agencies should explore additional funding sources to supplement the Section 105 program.
- (4) EPA and state and local agencies need to pursue alternative state and local funding, and develop funding mechanisms in addition to the Section 105 grants program. In so doing, they should fully utilize the alternative funding mechanisms already currently available to them-- namely 110(a)(2)(k) permit fee provisions.
- (5) EPA, in consultation with state and local agencies, should reexamine the basis for the national allocation of Section 105 funds and update it as appropriate. Any changes should be phased in gradually.

### Management Recommendations

- (6) EPA should integrate a more strategic, multi-year perspective into its ongoing Air Program planning, programming and budgeting process including the state and local assistance element. EPA should better assess the costs of implementing new activities on state and local agencies.
- (7) Within the current Section 105 program, EPA should seek productivity improvements intended to streamline the internal management of the process, and encourage improved grantee performance.
- (8) EPA, with the cooperation of state and local agencies, needs to improve its grants management information and data base systems to enable more effective decision making on resource utilization.
- (9) EPA must continue its efforts to improve and maintain grantee financial integrity and accountability, and strengthen Regional capability for adequate programmatic/fiscal oversight.

## RECOMMENDATIONS WITH ACTION ITEMS

### Policy

- (1) Determine the appropriate focus of the Section 105 program relative to EPA and state and local agency responsibilities:
  - (a) Assuming 105 funding levels remain relatively unchanged, OAR should develop a policy discussion paper for the Assistant Administrator on options for the proper program and focus of Federal, State and Local roles. These options include having EPA:
    - fund base program activities first and then new initiatives, if possible;
    - fund high priority activities and technical assistance to grantees with grantees responsible for base costs;
    - fund CAA-mandated activity first;
    - combine base and priority activities and rank order them according to three tiers of priority; or
    - support prevention and maintenance activities first, then allocate the balance to emerging areas.
  - (b) Have the Assistant Administrator convene a workgroup of senior Agency managers, consisting of several Regional Administrators, Office Directors and state and local agency officials to examine this issue and make appropriate recommendations.
  - (c) Have the Administrator urge a wider public discussion of changing Federal, state and local roles and responsibilities involving EPA, state and local agencies, and Congress.
  - (d) After receiving the workgroup recommendations, OAR in consultation with the program and Regional Offices, should issue a policy clarifying what constitutes an applicable Section 105 program expense.
- (2) Examine and promote other approaches to the traditional ways of "doing business."
  - (a) Have OAR and the Regional Offices publicize the cooperative public-private efforts occurring such as: Denver's "Brown Cloud" Study, Houston's Ozone Study and the PAWVOH Study. Promote such ventures in the rest of the country.

Funding

- (3) EPA should study the feasibility of seeking legislative changes to Section 105 during the CAA reauthorization process intended to increase the equity and effectiveness of the grant program.
  - (a) Draft revisions to Section 105 requirements that would "level the playing field" in terms of the Federal contribution to any grantee including minimum and maximum percentages and minimum grantee contribution percentage. Any changes would be gradually phased in.
  - (b) The maintenance of effort requirement should be retained but OAR, in consultation with OGC, the Regions, and state and local agencies should draft revisions intended to simplify and make more flexible the administrative aspects to the MOE provisions.
  - (c) OAR should draft a position paper for the AA and Administrator on the need for Congress to consider using a two year or multi-year appropriation cycle instead of the present annual appropriation process.
  - (d) During the CAA reauthorization, OAR needs to communicate to Congress the need to reemphasize the requirement for every state to have a fee (cost recovery) program under 110(a)(2)(k) in order to have an approvable SIP.
- (4) EPA and state and local agencies need to pursue additional approaches to funding state and local air program needs other than just Section 105 air grants.
  - (a) EPA and state and local agencies should fully utilize the alternative funding mechanisms already available to them, the 110(a)(2)(K) permit fee provisions. In so doing OAR, in consultation with STAPPA-ALAPCO, should set-up an information clearinghouse on successful state and local permit fee programs outlining: fee schedules, legal issues, implementation issues, ways to retain fee revenue, model programs, etc. An electronic bulletin board system could facilitate this.
  - (b) OAR, in consultation with STAPPA-ALAPCO, should also include information in this clearinghouse on other fee and cost recovery systems, and on other innovative approaches to generate revenue or cost savings including: pooling of shared equipment resources, data management efficiencies, and innovative personnel management practices.

- (c) EPA, in consultation with state and local officials, should also examine other funding alternatives for state and local assistance: dedicated user fees, low-polluting investment incentives, and the retention of fines, levies and penalties for a "Remedial Air Program Trust Fund."
- (5) EPA, in consultation with state and local agencies, should reexamine the basis for national allocation of Section 105 funds and update it, as needed.
  - (a) OAR should select a contractor to update the factual basis for current allocation criteria and for any criteria that might be considered in a revised allocation scheme. This would include: population, number of sources, extent of pollution, etc. The contractor would also identify other areas like degree of risk, performance criteria, and agency capability, that could be considered.
  - (b) OAR should form a workgroup consisting of Regional Office and Headquarters personnel to discuss the contractors results, and to advise on the need for any modifications to the national allocation scheme. State and local agencies should also be consulted.
  - (c) Should any modifications be necessary, a plan for their gradual introduction would need to be formulated.

#### Management

- (6) OAR should adopt a multi-year planning approach which would be tied to existing EPA management systems including those affecting the state and local assistance element.
  - (a) OPMD should work with OAOPS in extending their strategic multi-year approach throughout OAR. Multi-year planning should also be extended and tied to Regional management systems. State and local agencies should also be consulted on the extension of the multi-year concept to a portion of the Section 105 grants assistance.

- (b) CAR should routinely assess the costs of implementing each new activity on state and local agencies. Resource demands should be matched to resource availability and the appropriate timeframe.
- (7) Under the current Section 105 program, CAR should seek productivity improvements intended to: improve communication throughout the grants process, encourage improved grantee performance, and strengthen and maintain adequate oversight to ensure grantee program integrity.
  - (a) In the area of improved communication, internally EPA should: increase involvement of Regional senior management in grants review as needed; establish 105 issues as a topic for the AA/DAA, Regional Review visits; continue annual Air Branch Chiefs/Regional Grant Coordinators national meetings; issue a 105 Reference Manual similar to the OAQPS guidance notebook series which compiles relevant policies, memos, guidance, etc.; continue to encourage early Regional Office input in operating and grants guidance development; and promote personnel rotations and exchanges between Headquarters and the Regional Offices.
  - (b) In terms of increased communication between EPA and state and local agencies: Regional Offices should continue to hold early spring meetings with state and local agencies prior to formal grant negotiations; Regional Offices should continue to document their own Section 105 allocation rationales for their grantees; encourage Headquarters and Regional Offices to continue or develop formal personnel exchange or rotational programs with state and local agencies; those Regional Offices which have not done so are encouraged to develop their own manual outlining their Section 105 grants policies and procedures for their grantees; and Headquarters should continue to involve state and local representatives in early discussions on annual air program priorities via STAPPA-ALAPCO.
  - (c) Improved grantee program performance can be encouraged by Regional Offices in several ways: Regional Offices use of mid-year grant evaluations from the current year to influence grantee negotiations in the upcoming year, where possible; Headquarters and Regional Offices could establish or encourage formalized systems for

grantee performance incentives including reduced oversight and reporting requirements and increased grantee roles in high priority project selection; and wider Regional Office use of pure performance-oriented and adjusted schedule of award approaches for grant awards.

- (d) Overall productivity and performance enhancements include: OAR placing more emphasis on technical assistance and technology transfer activities with grantees; promoting resource-sharing among grantees and EPA; having Regional Offices draw a closer link between grant evaluations and national air audits, where possible; development of a pilot program within each Region designed to involve the Regional Office, program offices and at least one grantee in the review of EPA oversight and reporting requirements, and the refinement of them accordingly; periodic review of OAR's withholding and Escrow Policy; OAR review of the need for greater flexibility in the annual Regional on-site review of grantee performance; and development and expansion of interactive computer capabilities between EPA and grant recipients to simplify workplan development and negotiation, progress tracking, data and technology transfer.
- (8) EPA, in cooperation with state and local agencies, needs to improve its resource management information systems.
- (a) All state and local agencies should cooperate in the completion of the joint STAPPA-ALAPCO/EPA survey on the Costs of Operating State and Local Air Programs. OAR should consider alternatives to obtaining this information if the survey is not completed in a timely manner or the responses are inadequate.
  - (b) OAQPS, utilizing Productivity Improvement Program (PIP) grant funds, needs to complete its automation of the grant obligation status tracking system. Using PIP funds, OAR and OAQPS need to utilize existing Regional Offices' grants accomplishments tracking systems to rebuild a system which enables tracking overall grants accomplishments by major activity area. This should be integrated with the grants component of the Regional Priority Tracking System.

- (c) OAR should develop a discussion paper on the utility of developing state and local workload allocation models at the Regional level for potential use in awarding Section 105 funds to grantees.
- (9) EPA must continue its efforts to ensure grantee financial integrity.
- (a) Regional Offices should continue to improve their fiscal oversight procedures and systems in the wake of the OIG 105 audits. Additional actions Regional Offices have taken or can take are: conducting program administration training workshops for their state and local financial officers; hiring an auditor or accountant in the Region to track grantee fiscal accountability; and conducting joint Regional Office Air/Grants Divisions site visits to grantees.
  - (b) OAR and the OIG should clarify auditing responsibility and adequacy criteria. GAD and OAR should also continue to carry out the revised MOE guidance and pursue legislative refinements to current MOE requirements.





## APPENDICES

## APPENDIX A

# SECTION 105 OF THE CLEAN AIR ACT

### GRANTS FOR SUPPORT OF AIR POLLUTION PLANNING AND CONTROL PROGRAMS

**Sec. 105. (a)(1)(A)** The Administrator may make grants to air pollution control agencies in an amount up to two-thirds of the cost of planning, developing, establishing, or improving, and up to one-half of the cost of maintaining, programs for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards.

**(B)** Subject to subparagraph (C), the Administrator may make grants to air pollution control agencies within the meaning of paragraph (1), (2), or (4) of section 302(b) in an amount up to three-fourths of the cost of planning, developing, establishing, or improving, and up to three-fifths of the cost of maintaining, any program for the prevention and control of air pollution or implementation of national primary and secondary ambient air quality standards in an area that includes two or more municipalities, whether in the same or different States.

**(C)** With respect to any air quality control region or portion thereof for which there is an applicable implementation plan under section 110, grants under subparagraph (B) may be made only to air pollution control agencies which have substantial responsibilities for carrying out such applicable implementation plan.

**(3)** Before approving any grant under this subsection to any air pollution control agency within the meaning of sections 302(b)(2) and 302(b)(4) the Administrator shall receive assurances that such agency provides for adequate representation of appropriate State, interstate, local, and (when appropriate) international, interests in the air quality control region.

**(3)** Before approving any planning grant under this subsection to any air pollution control agency within the meaning of sections 302(b)(2) and 302(b)(4), the Administrator shall receive assurances that such agency has the capability of developing a comprehensive air quality plan for the air quality control region, which plan shall include (when appropriate) a recommended system of alerts to avert and reduce the risk of situations in which there may be imminent and serious danger to the public health or welfare from air pollutants and the various aspects relevant to the establishment of air quality standards for such air quality control region, including the concentration of industries, other commercial establishments, population and naturally occurring factors which shall affect such standards.

**(b)** From the sums available for the purposes of subsection (a) of this section for any fiscal year, the Administrator shall from time to time make grants to air pollution control agencies upon such terms and conditions as the Administrator may find necessary to carry out the purpose of this section. In establishing regulations for the granting of such funds the Administrator shall, so far as practicable, give due consideration to (1) the population, (2) the extent of the actual or potential air pollution problem, and (3) the financial need of the respective agencies. No agency shall receive any grant under this section during any fiscal year when its expenditures of non-Federal funds for other than nonrecurrent expenditures for air pollution control programs will be less than its expenditures were for such programs during the preceding fiscal year, unless the Administrator, after notice and opportunity for public hearing, determines that a reduction in expenditures is attributable to a non-selective reduction in expenditures in the programs of all executive branch agencies of the applicable unit of Government; and no agency shall receive any grant under this section with respect to the maintenance of a program for the prevention and control of air pollution unless the Administrator is satisfied that such grant will be so used to supplement and, to the extent practicable, increase the level of State, local, or other non-Federal funds that would in the absence of such grant be made available for the maintenance of such program, and will in no event supplant such State, local, or other non-Federal funds. No grant shall be made under this section until the Administrator has consulted with the appropriate official as designated by the Governor or Governors of the State or States affected.

**(a)** of this section shall be granted for air pollution control programs in any one State. In the case of a grant for a program in an area crossing State boundaries, the Administrator shall determine the portion of such grant that is chargeable to the percentage limitation under this subsection for each State into which such area extends. In fiscal year 1978 and subsequent fiscal years, subject to the provisions of subsection (b) of this section, no State shall receive less than one-half of 1 per centum of the annual appropriation for grants under this section for grants to agencies within such State.

**(d)** The Administrator, with the concurrence of any recipient of a grant under this section may reduce the payments to such recipient by the amount of the pay, allowances, traveling expenses, and any other costs in connection with the detail of any officer or employee to the recipient under section 301 of this Act, when such detail is for the convenience of, and at the request of, such recipient and for the purpose of carrying out the provisions of this Act. The amount by which such payments have been reduced shall be available for payment of such costs by the Administrator, but shall, for the purpose of determining the amount of any grant to a recipient under subsection (a) of this section, be deemed to have been paid to such agency.

**(e)** No application by a State for a grant under this section may be disapproved by the Administrator without prior notice and opportunity for a public hearing in the affected State, and no commitment or obligation of any funds under any such grant may be revoked or reduced without prior notice and opportunity for a public hearing in the affected State (or in one of the affected States if more than one State is affected).

APPENDIX B  
ONE BUDGET/GRANT YEAR'S LIFECYCLE  
(Example: FY 1990)

YEAR	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1987					
1988	Draft FY 90 OAR budget request is discussed @ 5/A-00 meeting		FY 90 OAR budget presentation to Administrator	Administrator's budget decisions to OAR	OMB hearings on OAR FY 90 budget
1989	Budget bills must be reported out of Committees ROs hold meetings with State Air Directors to discuss grant objectives and commitments ROs release Region-specific guidance to their grantees All supplementary operating guidance is to have been distributed	ROs and S/Ls initiate workplan negotiations First concurrence on House and Senate budget resolution	Grantees draft narrative portion of grant workplans and ROs and grantees confer	Final S/L grant workplans and assistance applications are due	Second concurrence on House/Senate budget resolution due House/Senate pass HUD-Independent Agencies appropriations bill President signs joint appropriations bill ROs approve S/L grant applications
1990	RO completes report on evaluation findings		ROs evaluate grantees' third quarter progress SPNS third quarter reporting		RO and S/Ls determine carry-over amount for the next fiscal year
1991					

YEAR	OCTOBER	NOVEMBER	DECEMBER
1987	<p>QAR discusses candidate FY 90 air/radiation issues with RO</p>		<p>QAR discusses candidate FY 90 air/radiation issues with STAPPA-ALAPCO (S/A)</p>
1988	<p>QAR initiates development of OQ/SPNS with Administrator's call letter</p> <p>QAR requests RO and HQ proposals for grant priorities</p> <p>QAR letter to S/A requesting participation in developing grant priorities</p>	<p>QAR passback to EPA</p> <p>Program Offices send their drafts of OQ and SPNS to OPMO</p> <p>Distribute rough draft Operating Guidance (OG) for discussion</p>	<p>QAR distributes grant priorities for review</p> <p>QAR meets w/ S/A to discuss draft OG and priorities</p> <p>EPA appeals OMB passback and receives revised passback</p> <p>QAR prepares final FY 90 budget package for OMB submittal to Congress</p>
1989	<p>EPA Comptroller receives Treasury warrant and apportionments from OMB</p> <p>Comptroller issues advices of allowance to allowance holders</p> <p>QARs award funds for the new fiscal year</p>		<p>End of FY 89 reconciliation including carryover and adjustment of FY 90 advice of allowance</p>
1990			
1991			



# APPENDIX C

## DISCUSSION of REGIONAL OFFICE and GRANTEE LOE PRACTICES and PROCEDURES

Region	Automatic RO Set-Aside	Description of RO and grantee LOE practices and procedures
1	No	States request that all funds be obligated; if a grantee does want to utilize the LOE mechanism it is done on an individual grantee basis; if funds have already been awarded to a grantee for an effort that now must be done via LOE then the grant or subsequent grant is reduced accordingly
2	No	Total allocation is made to grantees except when there is a refusal to assume responsibility for a program; in that case, the Region may use the LOE mechanism; on occasion states will request LOE assistance which is then funded with their 105 funds
3	No	States inform RO of their LOE project needs and how much they should have transferred from their base award; if LOE needs are identified after the grant award they are funded from available sources (contingency, unexpended prior year funds, etc.)
4	No	States have requested that all funds be obligated - no LOE set asides
5	No	States request that all funds be obligated; if LOE projects arise during the year the RO and grantee can deobligate, use prior year unexpended, or mutually agree as to what other activity will be deferred in its place

6	Yes	RO contacts states by phone early in process to identify their LOE needs; traditionally the amount set aside has been about 5% of the Region's allocation
7	Yes	RO sends letter to states requesting their identification of needs; priority of LOE requests is based upon each merit, EPA-State priorities, grantee refusal to perform certain required activities
8	No	RO obligates all funds to its grantees; if a state requests an LOE project then funds come from its grant award; if there are unexpended funds at the end-of-the year a LOE project may also be done
9	Yes	The amount of LOE set aside is determined by state and high national projects; RO technical staff talks to their state and local counterparts with potential projects identified during workplan negotiations; grantees send request to Air Section Chief requesting LOE projects
10	Yes	States in Region meet to discuss and jointly recommended potential projects and RO staff select proposals; most grantees on July fiscal year but do not see their LOE funds until November



Schedule For Targeting LOE Funds

May	OAQPS request RO estimate of grantee requests and provides preliminary guidance on contractor costs of activities.
August	ROs provide initial estimate of LOE projects and costs.
October	Preliminary advice of allowance to special support account.
November	ROs conduct further negotiations with grantees and make appropriate adjustments; provide OAQPS with planning list of projects.
January	Transfer of Regional 105 funds to the special support account; notification of the advice of allowance.
April-June	Additional direct transfer requests from ROs.



APPENDIX D  
DISCUSSION OF DRAFT 1974  
ALLOCATION RATIONALE



APPENDIX (1974 Allocation Plan)

I. 1974 Allocation Plan Criteria and Assumptions

The FY '74 allocation plan utilizes specific input data on a statewide basis. In making this preliminary allocation of State needs FY '74) the following parameters were utilized in the calculations for each State:

1. The population of the State expressed as a percentage of the national population. (1970 Census Data.)
2. The number of manufacturing establishments in a State expressed as a percentage of the estimated nationwide total. (1967 Census of Manufacturers.)
3. The number of air quality priority 1 regions in the State expressed as percentage of nationwide total.
4. The total capital expenditures for new manufacturing equipment expressed as a percentage of the nationwide total.
5. The motor vehicles registered in the State expressed as a percentage of the national total.

The allocation for each State is first determined as its percentage need and then adjusted to a base of 100%. The State's Federal share of Federal dollars is then the State's percentage need multiplied by the total Federal dollars available for 1974 (\$48.5 million). Table 1 shows the factors utilized for each State and the resulting allocation.

The tentative allocation scheme parameters address directly two of the four basic Federal Register criteria, population and the extent of the stationary source problem. The scheme also reflects, somewhat, on the

impact of national priorities as it expresses the relative problems to be faced by a State with respect to priority I air quality regions (air quality standards) and looks at a possible indicator of the mobile source and stationary source problem as they relate to meeting the standards. The tentative allocation scheme does not address the impact that requirements for revising control plans or developing new control schemes, such as land use planning and transportation controls, may have on control program resources of a State. Nor does it look at local and State programs in terms of the types of program operations that they should perform in order to be most effective in controlling air pollution sources.

Although the scheme provides a basis for apportioning grant funds on a percentage basis regardless of the amount of total Federal funds, it has an obvious shortcoming in that the growth in population, motor vehicles, etc. were not considered.

A second important aspect would be to look at the possibility of substituting a measurable control parameter that indicates the extent of the existing problem. The total emissions in a State could be substituted for the number of manufacturing plants and capital expenditures as these two parameters indicate the extent of the possible pollution problem from stationary sources. Such a substitution neglects the variation from state to state in types of existing control problems and could penalize those states which have performed capably in the abatement and preventive aspects of air pollution control.

The optimum allocation system would be one that tended to provide funds to states and localities not only on a need basis, but also on the

effectiveness of the control program in either reducing air pollution levels or in the maintenance of air pollution standards. The existing data would not support this type scheme until definitive trend data concerning emission reduction and air quality data are obtainable for each agency. The semiannual and annual report of State activities may eventually result in data that can be correlated with cost.

## II. Revision of 1974 Target Allocation

In an effort to move toward a distribution of resources to those areas with an increasing need, and toward the achievement of the Clean Air Act on a nationwide basis, the tentative 1974 allocation tended to redistribute the funds from areas with essentially (1) small land areas, (2) air particulate problems, (3) slowed growth rates, and (4) relatively smaller populations to areas with (1) medium size land areas and large populations, (2) increased growth rates, and (3) transportation control needs. Data provided by the regional offices and an analysis of State SIP resource needs, however, indicates these changes in distribution should be phased over a period of time to prevent the granting of increased awards to agencies that cannot utilize these additional resources immediately and to prevent drastic cuts in essential agency operations that are striving to meet SIP obligations.

In 1973 the regional offices were requested to rank their agencies based on the priority system of SIP roles. Since Federal funds will be available to support the State and local control program operations nationwide in FY 1974 at the same level as in FY 1973 we must rely on the State and local agencies to make an even greater effort to obtain additional

non-federal resources. The limited Federal resources make it necessary to assign lower priority to continued support to agencies that may share some responsibilities with the State agency. For this reason the regions are encouraged to provide the State and those Priority I and II local agencies with relatively more of the necessary resources to achieve the implementation plan by providing relatively less support or phasing out unnecessary agency operations or agencies that do not have specific delegated operations. This policy means that agencies which are not contributing effectively to solution of priority problems or even those with some responsibility in enforcement, source surveillance, air quality monitoring and laboratory services will face a phaseout of Federal funds in 1974.

To begin this implementation of a program whereby the regions begin to look at the need and effectiveness of the local programs a 70% reduction of funds in priority III and IV agencies has been reallocated to the regions having essentially priority I and II agencies. In addition, funding levels for priority I and II agencies have been kept at essentially the same level as in 1973. The revised allocation for the regional offices is shown in Table II.



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