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GUIDELINES FOR EVALUATING
STATE AND LOCAL AIR POLLUTION
CONTROL AGENCIES



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Air Quality Planning and Standards

Research Triangle Park, North Carolina

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STATE AND LOCAL AIR POLLUTION
CONTROL AGENCIES

Control Programs Development Division

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December 5-6, 1972

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Section 1. The Evaluation Process

Background

State and local air pollution control agencies are encouraged through Federal financial assistance to develop effective programs for the prevention and control of air pollution. The award of this assistance is intended not only to aid in the continued development of these programs but is also structured to support those agencies demonstrating their ability to maintain a comprehensive control scheme for reduction and abatement of air pollution. The Federal Register, Title 40, Part 35, State and Local Program Assistance Grants, provides authority, criteria, and eligibility requirements for awarding of these grants. Three types of grants will be awarded in support of an air pollution control program--pre-maintenance, maintenance, and interstate planning. Grants may be made in amounts up to two-thirds of the cost for pre-maintenance programs, three-fifths of the costs supporting a maintenance program, and for amounts up to 75 percent of the estimated air quality planning program costs. The agencies qualifying for support under the program can be municipal, regional, state, or interstate. However, limitations are placed on the number of years that an agency can receive pre-maintenance support based on the type of agency and number of budget periods (three or more or less than 3) the agency received support for between the years July 1, 1968 and July 1, 1972.

A survey of State and local air pollution control agencies conducted in the spring of 1971 indicates approximately 264 agencies are operating programs that could receive some type of grant support. The number of agencies currently receiving grant support range from 16 in Region X to 45 in Region V.

In determining the desirability of continuation of support, a program evaluation must be made of these agencies' program objectives and program performance. These program evaluations are to be scheduled at least annually by the Environmental Protection Agency Regional Offices and are to be conducted no later than 120 days before the beginning of a new grant period. The effectiveness of these evaluations and ultimately their impact on the agency and the meeting of the Clean Air Act objectives depends critically on the purpose for which they are conducted as well as how they are conducted.

The level of effort at which the Federal government, in cooperation with State and local control agencies, conduct these evaluations could consist of either (1) a checklist review of the application with control agency personnel to be sure all items mentioned as criteria in the regulations are addressed or a combination of limited review of the submitted application; (2) an agency financial audit; and/or (3) a complete study of agency operations with recommendations for improvement.

APPLICABILITY OF AGENCY EVALUATION

The application of the evaluation program could thus take many varied forms, entail many different procedures for conduct of the evaluations, and could generally result in a non-uniform application

of the grant's criteria and subsequent grant funding between the EPA regional offices. It is important, therefore, that established procedures and available criteria be provided so that consistent evaluation techniques are applied to APC agencies. The primary responsibility for conducting these agency evaluations is with the regional offices. The time involved, personnel required, writing of reports with recommendations and follow-up of these recommendations will probably require expertise and personnel training requirements beyond that presently available in the regional offices for making such evaluations. The purpose of this document then is to provide some guidance and definition to the regions concerning the type of evaluations they should conduct and the procedures and criteria to be utilized in any evaluation.

COMPONENTS OF EVALUATION PROCEDURE

The regional office evaluation procedure should result in the resolution of conflicting interests between the pollution control agencies within a state; an allocation of available funds and other resources that will achieve the most effective control of enforcement operation; establishment of a priority system for review and analysis of agency programs; and of course cooperation between the Federal, State, and local governments in conducting specific programs that will result in eventual overall program improvement and achievement of national goals.

The overall mission of the grant process is to provide resources to State and local agencies to assist them in solving their air pollution problems. The specific evaluations and analyses made of an air pollution agency must be directed toward improving the use of those

resources to provide efficient operations that achieve control of air pollution sources within the control program's jurisdiction.

In establishing an evaluation procedure to effectively and efficiently serve this purpose, the Regional Office should consider the following components as a part of its evaluation process:

1. Development of a screening mechanism to select agencies for review.
2. The use of adequate guidelines (criteria) for evaluation of agencies that:
 - a. Reduces the time involved in the review process
 - b. Assures an adequate estimate of the level of the effectiveness of the agency.
3. The setting up of more adequate instruments for the collection of data pertaining to the evaluation process.
4. The assessment of factors involved in evaluation of an agency that affects national standards, implementation plan accomplishment, budgetary considerations, and best means of assuring control.
5. The extension of the evaluation procedure beyond appraisal of effectiveness by assuring identification of agency needs and formulation of programs for assistance to the agency.

Agency evaluations should not be exclusively the outgrowth of the grants program, but should extend to the APC agency an opportunity and recommendations on which to base program development, planning objectives,

resource needs, and criteria for reporting and measuring effectiveness. A specific objective can be related to the different levels of analysis to be performed for an agency.

The regional office should select a review technique, based on criteria, that has as its aims:

1. The continual development of a review technique suitable for selecting agencies for intensive evaluation based on criteria that provides for follow-up to the agencies.
2. Includes the optimum means of evaluation, including subjective, judgmental, or statistical methods.
3. Documents the problems involved in the evaluation process as well as documenting the APC agencies' shortcomings.

In general, the types of evaluation and analysis assistance that will be made available to the State and local air pollution control agencies will fall into the following categories:

1. Grant evaluation - The evaluation made in conjunction with the agency's grant application to review the agency's goals and program. This type of assistance should be geared to providing the agencies assistance in defining goals, outlining project milestones and accomplishments, and coordinating Federal program requirements with the agency so that the grant application can provide an accurate estimate of each agency's needs and goals. These evaluations are performed for each agency on a yearly basis.

2. Agency Performance Review - This evaluation is a complex analysis and detailed review of the functions and activities of an air pollution control agency. It is intended to serve the agency by providing recommendations for improvement of operations; assist the agency in qualifying for maintenance support; and when necessary, provide new direction, organization, or program planning concepts on which to base a long-term viable air pollution control program. This type of evaluation should be continuous, and if possible, performed yearly to supplement the grant evaluation review.

Section 2. EVALUATION AND ANALYSIS GUIDELINES

The purpose of this document is to present the general guide of factors that should be considered and the types of studies of an agency that should be undertaken to assure that proper evaluation and assistance is being provided to improve the agency's operation.

The guides present an indication of minimum investigative elements connected with the review of agency program progress. It should be recognized that each type of evaluation can be associated with the agency's acceptability for grant award and its ability to carry out enforcement provisions as outlined in the Clean Air Act.

Federally funded programs will be held more accountable for demonstrating the effectiveness and efficiency of their operations. The program evaluation then, either through mechanisms of review of the grant application or actual observation of program operations, should provide information to assist in making informed judgments concerning their termination, continuation, modification or the refocusing of an agency's programs. The evaluation itself should provide the agency with a review report on which it can take corrective action concerning the strengths and weaknesses in its plans and activities.

Consideration of which evaluation to use at which time in an agency's stage of development will depend upon your ability (regional office personnel) to recognize such need and the particular agency's ability to adopt and adjust to any requirements or recommendations that might result from such an evaluation. These guides will cover the following areas of concern: (1) frequency of review criteria, (2) basic agency evaluation criteria, (3) specific program criteria, and (4) use of report.

FREQUENCY OF REVIEW CRITERIA

Reviews of control agencies should be made to improve program operation and efficiency, to determine level of grant support, and to measure the overall capability of the agency to adequately implement a program of enforcement to achieve national ambient air standards. The reports can then be broken into classifications, based on these reviews, such as program improvement (grant evaluations), and agency program operation (performance). Under the classification of reviews for "program

improvement could be placed planning assistance, pre-maintenance reviews, and agency analysis reports. Agency program operations (performance) would be (1) review of reports submitted by the agency to fulfill implementation requirements, and (2) program analysis to determine capability of the agency to adequately carry out and enforce applicable implementation plans, new source performance standards, or hazardous air pollutant emission standards. The type of report can thus be classified as follows:

Report	Program improvement (grant evaluation)	Program operations
Planning	X	
Pre-maintenance	X	
Maintenance		X
Analysis	X	X

The frequency at which the various reports should be conducted generally depends on the stage of development of the agency programs. However, Federal Register requirements for grant support, and implementation plan timetables provide some guidelines on which to base the frequency of reports for grant evaluation and program performance. Evaluation, including application assistance, should be a continuing program of the regions and should provide assistance to the agency in determining the requirements of the Federal government. In addition, factors of circumstance, opportunity, and individual agency requests must be considered. The criteria for frequency of agency review for each type of report can then be summarized as in Table II.

COOPERATIVE RESPONSIBILITY FOR PROGRAM REVIEWS AND ANALYSES

The responsibility for awarding program grants lies with each of the ten EPA regional offices. The primary responsibility for carrying out enforcement tasks also rests with the regional offices. The assistance to the regional offices from cooperating groups should be directed to providing a basis for regional office decision-making in these areas. Thus, the reasons for cooperative efforts with a regional office centralized group in formalizing evaluation reports are to (1) provide uniform guidelines and procedures for each regional office, (2) consolidate expertise in a small centralized group that has program, administrative, and technical skills for conducting such evaluations, and (3) provide an independent viewpoint to agency operations within a region, that may either reinforce or alter the recommendations, considerations, or views of that agency as held by EPA enforcement and technical regional office personnel.

A centralized regional office group cannot be expected to have the personnel, expertise, and resources necessary to perform all the evaluations and types of evaluations necessary for the effective program development of State and local agencies. To provide some guide for the workload that can be expected and the criteria that must be considered the following table is presented to represent the cooperative relationship that each regional office should consider as useful in making a review of a control agency program.

	Request	Visit	Interviews	Cooperative responsibility Report writing recommendations
Grant evaluation	E.G.	E.G.	E.G.	E.G. & T.P.
Program operation evaluation	E.G.	E.G. & T.P.	E.G. & T.P.	E.G. & T.P.
E.G. - Evaluation Group T.P. - Technical personnel				

The participation level in the evaluations between the evaluation group and other technical personnel depends on the lines of communication established in the regional office and the support provided the evaluation group by the other divisions. The level of participation guidelines are the following:

1. Evaluation group coordinates and requests all evaluations. Evaluation group prepares preliminary information concerning problems and needs for specific type of evaluations at selected agencies.
2. Evaluation group has responsibility for reporting on all pre-maintenance evaluations. Any assistance provided by technical personnel would be directed at a specific program area such as air monitoring and data handling, identified during review of grant applications or visits to the agency.
3. The evaluation office should probably request outside review assistance for all agencies requesting maintenance support to reinforce or to provide program support regarding conditions for

rejection or acceptance of maintenance grant award. Criteria for maintenance grant awards are set forth in regulations, so the evaluation office could theoretically provide this evaluation of an agency. However, judgment and interpretation of specific program operations may require assistance from individuals skilled in enforcement, engineering, or technical services activities.

4. Agency operation reviews should be considered as a cooperative effort with maximum participation of regional office personnel, both qualified technical personnel, and evaluation personnel.

These evaluations are intended to develop statewide programs that will result in effective enforcement of State implementation plans or be a part of the procedure for involving EPA state strategy for enforcement of implementation plans.

5. Assistance on specific program areas identified during any evaluation can be obtained also from headquarters components. As expertise and documentation in areas of enforcement, permit systems, laboratory operations, and other agency functions are developed, they are generally made available in form of procedure documents and/or guidelines.

An agency evaluation essentially requires the scheduling of activities as shown on Table I. If the evaluation involves only a review of the grant application then such items as field visits and field work may be eliminated for that activity. Although it is strongly recommended that conferences be held with the State and local agency

during the grant evaluation review to define goals, discuss agency problems, and coordinate Federal program requirements. In some regions, it may be important to establish a priority system which assists in determining the specific evaluation activity that will be conducted and provides for the explicit type of data that will be collected for any evaluation review [operations (performance), or program improvement (grant application review)]. In establishing this priority system, factors that also pertain to overall criteria associated with program objectives should be considered in addition to the guidelines summarized in Table II pertaining to purpose, frequency of review and basis for review.

BASIC PROGRAM CRITERIA

In the evaluation of any air pollution control agency, consideration must be given by the evaluator to the following basic influences that affect control program operations:

1. The requirements of the approved implementation plan which must be satisfactorily implemented to support national ambient air quality standards.
2. The structure of State and local activities designed to achieve the objectives in the State plan and to meet the Federal reporting requirements for enforcement of the plan.

When making visits to local agencies, for the purpose of evaluation, it is important that representatives of the State agency participate to assure the above influences are satisfactorily addressed and any problems that exist are fully discussed. Likewise, if possible, it

would be profitable to have local agency representatives present during the evaluation visits to the State agencies, as the exchange of information often resolves conflicting areas of program responsibility.

In general, when reviewing the agency, the following criteria objectives should be considered as being important to satisfactorily implement the State's plan:

1. Appropriate role of State agency in areas of direct involvement in enforcement activities.
2. Eliminate inefficient duplication of equipment, personnel, and activities by seeing that agreements of understanding exist between State and local agencies.
3. Determine that objectives move toward establishing minimum monitoring network for State and that special monitoring requirements above the minimum network are adequately justified.
4. Develop reporting data techniques on a statewide basis that integrate into Federal reporting requirements.
5. Adequately define role of State and local agencies in regard to items such as enforcement authorities, permit systems, etc.

Criteria are provided in Table III and IV to assist in classification of regional air pollution control programs and in defining the roles of State and local agencies pertaining to specific agency operations.

Complicating the overall evaluation of local air pollution control programs is the reorganization of State programs usually a consolidation of environmental programs. Program consolidations often result in a redirection of priorities and sometimes change or mesh the familiar

activities of the air program. Generally then, the level of effort in terms of resources, objectives, and program activity are difficult to obtain in the traditional program concepts by the evaluator. However, applying the above criteria objectives enables the evaluator to at best inform the agency of what is expected in carrying out activities to achieve the implementation plan. In addition, when evaluating either the grant application or performance of an agency the evaluator must encourage and look for objectives that may accomplish long-range goals and foster the continued development and enforcement of the SIP. These include programs associated with:

1. Land use and transportation controls.
2. Review and development of impact statements.
3. Operation of permit systems.
4. Planning and growth considerations affecting air pollution control.
5. Data systems that will assist in efficient agency operations and provide for adequate reporting of data on statewide basis compatible with Federal requirements.

Agency effectiveness is an essential consideration in the evaluation of any air pollution control agency. Once a decision has been made that an agency has developed adequate goals and objectives (perhaps the first step of an evaluation), then key indicators of success (or failure) are the measurable results which occur through actions taken to achieve such goals and objectives. Therefore, measurements of agency effectiveness should precede a comprehensive agency evaluation.

The ultimate achievement of air quality goals is theoretically scheduled for 1975, or 1977, or sooner. Obviously, attempts to measure results prior to then must focus on intermediate objectives, or milestones, that must be met. Progress reports, now required on a periodic basis from each State, provide an excellent means of documenting program achievements which may subsequently be measured.

If an agency's objectives are closely examined, three classes of measurable results can generally be formulated--air quality improvement, emissions reduction, and source compliance. Realistically, each class has some cause and effect relationship to the remaining two, but from an evaluation standpoint there is measurable data which can be readily obtained and which can be attributed to specific agency functions and actions.

For example, improvements in air quality will be documented by data collected through air monitoring activities. While air quality improvements may be indirectly inferred from actions resulting in emission reductions and source compliance, air monitoring data provides a direct measure of improvement. Similarly, it may be reasoned that a widespread improvement in air quality should infer that emissions are being successfully reduced; however, the direct measure of reduced emissions is provided through source testing activities and the development of an emission inventory.

The type of program evaluation, and the degree of effort which should be devoted, can be determined by analyzing each agency's progress (measurable agency output), revealing difficulties or insufficiencies,

and determining the relative urgencies of all agencies within a given state, region, etc. Furthermore, it is possible to direct the evaluation effort towards specific agency operations on the basis of any given area of ineffectiveness where agency output does not demonstrate positive progress or favorable results.

Program Elements for which State is generally responsible:

1. Basic statewide plan development and evaluation.
2. Basic operating procedures (forms, reporting formats, etc.).
3. Training (smoke schools, skills upgrading, etc.).
4. Public Information program. (Partly.)
5. Special engineering skills. (Some localities require specialized inspection and engineering skills.)
6. Laboratory support (in particular special hardware and analytical facilities). Local activities may be required for collection of samples, and maintenance of sampling equipment, etc.
7. Major data handling facilities. Local data collection, analysis, and reporting also require facilities and personnel.
8. Meteorological support.
9. Progress evaluation.

Table I. AGENCY EVALUATION ACTIVITY SCHEDULE

PRELIMINARY PREPARATION	1.	SETTING EVALUATION PRIORITIES	-Federal Register Requirements (Grants) -Implementation Plan deficiencies (Program development)
	2.	SCHEDULE FIELD VISIT	-Coordination with State and local agencies for visit -Preparation of agendas, request for preliminary information regarding agency activities, schedule for interviews
	3.	OFFICE PREPARATION	-Selection of team members -Study of agency information--review and summarize--SIP, Quarterly & semi-annual report, compliance reports, and grant.
FIELD WORK	4.	SITE VISIT	-Thorough study of agency operations, interviews with agency support personnel -Obtain appropriate information and material
	5.	EVALUATION CRITIQUE	-Meet on final day of visit with "key" agency personnel to summarize preliminary finding and conclusion
ANALYSIS AND REPORT DEVELOPMENT	6.	REPORT PREPARATION A. SORT AND CATALOGUE INFORMATION B. ANALYSIS AND DIAGNOSIS C. PRELIMINARY DRAFT	-Additional information is obtained and existing information verified wherever questionable -Review recommendations in regional office -Copies of draft report are forwarded to agencies involved
	7.	AGENCY REVIEW	-Consultation and discussion with agency. Joint review of report increases agency receptivity, adds clarification, and improves report effectiveness
IMPLEMENTATION	8.	PROGRAM ASSISTANCE	-Follow-up on final report recommendatio to provide additional assistance and guidance in implementing program recommendations

Table II. GUIDELINES FOR EVALUATION OF AGENCIES

Grant purpose	Purpose	Frequency of Review	Basis for Review
Pre-Maintenance	Program Improvement Grant Evaluation	Once per year	<ol style="list-style-type: none"> 1) Approval of grant 2) Consistency with implementation plan
Maintenance	Program Improvement Grant Evaluation	Once per agency and updating of baseline review on a yearly basis	<ol style="list-style-type: none"> 1) Perform baseline review of agency operations 18 months prior to grant submittal 2) Review for grant approval 120 days prior to grant period
Efficiency review	Program Operation	Once per year with follow-up of recommendations and subsequent reviews as necessary and requested to improve program operations	<ol style="list-style-type: none"> 1) Program development of local and State program on Statewide basis 2) Review of Statewide program to measure enforcement effectiveness 3) Reorganization on a Statewide basis 4) State programs requesting maintenance or extension of pre-maintenance grant time

Table III. CRITERIA FOR PROGRAM OPERATION BASED
ON POPULATION AND MANPOWER STAFFING REQUIREMENTS

Population Range	Number of States	State Staffing Requirements Man-Year Range	Maximum Potential of Local Agencies in Man-Years	Type of Program Operation
< 1 million	15	16 - 75	0 - 15	State Operated (Local Minimal)
1 million to 3 million	13	76 - 150	16 - 25	State Comprehensive (Local Minimal to moderate)
3 million to 5 million	11	151 - 250	26 - 140	State Comprehensive (Local Moderate to comprehensive)
5 million to 6 million	3	251 - 500	33 - 178	State Comprehensive (Local Moderate to comprehensive)
6 million +	8	501 - 1000	153 - 500	State Comprehensive Local Comprehensive Moderate Minimal

Table IV. CRITERIA FOR PROGRAM ORGANIZATION
AND ASSIGNMENT OF RESPONSIBILITIES

Program level	Comprehensive ^b State and/or local	Moderate: local	Minimal ^c : local
Staffing ^a level Program element	(Staffing level > 20)	(Staffing level=6 to 20)	(Staffing level < 6)
Management	<ul style="list-style-type: none"> •Administration (supervisory and fiscal matters) •Policy and planning •Program Evaluation •Public and inter-governmental relations •Long-range studies (land-use and transportation) •Evaluate environmental impact studies •Training •Promulgate regulations •Administer hearing and variances •Grant applications •Legal support •Episode and emergency operations •Clerical 	<ul style="list-style-type: none"> •Minimal staff time allocated to management category. Mostly involves direct staff supervision on program matters •Some local and State intergovernmental liaison •Grant applications •Clerical 	<ul style="list-style-type: none"> •Activity limited to direct staff supervisors and clerical support •Liaison with State agency •Grant applications

Table IV. (con't.)

Program activity	Comprehensive ^b State and/or local	Moderate: local	Minimal ^c : local
Enforcement	<ul style="list-style-type: none"> •Area surveillance •Source registration •Source inspections and reports •Source data gathering •Case documentation •Legal actions •Permit support activities •Complaint investigation •Episode and emergency activities •Clerical support 	<ul style="list-style-type: none"> •Area surveillance •Source registration •Source inspection and reports •Source data gathering •Case documentation •Legal actions •Limited permit support activities •Complaint investigation •Episode and emergency activities •Reporting as required by State •Clerical support 	<ul style="list-style-type: none"> •Area surveillance •Source registration •Specified source inspections and reports •Data gathering •Case documentation •Legal actions •Initial complaint investigation •Emergency and episode activities •Reporting as required by State •Clerical support
Engineering	<ul style="list-style-type: none"> •Permit systems •construction permits •operation permits •Plan review •Emission inventory •Source testing •Site inspections and consultation •Regulation development •Legal testimony •Special technical studies •Clerical support 	<ul style="list-style-type: none"> •Limited permit activity for specified pollutant source categories •Emission inventory •Site inspections and consultation for specified source categories •Reporting as required by State 	<ul style="list-style-type: none"> •No activities or responsibilities

Table IV. (con't.)

Program activity	Comprehensive ^b State and/or local	Moderate: local	Minimal ^c : local
Technical support	<ul style="list-style-type: none"> •Laboratory operations •Air monitoring network •Instrument maintenance and calibration •Source testing support •Data handling •Meteorology •Special studies •Legal documentation •Clerical support 	<ul style="list-style-type: none"> •Laboratory operations (very limited) •Air monitoring network Primarily servicing and sample collection Instrument maintenance Limited calibration •Limited data reporting as required by State •Assistance to State in special studies 	<ul style="list-style-type: none"> •Sample collection limited instrument maintenance

a Staffing level is the total equivalent man-years of effort in each designated agency.

b The degree of activity in local comprehensive programs for certain functions would be specified (for example, all laboratory operations would probably not be undertaken by a local comprehensive agency and certain large source enforcement activities may be preempted by the State agency).

c The allocation of responsibilities would be specifically detailed by the State agency. In general program activities would be limited to enforcement activities associated with area sources and the less complex industrial sources.

FUNCTIONAL ALLOCATION OF MANPOWER RESOURCES
ON A STATEWIDE BASIS

<u>Functional Area</u>	<u>Percent. of Total Staff</u>
Management	20 to 25
Enforcement	25 to 35
Engineering	20 to 30
Technical Operations	15 to 20

10 to 20 percent of each area is
for clerical support

In either a review of an agency's application for grant funds or an "in depth" evaluation, the evaluator should seek to answer some basic questions that pertain to operations. These questions can be structured by functional activity as given by the example protocol document Appendix 1. In evaluating an agency, answers to the following overall questions should be sought:

1. Statistics - Does the agency have the programs that define the extent of the problems and program operation? This question requires an agency to have programs such as emission inventory and air monitoring networks. These data can be provided by the agency or performed in conjunction with other agencies, but the system should include proper reporting of the data.
2. Planning - Does the agency have the capability to adequately analyze the data and develop a program with definitive program goals and objectives?
3. Available Resources - Does the agency have the skilled manpower, budget, facilities and/or a plan to obtain these resources to carry out its role and responsibility under the SIP?
4. Necessary Action - Does the agency have the authority (rules and regulations), legal assistance, and procedures required to take enforcement action? Does the agency operate the preventive and enforcement programs that are required to achieve ambient air standards? These activities include planning programs associated with growth characteristics of an area, land use and transportation activities, impact statements, preparation and review, inspection programs, and permit system operation.

5. Assumption of National Programs - Has the agency asked for and received the delegation to carry out national programs such as the enforcement of national new source performance standards, and hazardous pollution standards? What Federal action has been necessary by the Federal Government to enforce the ambient air standards, promulgated regulations, or specific implementation plan strategy (transportation controls) in the State or within the local area? The local and State control agencies should be encouraged to avoid Federal enforcement except in partnership considerations beneficial to both governmental levels.

Rating the above areas undoubtedly are judgmental on the part of the evaluator unless he carefully uses the definitive criteria to measure the agency against. An experienced evaluator skilled and knowledgeable in a control agency's operation can develop important recommendations by asking a few critical questions. However, uniformity and perhaps eventually measures of cost effectiveness can be obtained from agency evaluations by structuring specific questions and formulating data collection systems.

REPORTS

As the regional offices develop their evaluation, analysis and review techniques, the State and local agencies should be encouraged to document their records, procedures, and guidelines. In any on-site visit to an agency the evaluator should ask to see copies of records, agency activities, and of statistical concrete results. Agency documentation should include such things as:

- Description of functions and activities carried on by the agency.
- State and local agreements as to respective functions and responsibilities.
- The agency's goals and objectives with dates for achievement.
- A compilation of agency policy statements.
- A compilation of agency procedures used in program operation.

The agency should be requested to keep these records, procedures in a standard operating manual. This manual should be compiled and updated in a manner that keeps it available for review. Records of this type serve as an evaluation tool for external evaluation and it also aids the agency in conducting a self-evaluation. Records of this type, if presented properly, would give an adequate picture of the agency's general plan, delineate responsibilities, and set schedules and assignments. It would be helpful if the regional EPA offices suggest to the agencies a general format for the manual which could be set up along the following lines:

1. Definition of the scope and objectives of the effort.
2. Definition of roles and responsibilities under the SIP.
3. Categorical program description that defines measurements made and data output specifications. Include:
 - a. Air quality measurements
 - b. Meteorology measurements
 - c. Calibration procedure
 - d. Emission inventory
 - e. Permit system
 - f. Management data.

4. Description of personnel, equipment, and resources committed to effort and effort contributed by other organizational components.
In case of a State agency this may be district offices or agreements with local agencies.
5. Schedule of operation pertaining to the activity including:
 - a. "In-house" and field operations (inspections)
 - b. Number and frequency of samples, analyze
 - c. Data reduction and summary
 - d. Frequency and dates for report.
6. Procedures that describe roles, responsibilities, and relationship for the activity including:
 - a. Administrative support-obligation of the respective agencies in terms of personnel, budget.
 - b. Respective duties assigned to each agency in regard to maintenance and operation of equipment, inspection priority (class or type of industry or equipment) and enforcement authority).
 - c. Liaison performed between respective agencies and overall responsibility for project supervision.
7. Outline of procedures and responsibilities of data collection and interpretation including:
 - a. Forms
 - b. Tabulation
 - c. Distribution procedures and schedule of distribution
 - d. Major uses of data
 - e. Brief description of data output and if data system involves participation of other agencies, a description of what those data are.

When the agencies have this type of information available, the agency will find that they operate more efficiently. Also, the job of the evaluator becomes much easier. In order to give emphasis to this type of reporting system by the agencies, the regional offices could format their findings and recommendations in a similar manner.

Thus, the suggested format for evaluation reports would follow along the same lines as the operational manual and consist of the following components:

1. Comparison of objectives against SIP and Federal program requirements and regional or national operating norms. Recommendations for new objectives and timetables are necessary.
2. Recommendations regarding cooperative operation of activities, new and more efficient organization of activities, joint protocol documents, allocation of resources and elimination of unproductive duplicative efforts.
3. Analysis of resources committed to effort.
4. Recommendations regarding data collection and handling systems.
5. Recommendations regarding scheduling of operations.
6. Analysis of district and local operations if they reflect on agency.
7. Recommendations concerning data reporting and collection system.
8. If appropriate recommendations associated with long-range planning for meeting anticipated Federal requirements regarding stationary and mobile pollution sources.

Section II

AIR POLLUTION CONTROL AGENCY EVALUATION

Specific Criteria

As the State and local control agencies move closer to the deadlines imposed for meeting ambient air standards it will become increasingly important to have data which measures an agency's effectiveness in utilizing their program operations and resources. It appears that the funding for such agency operations from the Federal viewpoint will not be sufficient to support all activities that State and local programs have need for or would like to carry on. As pointed out previously in these guidelines, the Federal guidance and support to State and local agencies should then be directed to strengthening those skills and capabilities that will achieve national standards, and enforce regulations and strategies designed to carry out implementation plans.

The specific evaluation procedures should be designed to identify agency operations and make recommendations for improvement. Eventually, it should be possible to allocate the available resources, State and local, on the basis of priority and need. Therefore, the specific criteria given for each area of an air pollution control agency's operation, administration, engineering, enforcement, and technical services are intended to provide information on a comparable manner from agency to agency. Eventual refinement of the system, if used either on a nationwide or regional basis, should provide a data base for comparison of agencies against a regional or national norm, provide a measure of efficiency, and as historical, air monitoring, emission data, and growth data trends are established give some picture of the cost effectiveness of the dollar expenditure by the control program.

In Section I, basic program criteria were provided to give the evaluator an understanding of the influence national priorities should play in the evaluation of State and local programs. These objectives

must be kept in mind and are indicated as priority objectives on the report form for each program area. The evaluation data collection procedure obtains data in several ways:

1. Quantitatively - for measurement against operating norms of the programs within a region or on a nationwide base.
2. Qualitatively - subjective judgments made by the evaluator, and
3. Use of rating number or priority for operation and comparison to its importance for achieving implementation plans, or other Federal priorities.

AIR POLLUTION CONTROL AGENCY
EVALUATION DATA REPORT
General Information

Agency Name _____
 Fiscal Year _____ to _____ EPA Region _____
 AQCR Name _____
 (if not state agency) _____
 Evaluation Date: Review _____
 Visit _____

AGENCY DESCRIPTORS:I. Jurisdiction

- A. Population served _____
 B. Growth rate % _____
 1. Population (annual) _____
 2. Sources (annual)
 Industrial _____
 Mobile _____
 C. Area served (mi²) _____
 D. Value mfg. \$ x 10⁶ _____

II. Operating Resources

- A. Total Staff _____
 1. Positions _____
 2. Man-year estimate _____
 B. Total Budget _____
 1. Personnel _____
 2. Operating exp. _____
 3. Equip. & contractual services _____
 C. Implementation Plan Resource
 1975 1977
 1. Staff _____
 2. Budget _____
Criteria Measurement
 Operating Cost/Man-year _____

PROBLEM DESCRIPTORS:I. Air Quality

	Annual average	Highest value	
Particulate	_____	_____	ugm/m ³
Sulfur dioxide	_____	_____	ugm/m ³
Nitrogen dioxide	_____	_____	ugm/m ³
Carbon monoxide	_____	_____	ugm/m ³
Hydrocarbons	_____	_____	ugm/m ³
Oxidants	_____	_____	ugm/m ³
Other-specify	_____	_____	ugm/m ³

II. Emission Data
(Annual tons/yr.)

Particulate	_____
Sulfur dioxide	_____
Nitrogen dioxide	_____
Carbon monoxide	_____
Hydrocarbons	_____
Other-specify	_____

Schedule A
General Information
Suggested Sources of Data

AGENCY DESCRIPTORS:

- I. Jurisdiction - Department of Commerce, Bureau of Census
Population Reports - 1970 and Interim Year Reports.
Department of Commerce, Bureau of Census
Manufacturing Census - 1967 Data - Update with
data from Agency Emission Inventory Permit System
and other local sources.
- II. Operating Resources - Agency grant application - update
through contacts with agency.

PROBLEM DESCRIPTORS:

- I. Air Quality - Semi-annual and annual reports - quarterly reports
are principal source of air quality data.
EPA data reporting system SAROAD, CDHS, etc.
Agency reporting records.
- II. Emission Data - EPA data reporting system - NEDS (State)
Agency Emission Inventory.

AIR POLLUTION CONTROL AGENCY EVALUATION DATA REPORT

Management Function

Definition of Responsibilities:

I. Program responsibilities defined for agency activities in: (encircle one)

Implementation plan and interagency agreements - 5

Implementation plan (approved) - 4 Grant application - 3

Interagency agreements - 2 Not defined or poorly defined - 0

Criteria score _____

II. Program Responsibility Summary Management:

Enter one: State Shared with Delegated Partial Other,
 only 1 state 2 by state 3 delegation 4 specify 5

Planning

SIP review, revision, etc. _____

Land use controls _____

Transportation controls _____

Complex Source Siting _____

Services

Training by _____

Special _____

Outside
agency _____

Informational _____
(library, public, and
inf. retrieval and
dissemination)

Evaluation

Impact reviews _____

Action Plan
initiation
(emergency, SCS) _____

Program Review _____

Region's Estimate of Responsibility Priority I, II, III,
IV, V

Program Objectives: (Select one)

I. Objectives are consistent with following:

Achieving and maintaining Federal or other applicable air quality standards as defined in the approved implementation plan, and maintenance support as defined in the Federal Register 5

Achieving only the Federal or applicable air quality standards 4

Achieving only maintenance support as defined in the Federal Register 3

Achieving none of the above 0

Criteria score _____

II. Review and Evaluation of Objectives: (subjective) Select one.

Clearly defined 5

Poorly defined (indicate areas) 3

Incomplete or unrealistic 1

Not defined 0

Criteria score _____

III. Program Plans for Achieving Goals indicate following:

Specific target dates and resource requirements 3

Resource requirements only 1

Target dates only 1

None of above 0

Criteria score _____

Resource Criteria: Enter estimate of resources needed by agency as given in SIP or by other estimating procedure. Circle approximate % that current resources represent.

I. Needs (Total agency)

		% Estimate of Achievement of Need			
		SIP		Other (manpower model, etc.)	
		1975	1977	1975	1977
% Budget		50, 75, 90	50, 75, 90	50, 75, 90	50, 75, 90
Budget					
Man-years					
% man-years		50, 75, 90	50, 75, 90	50, 75, 90	50, 75, 90

If 100% indicate here _____

Also describe needs outside implementation plan _____

Criteria score _____

>75% - 4

<75% - 0

II. Personnel

Administrative Services Staffing Pattern (man-years)

Total _____	Legal _____	Policy _____
General _____	Information _____	Planning & eval. _____
Training _____	Financial _____	Other _____

III. Vacancy rate - (Total agency)

	Number vacant		% of total positions vacant	
Budgeted positions				
Man-years				
Turnover rate - circle one				
	5%	10%	15%	15%
Criteria score:	5	4	3	0

IV. Organization

Agency has:	Yes	No
1. Organization chart	1	0
2. Functional statements	1	0
3. Agency procedures that clearly define responsibilities	3	0

Criteria score _____

V. Facilities - circle applicable criteria score for each agency operation

	Sq. footage per person		
	150	100	75
Administration (per person)	5	4	0
Engineering	4	3	2
Enforcement	4	3	2
Technical Services lab	3	2	0
Data handling	5	4	0
Enter total ft ² available	_____		

Administrative ServicesI. Training - Current Fiscal Year

A. Total number man-weeks _____ New staff _____ Existing staff _____

Criteria score
Man-weeks avg.

	(1-2)	(3-5)	1-3)	1	0
New employees		5	3	1	0
Existing employees	5			3	0

B. Program

	Yes	No
Written, formal training program	1	0
Orientation for new employees	1	0
Outside training program	1	0
Identifies new training needs & skills	1	0

II. Public Information and Education (circle answer)A. Program CriteriaYes No

Budgeted, with functional statement 1 0

Full-time or part-time employee assigned 1 1

Criteria score _____

B. Program Services

<u>Reports</u>	<u>Yes</u>	<u>No</u>	<u>News Media</u>	<u>Yes</u>	<u>No</u>	<u>Number</u>
Annual	1	0	News release	1	0	_____
Quarterly	1	0	Radio & TV release	1	0	_____
Monthly	1	0	Radio & TV appearance	1	0	_____

Distribution List _____

<u>Speakers</u>	<u>Yes</u>	<u>No</u>	<u>Number</u>	<u>Publications</u>
Civic & school	1	0	_____	Number distributed _____
Citizen groups	1	0	_____	Number of kinds _____
Industry	1	0	_____	

<u>Special Status Reports</u>	<u>Yes</u>	<u>No</u>	<u>Criteria measurement</u>
Compliance	1	0	Number/100,000 population
Air monitoring	1	0	
Special problems (new regulations)	1	0	

AIR POLLUTION CONTROL AGENCY EVALUATION DATA REPORT

Engineering Activities

Program Responsibility

I. Program Responsibility Summary Engineering

Enter one: State only 1 Shared with state 2 Delegated by state 3 Partial delegation 4 Other, specify 5

Information gathering

Emission inventory _____
Permit system _____
Other, specify _____

Enforcement Support

Source testing _____
Source inspections _____
Permit _____
Compliance sched. _____
review & preparation _____

Planning

Regulations _____
Special Studies _____
Land use _____
Transp. _____
Complex source _____
Other _____

II. Engineering Services Staffing Pattern (man-years)

Total _____	Emission Inventory _____	Permit System _____
Source testing _____	Source Construction _____	Planning _____
Other _____	(Insp. & compliance)	

Program Operations

I. Emission Inventory

Sources inventoried F.Y. _____ Total _____

% Sources not inventoried	<u>0-10%</u>	<u>10-50%</u>	<u>50-100%</u>
criteria score	5	3	0

II. Permit System Agency responsibility review _____ approve _____

Total permits issued FY _____ Total sources _____

% Sources operating without permit 0-10% 10-50% 50-100%

criteria score 5 3 0

Review: Enter total number Const. Operation Limitations*
Size Class

Type: Incinerator

Fuel burning

Ind. process

Other

Criteria score 5 5

* Limitation on agency by agreement, reg., responsibility, etc. for review or approval of permit.

Review Criteria:

% pt. sources reviewed 100% 75% 50% <25%
(calculations, consultations,
emissions, collection, system,
control system)

Criteria score 5 4 3 1

New construction caught by checkoff system Yes No

Criteria score 1 0

Where: Ex. Bldg. Dept., Zoning agency, other _____

III. Source Tests Number source tests _____

Conducted by this agency _____ for agency by _____

State _____ Contractor _____ Other _____

Criteria measure

Enter % sources tested in compliance _____

IV. Compliance Activities

Number of sources on compliance schedules _____

% of sources required to reduce

Emissions (Implementation Plan) on schedules	100%	75	<50
Criteria score	5	3	0
% of sources on schedule (18 month)	100%	75	<50
Criteria score	5	3	0
% of sources not on schedule (not in compliance)	50	25	<10
Criteria score	0	3	5

V. Regulations and Legislation (check, if yes)

A. State and local regulations cover

1. Controlling visible emissions (open burning) _____
2. Permit system _____
3. Emission standards _____
4. Emission monitoring by owners _____
5. Inspections and tests _____
6. Enforcement procedures _____
7. Emergency episode controls _____

B. There are differences between state and local regulations and EPA regulations and standards _____

Specify (attach copy of regulations with differences noted)

Criteria score:

- If applicable state and local regulations cover all above categories - 5
- at least five - 3
- less than five - 0

- If applicable state and local regulations comply with implementation plan and are not deficient in legal authority - 5
- If deficient in emission limitations only - 3
- If deficient in emission limitation and other areas, ex. record keeping, prevent const., etc.- 0

Program Information Criteria

- I. Emission Inventory: Check if applicable. Recommendations should be made by evaluator concerning these areas, if not satisfactory.

Data source: permit _____ agency survey _____ other (specify) _____
National Emission Data System (NEDS) _____

Emission factors used:

EPA AP-42 factors _____ Other (specify) _____

Area source emission estimated by:

Rapid Survey Techniques (AP-29) _____ APTD 1135 _____ Other _____

Formats

Appendices D, E, F, G of Federal Register (11/25/71) _____

(*) National Emission Data Systems (NEDS) _____

Other (specify) _____

Point sources included over: 100 tons/yr _____ 50 _____ 25 _____ other _____

Inventory is updated by means of:

Permit system application _____

Surveillance and investigation activities _____

Other (specify) _____

Data is computerized:

By agency _____

By state _____

Other (specify) _____

E.I. is used for:

Control strategy _____

Abatement action _____

Inspection priorities _____

Other (specify) _____

* Recommend, if not used by agency.

II. Permit System

Reviews and calculations are made to determine volume and composition of emissions _____

The capacity of the air pollution collection system _____

Effectiveness of control equipment _____

Other (specify) _____

Source tests are prerequisite for new or modified sources _____

Inspections are prerequisite for renewals _____

Fees are collected _____

(Fee schedule (specify)) _____

C. EVALUATION OF ENGINEERING FUNCTION

Introduction

An evaluation of engineering should determine performance, in terms of activities carried out and results achieved--including air quality levels and emission rates. It should also determine capability, in terms of staff experience and education, understanding of Federal, state and local requirements and objectives, and knowledge and skill in applying techniques for achieving these objectives. Five basic activities should be evaluated: (1) emission inventory, (2) permit system, (3) source testing, (4) regulations development, and (5) special studies and reports.

Since a limited amount of time will be available for on-site interviews, much of the information needed for the evaluation should be obtained in advance. This will enable the evaluator to make the best use of his time at the agency and concentrate on areas which need clarification. It also gives the agency an opportunity to review their activities, organize their information and respond effectively to the interview.

The evaluation process involves three steps: (1) information gathering, (2) site interviews, and (3) appraisal and report.

Step 1: Information Gathering

A summary of emission inventory and source compliance data can be tabulated on a form similar to that shown in Figure 1. This provides a summary of emissions by source categories as well as a summary of

work to be done. Compliance data should be relative to requirements of the SIP.

Some of this information can be obtained from the agency's semi-annual reports and grant applications. Some may have to be obtained by means of a questionnaire directed to the agency and completed prior to the site visit.

Step 2. The Site Visit and Interviews

Interviews should be limited to investigating specific problems confronting the agency and determining the dimensions of and reasons for these problems. The evaluator must adapt his questions accordingly. For example, if information received in Step 1 above shows that there are a large number of sources requiring emissions reductions, but a small number of these are on compliance schedules, the reasons for the discrepancy must be found and corrective action taken.

As another example, if the emission inventory is not yet complete, it should be determined specifically what plans there are for completing it and how much manpower will be assigned.

Not all kinds of information can be reduced adequately to a data form, such as: How are job priorities established, work assignments made, and how are engineering records filed and retrieved. It is important to ask these types of questions during the interview, especially when trying to discover the reasons for poor performance in specific areas.

The evaluator should be thoroughly familiar with the agency's responsibilities under the implementation plan. He should determine, in the course of the interview, how well the agency understands their role and what specific plans they have for meeting these responsibilities. (i.e., How they are going to complete the emission inventory, bring all sources into compliance, etc.)

Step 3. Appraisal and Report

Basically the objective in evaluating the agency should be to examine areas in which the agency is having or will have problems in meeting the requirements of the state implementation plan, and then recommend the steps necessary to meet those requirements.

The results of the evaluation will depend partly on judgments formed during the interviews as well as appraisal of the data submitted prior to that time.

It will be of help to the evaluator to use some system of rating numerical information.

[illegible]

AIR POLLUTION CONTROL AGENCY
EVALUATION DATA REPORT

Enforcement Activities

Program Responsibility:

I. Program responsibility summary - Enforcement

Enter one: State only 1 Shared with state 2 Delegated by state 4 Partial delegation 4 Other, specify 5

Area Source Surveillance _____	Complaint handling _____
Transportation control _____	Episode program _____
Source inspection _____	SCS implementation _____
Incineration _____	Input for preparation _____
processes _____	of legal case _____
fuel burning _____	Prosecution of violators _____

II. Enforcement Services Staffing Pattern (man-years)

Total staff _____ Field patrol _____ Complaint handling _____
 Legal proceedings _____ Source inspection _____
 Data & report preparation (consultation) _____ Other _____

Program Operations:

I. Source identification

Number of sources under surveillance (total) _____
 open burning _____
 fuel burning _____
 incinerators _____
 process (total) _____
 process particulate _____
 gaseous _____
 other sources (specify) _____

Criteria:

Source listing (circle only one)

Includes all sources subject to regulations and SIP 5
 Includes sources over 25 tons/yr. emissions 3
 No source listing 0

Source listing update (circle only one)

Annually 3
 Every 2 years 2
 Every 5 years 1
 Never 0

Source listing usage (circle both if applicable)

Develop and/or update emission inventory 3
 Start and continue permit system 3

II. Inspections

	Fuel burning	Inciner- ation	Industrial ¹	Open burning	Other, specify
(Enter number of sources)					
Subject to emission regs.			a b		
In violation of emission regulations (total)			a b		
On compliance schedules			a b		
Legal action has been started on			a b		
In compliance			a b		
In violation with no compliance schedule and no legal action started			a b		
Enter no. FY corrections by:					
Staff			a b		
Board (if applicable)			a b		
Court			a b		

= ¹/ Enter particulate sources in (a) and gaseous sources in (b)

Criteria:

Compliance Schedule Activity (circle all applicable)

Agency enters into legally enforceable compliance
schedule agreements (milestone dates) 5
Conducts on-site inspections for progress
verification 3

Scheduled inspections (circle all applicable)

Conducts periodic scheduled inspections 5
Inspection frequency based on industry type
and/or emission potential 3

Comprehensiveness of inspection (circle all applicable)

Flow diagrams are made, reviewed or changed 1
Production figures obtained 1
Equipment list compiled, changed, and updated 1
Operating parameters noted 1
Maintenance program reviewed 1
Do not conduct comprehensive on-site inspections 0

III. Field Patrol and Complaint Handling

Number of complaints received per year _____

*Number of complaints acknowledged _____

Number of violations observed _____

*Number of violations corrected _____

*Criteria for scoring

Acknowledged	% corrections
>75% - 5	> 90% - 5
50% - 74% - 4	75% - 90% - 3
< 50% - 0	< 75% - 0

Criteria:

- Observed violations are written up and documented _____ 5
- Area divided into districts for uniform coverage _____ 4
- 24 hour response capability _____ 3
- A communication system between headquarter and field personnel _____ 2

IV. Emergency Episode Program (Criteria)

- A communication system that can locate a responsible agency official is in effect. _____ 4
- An episode manual outlining responsibility of agency personnel has been prepared. _____ 3
- The episode program has been coordinated with law enforcement and civil defense agencies. _____ 2

V. Administrative Procedures (Criteria)

- Written standard operating procedures for field enforcement personnel _____ 4
- Standardized field forms in use _____ 3
- Granting of a variance requires a compliance schedule _____ 2

Enforcement Records (check all applicable)

- Master file on all sources _____ 5
- Files in alphabetical order _____ 4
- Files are cross-referenced _____ 2
- No master file on all sources _____ 0

Prosecution

Field enforcement personnel provide input for
preparation of legal cases _____ 5
Agency has a staff attorney _____ 4
Agency has access to a pool attorney _____ 3
Agency personnel and legal counsel have a close
working relationship _____ 2

Percentage of prosecutions in the agency's favor

80 - 100% _____ 5
50 - 79% _____ 3
25 - 49% _____ 1
Less than 25% _____ 0

D. EVALUATION OF ENFORCEMENT ACTIVITIES

Enforcement is the "activities conducted by an air pollution control agency to secure certain and continuing control over the sources of air pollution." The mission of an enforcement program then must be to implement the plans that have been adopted to achieve acceptable levels of air quality.

Enforcement therefore overlaps many agency program activities such as the permit system, source inventory, source testing, and air monitoring if property line concentrations are a part of the regulations.

Since successful enforcement plays such a key role in improving air quality, it is important that a careful evaluation be made of this activity.

An agency may have the best air monitoring network in the country or the best laboratory, or the best source inventory, but if it is not bringing sources into compliance with the emission regulations, then the agency cannot justify the use of Federal grant money on its program.

An agency's program grant application must reflect SIP goals with milestone dates, otherwise the evaluator has little to measure the agency's performance against.

A field operations (enforcement) program consists of key activities for which objectives should be specified in the grant application. These program activities and their significance are discussed below.

Source Identification - The agency must know how many sources it has and where they are located before effective planning can take place. Source identification is even a prerequisite to a comprehensive emission inventory. Source identification must be considered the highest priority

activity of a new or young agency because it is the basic starting point or common denominator from which all other agency activities should be built upon.

Established agencies without a comprehensive source listing could experience difficulty in their emission inventory, permit system operations, and inspection programs.

Compliance Schedule Inspection - An on-site inspection of sources to verify milestone dates in the legally enforceable compliance schedule. Through a permit system or emission inventory the agency should have a close estimate of sources not meeting the emission regulations. The agency should then have on file compliance schedules for these sources. The compliance schedules should include milestone dates to reflect periodic progress toward completion of the schedule. The field enforcement officers should verify this by on-site visits to the source shortly after each milestone date has passed.

Scheduled Inspections - Inspections conducted by a certain date on an annual or other frequency basis. Inspection scheduling may be based on source registration, emission inventory, permit system, complaints, or other information systems. Ideally, scheduled inspection frequencies should be proportional to the emission potentials of the source. The scheduling process should not be completely automated. It must rely heavily on the recommendations of the field enforcement officer.

Field Patrol - Sometimes referred to as surveillance activities. Vehicle patrol is the principal surveillance method. The enforcement officer should patrol in a manner that will bring the greatest area of his district

under view while taking the shortest route. When a questionable visible emission or violation is observed, the enforcement officer takes a reading and/or investigates. All observed violations are written up according to prescribed agency procedure. A communication system will allow the agency to respond quickly to complaints and emergencies. If necessary, agencies should have 24 hour a day field patrol capability.

Complaint Handling - An agency should respond quickly to complaints received. The number of complaints received is influenced by many factors, such as number of sources, agency publicity, air quality levels, public awareness of agency, magnitude of emissions, meteorological conditions, etc. Many of these factors cannot be related to the agency's effectiveness, therefore, evaluation of complaint handling cannot be related to number of complaints received. The capability to respond, response time, percent of complaints responded to, and use of the complaint information, are the important considerations in evaluating the complaint handling activities of an agency.

Emergency Episode Program - An agency should have the ability to respond to a meteorological episode or upset involving hazardous pollutants. This program must be coordinated with law enforcement and civil defense agencies. An emergency episode procedure manual should be available to all involved personnel.

Administrative Procedures - This includes agency procedure manuals written for field enforcement officers, field forms such as violation notices, inspection reports, citations, etc., and the entire spectrum of how the agency conducts its enforcement program. An agency must have standard operating procedures for enforcement. Without standard operating procedures there cannot be consistent enforcement practices.

Enforcement Records - The agency should have documentation on all violators. Source records should be filed in such a way that access to the information requires a minimum of effort. All inspection sheets should be on file along with any documentation for legal action.

Legal Action - Successful prosecution of violators after all other remedies for relief have failed. The state attorney general or local prosecuting attorney will usually have responsibility for prosecution before an administrative body or the courts. It is most important to the agency to have attorneys familiar with environmental law assigned to air pollution cases rather than have to start out with a new attorney on each case. Agency personnel should be informed as to what documentation is needed for a legal brief and should work closely with the prosecutor on case preparation.

Two basic questions that must be addressed in evaluating the legal action aspects of an enforcement program are: (1) Does the agency follow up on sources that are in violation of emission regulations?, and (2) Is the agency able to successfully prosecute violators?

A numerical value can be assigned to sub-elements under each of the above program functions. The total points given an agency can then be used to rank the enforcement activities of all agencies under consideration.

The importance of the total enforcement points scored by an agency would have to be considered in light of the enforcement role assigned that agency by the state implementation plan.

AIR POLLUTION CONTROL AGENCY EVALUATION DATA REPORT

Technical Services Activities

Program Responsibility

I. Program responsibility summary - Technical Services

Enter, one: State only 1 Shared with state 2 Delegated by state 3 Partial delegation 4 Other, specify 5

Laboratory Services

Pollutants Analyzed

Criterial _____

Hazardous _____

Trace elements _____

Material, fuel
qual., etc. _____

Special studies _____

Equipment
maintenance _____

Instrument
calibration _____

Enforcement Support

Source testing _____

Special Analytical
studies _____

Source ident. _____

Part. ident. _____

Odors, etc. _____

Air Monitoring

Minimum F.R.
network _____

Special, complex
source,
transportation
control _____

Data Handling

Collection _____

Storage and
analysis _____

Report prep. _____

Meteorology

Data acquisition _____

Forecasts _____

SCS (modeling)

Eval. of source _____

Eval. area source _____

Land Use planning _____

II. Summary of Staff - Technical Services (man-years)

Total _____ Air monitoring network _____ Laboratory operations _____

Data processing _____ Special study _____ Other _____

Program Operations

I. Air Monitoring

Type: (check one)

State _____ Portion of AQCR _____ Other monitoring _____
AQCR _____ Not under SIP _____

Enter number in network: (FY _____) Hi-vols _____ Bubbler & sequential _____
Tape samplers _____ SO₂ cont. _____ Ozone cont. _____
HC cont. _____ CO cont. _____ Other (specify) _____

Enter number of days equipment out of operation due to failure:

Hi-vols _____ Bubbler & sequential _____ Tape samplers _____
SO₂ cont. _____ Ozone cont. _____ HC cont. _____
CO cont. _____ Other (specify) _____

II. Laboratory Operations

Number of samples analyzed: Total _____ Criteria pollutants _____
Hazardous materials _____ Fuel _____ Special (FL, Pb, etc.) _____
Other _____

Criteria:

Amount of data validated and reported

90% of possible	___ Good	5
90% to 70%	___ Fair	3
70% or less	___ Unacceptable	0
Don't know	___ Unacceptable	0

If unacceptable is marked the evaluator should go on to the following:

Instrument maintenance and calibration is performed:

1. On a predetermined schedule, based on past experience,
to minimize the data from being out of control good 5
2. Every 3 to 6 months routinely fair 3
3. Once per year, or whenever equipment malfunctions poor 2
4. Never unacceptable 0

Quality Control

Agency

Maintains Quality Control by (check all applicable)

replicate samples blanks spiking

Constructs control charts on critical parameters. Yes No

Criteria:

The Quality Control Program is:

1. Routinely carried out and adequately documented 5
2. Haphazardly carried out and/or poorly documented 3
3. Not done at all 0

III. Data Processing

Data is reported in format acceptable to EPA for quarterly and semi-annual reports. Yes 5 No 0

Format used - SAROAD State accepted Other

Data report identifies: (check applicable descriptors)

Site Number of samples Sampling interval maximum

Averages Deviations

Data report summaries identify: (check applicable descriptors)

Relationship of values to standards Trends

Agency provides daily pollution report to public. Yes No

Criteria Score:

Turnaround time on data reports:

<1 month - 5 1 to 3 months - 3 >3 months - 0

IV. Special Studies and Reports

	Number of studies being made	Network		Comp. date
		No. Sites	Pollutant	
A. Mobile source emissions				
B. Transportation controls				
C. Land use alternatives (complex sources)				
D. Other (specify) SCS, and large point source (SO ₂)				
E. Technical guides written (List)				

Emergency Episodes

Number of sites designated _____ Frequency of operation _____

Are meteorological forecasts being made? Yes _____ No _____

Are supplementary control systems planned? _____

Can sampling be affected for sources? _____