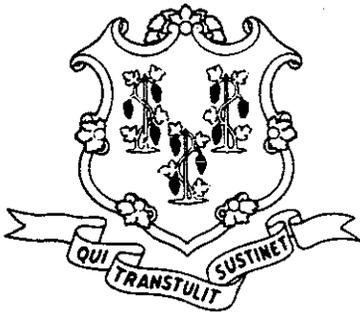


**BUREAU
OF
AIR MANAGEMENT**

**Connecticut
General Assembly**



**LEGISLATIVE
PROGRAM REVIEW
AND
INVESTIGATIONS
COMMITTEE**

JANUARY 1990

CONNECTICUT GENERAL ASSEMBLY

LEGISLATIVE PROGRAM REVIEW AND INVESTIGATIONS COMMITTEE

The Legislative Program Review and Investigations Committee is a joint, bipartisan, statutory committee of the Connecticut General Assembly. It was established in 1972 to evaluate the efficiency, effectiveness, and statutory compliance of selected state agencies and programs, recommending remedies where needed. In 1975, the General Assembly expanded the committee's function to include investigations, and during the 1977 session added responsibility for "sunset" performance reviews. The committee was given authority to raise and report bills in 1985.

The program review committee is composed of 12 members. The president pro tempore of the senate, the senate minority leader, the speaker of the house, and the house minority leader each appoint three of those members.

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A Performance Audit of
the Bureau of Air Management

Legislative Program Review and Investigations Committee

January 1990



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SUMMARY

The findings and recommendations contained in this report are the result of the Legislative Program Review and Investigations Committee's seven-month study of the Department of Environmental Protection's (DEP) Bureau of Air Management. The study focuses on several areas of concern that include the bureau's management, enforcement activities, complaint processing, air testing, and inspections.

The program review committee has found that the Bureau of Air Management has a good record of meeting the goals of the U. S. Environmental Protection Agency (EPA) and the federal Clean Air Act. For instance, the DEP has the most extensive air monitoring network in the region according to EPA. In a 1988 audit, EPA found the network to be well run. In contrast, the program review committee found the bureau's ability to conduct site specific or stationary source testing for air toxics and odors to be nonexistent. The bureau should make greater efforts in meeting the needs of Connecticut citizens and local air pollution problems. The aim of the committee's recommendations is to require the Bureau of Air Management to focus more resources on local air pollution problems, while maintaining its good relationship with EPA.

As noted in Chapter II, state funding for the air management bureau has steadily increased since 1984, while federal funds have actually declined. In state FY 84, 72 percent of the air bureau's funding was provided by the federal government, while the state funded 28 percent of the program. By 1987, the state's portion of the bureau's funding was 58 percent, and by FY 90 the state contributed a full 70 percent. In fact, program review found that state funding increased more than four-fold over this seven-year period, rising from \$886,466 to \$4,325,476, while federal funds actually declined from \$2,334,220 to \$1,862,000. With this increased state funding, comes greater demands by the legislature for implementation of programs it deems to be important. The recommendations adopted by the committee are aimed at enhancing those programs.

Overall, the performance audit found deficiencies in several key areas. The review found problems with the bureau's management in terms of communication of goals and objectives, and other information to line personnel, affecting the bureau's ability to carry out its functions. Problems are also cited with enforcement activities, including administrative processing of enforcement actions, the length of time it takes to bring a violator into

compliance with state air regulations, and the DEP's inability to conduct on-site testing for emissions. Other areas of concern include the lack of adequate internal evaluation of the bureau's performance, lack of performance standards for conducting inspections, and problems with the manner in which complaints are handled and investigated.

To address these deficiencies, the Legislative Program Review and Investigations Committee adopted the following 17 recommendations aimed at improving the organization, operations, and funding mechanisms of the Bureau of Air Management. The recommendations should insure that state-mandated programs receive a high priority, and thus improve the public's confidence in DEP's ability to deal with citizen concerns.

RECOMMENDATIONS

- 1) The Bureau of Air Management shall be reorganized as shown in Figure III-1 to III-4.
- 2) The Bureau of Air Management shall develop an internal performance evaluation program that systematically plans for and monitors the operations and progress of the bureau and its programs.

The objective of the evaluation program is to require the bureau to develop program performance indicators, gather the necessary data and information to gauge the progress of each program, and evaluate the outcomes of each of its operations. The report, which shall include a summary of the state's air quality, will be submitted annually to the General Assembly, specifically to the committees of cognizance, and the Legislative Program Review and Investigations Committee. The first report will be due on September 1, 1990.

- 3) Management shall hold monthly meetings of all division directors, assistant directors, and principal-level staff to create bureau-wide goals and objectives, performance standards, and coordinate efforts to achieve them. Similar meetings of all DEP Environmental Quality managers (from bureau chiefs to assistant directors) should be held quarterly.

- 4) An Air Testing Unit shall be established under the Regulation and Enforcement Division, as outlined in Figure III-3. The unit would be responsible for coordinating all the activities related to site-specific or stationary source air

testing. The unit would further develop the necessary back-up laboratory facilities to carry out its air testing responsibilities. The Air Testing Unit would specifically be required to:

- develop policies and procedures for testing, including how the Bureau of Air Management will use the mobile air toxics van; when outside private laboratory facilities will be used; when consultant services should be used, and when the bureau is likely to perform its own testing. This overall strategy, along with performance indicators, such as sites tested, and results found, shall be included in the annual performance monitoring report;
- conduct stack testing of all major (A1) sources every three years to ensure that compliance with standards and permit parameters is maintained;
- implement the statutorily required continuous emissions monitoring strategies for resource recovery plants;
- conduct ambient air quality testing at sites where ambient air quality problems are persistent. Persistent problems are defined as facilities or sites that are the subject of 5 documented complaints from different addresses within a 30-day period or less (this standard would be applied after a site has been tested for odor violations);
- review methodologies and results of testing conducted by consultants, pursuant to issuance of permits or enforcement action; and
- develop a program for odor testing and coordinate all activities related to the use of odor testing equipment as well as establish priorities for handling odor.

5) The commissioner of the Department of Environmental Protection shall appoint a three-member panel of technical experts to assist the bureau in developing the Air Testing Unit, advise staff on the purchase of air testing equipment, and aid in the development of testing strategies and methodologies. The members shall be chosen from a list submitted by the Connecticut Academy of Science and Engineering.

6) The Bureau of Air Management shall prepare a comprehensive written policy for responding to complaints.

7) The Bureau of Air Management by April 1, 1990, shall establish an automated system for processing and tracking the handling of complaints. At a minimum, the system should insure that supervisory staff will be able to analyze:

- the nature of the complaint;
- the time of day and day of week the complaint was observed;
- the weather and wind conditions during which the problem was observed;
- the location of the alleged source;
- the date the complaint was received, assigned, and investigated;
- the staff responsible for the investigation;
- the type of complainant (anonymous or known, employee or neighbor, etc.);
- the action taken as a result of the complaint investigation; and
- the final outcome of any action taken.

The Department of Environmental Protection, Bureau of Air Management, shall develop a form for distribution to complainants to document information concerning persistent odor or emissions problems.

8) The Bureau of Air Management shall: 1) determine and examine the amount of time, including travel time, taken to conduct the various field inspections; and 2) compile and analyze inspector workload data for 1989 and annually thereafter.

9) The Bureau of Air Management shall prepare a written procedure manual establishing department guidelines and standards for the entire Field Enforcement Section. In addition, the Bureau of Air Management should establish training sessions for inspectors. Training should cover: an update of department policy regarding performing assignments; a review of any new federal/state regulations; writing inspection reports; and training in the use of the proposed computerized complaint system.

10) The Enforcement Section shall include both administrative and field enforcement activities, as previously recommended and the Department of Environmental Protection should be authorized to hire two additional positions in the Administrative Enforcement Section of the Bureau of Air Management.

11) If a facility has received two prior notices of violation in a one-year period, the third notice shall automatically require air testing, as prescribed by the bureau's air testing unit. If testing shows that the facility is in violation of any air regulation, standard, or permit, the facility shall pay the costs of the testing and given an order to abate such pollution.

12) The first time a facility is issued an order the facility shall be directed to hire its own consultant. If the order is complied with but does not correct the problem, the Bureau of Air Management shall hire a consultant qualified in the problem area, at the company's (named in the order) expense, to conduct any necessary testing and find a solution to the problem.

Correction of the problem is defined as a determination of compliance by a bureau inspector, and three months with no complaint related to the "corrected" violation. Further, any subsequent order issued to a facility, requiring air pollution abatement, shall require a consultant hired by the bureau, and paid for by the facility.

13) More time should be given for compliance when orders are developed, but the Bureau of Air Management staff shall only allow delayed compliance in cases where hardship exists, as determined by the enforcement staff.

14) For any facility that is six months delinquent with any one step in an order, the Bureau of Air Management shall immediately refer the case to the Attorney General's office for legal action. After the case has been referred, the bureau shall continue to bring the source into compliance using administrative enforcement actions.

15) The commissioner of the Department of Environmental Protection shall meet with the Attorney General to discuss ways in which their respective staffs can work together to speed processing of environmental cases.

16) The current statutory permit fee requirement shall be abolished, and that the Bureau of Air Management be statutorily required to establish an annual regulatory fee

based on the total tons of emissions x \$30 a ton = dollar amount of regulatory fee due. All facilities required to be permitted or registered would be assessed a fee.

All payments received by the commissioner pursuant to this shall be deposited in the general fund and credited to the appropriations of the Department of Environmental Protection, as already outlined in Sec. 22a-174(h) of the Connecticut General Statutes. Further, to the extent possible, those funds shall be earmarked for Bureau of Air Management's permitting, testing, and enforcement activities.

17) A phased-in implementation of the regulatory fee be established as emissions information about facilities are computerized. Until data about a facility's emissions are computerized, those facilities shall be charged a regulatory fee of \$50 per year. All facilities shall be assessed based on the formula by January 1, 1993.

CHAPTER I: INTRODUCTION

The Legislative Program Review and Investigations Committee (LPR&IC) authorized a performance audit of the Air Compliance Unit, which has been since renamed to the Bureau of Air Management, within the Department of Environmental Protection (DEP). The scope of the study focuses on the management of the bureau, and the operations of the bureau's regulatory programs, including inspections, air testing, complaint-handling and enforcement. The audit does not cover a number of other functions in which the bureau is involved. These areas, which were evaluated favorably in recent EPA audits, include DEP's air monitoring system, modeling programs, and review of new sources. Also, the auto emissions inventory program was examined previously by the LPR&IC and is not discussed in this review.

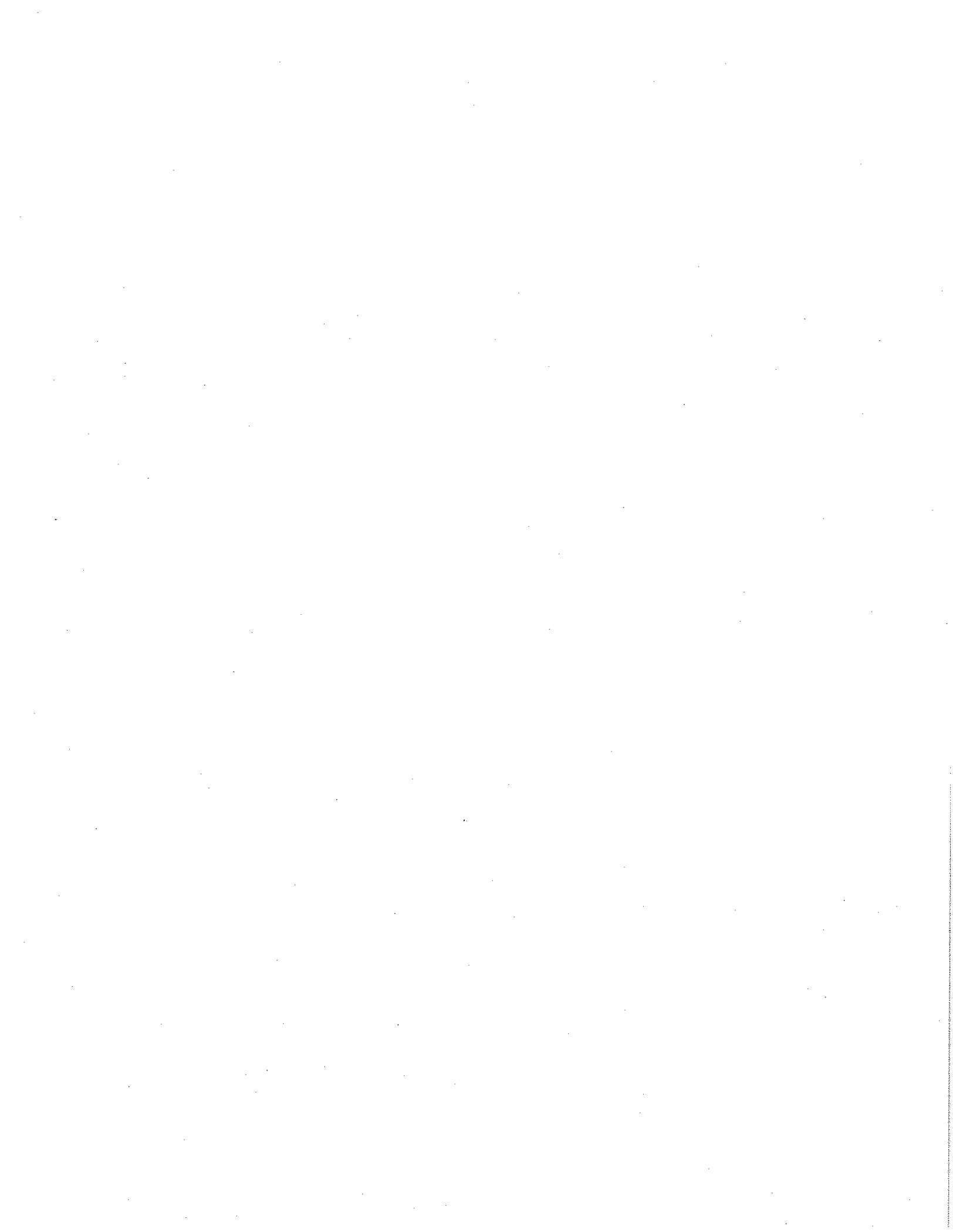
Methods

The program review committee used the following methods in conducting this audit.

- review of federal and state statutes, department budget materials, regulations, and policy manuals;
- review of testimony received at four public hearings held in Norwalk, Hartford, Groton and Vernon;
- examination of two random samples of complaints received by the bureau in 1988 and the first six months of 1989;
- interviews with bureau staff, Department of Health Services laboratory personnel, staff of the Environmental Research Institute at the University of Connecticut, and private engineering consultants;
- survey of all bureau employees on the management of the bureau; (see Appendix A)
- examination of enforcement and permitting databases; and
- site inspections with a unit inspector.

Report Organization

This report is divided into three chapters. The Introduction is Chapter I, and Chapter II, entitled Program Description, gives a background of air pollution control programs, and provides information about the Bureau of Air Management operations, including organization, resources, and program responsibilities. Chapter III, Findings and Recommendations, contains analysis of the bureau's programs, and the committee's findings and recommendations.



CHAPTER II: PROGRAM DESCRIPTION

Background

The United States has had federal legislation addressing air pollution since 1955, when Congress passed the Air Pollution Control Act. The basic thrust of that legislation, however, was to "preserve and protect the primary responsibilities of the States and local governments in controlling air pollution." However, by the mid-1960s, it was clear that this voluntary approach at the local level was largely ineffective. In 1967, Congress passed the Air Quality Act that called for establishing air quality regions, development of air quality standards, recommended air pollution control techniques, and created a timetable for the enactment of those standards. These efforts were bolstered by the Clean Air Act of 1970, which expanded the coverage of the federal program and placed authority for its implementation in the newly created Environmental Protection Agency.

In Connecticut, the framework for the state's air pollution control program was passed in 1967 with Public Act 754. This legislation established a regulatory program to control air pollution, including authority for developing and enforcing regulations. Initial responsibility for implementing the program was given to the Air Pollution Control Commission under the state Department of Health.

In 1971, the state Department of Environmental Protection, which had just been created, was given responsibility for all environmental areas, including air pollution control. Since that time, several changes or additions -- some in response to federal law and others initiated by the state -- have been made to the state's air pollution control program. (See Appendix B for a summary of state legislation affecting air pollution control.)

Program Purpose

The main purpose of the Bureau of Air Management is to ensure that the quality of the air is protected from the type and quantity of pollutants that might be harmful to the health of humans, plants or animals, or which might prevent citizens from enjoying their lives and property.

The bureau performs a variety of functions aimed at achieving this goal including: 1) setting air quality standards, and monitoring the state's air quality; 2) administration of a regulatory program for permitting pollutant sources, and enforcement of air regulations; 3) collecting and analyzing air quality data, and responding to citizen complaints.

ORGANIZATION AND RESOURCES

The entire Department of Environmental Protection is currently undergoing a reorganization. Under that reorganization, the Air Compliance Unit has been merged with the Radiation and Noise Control Units, to form the Bureau of Air Management, under the direction of a bureau chief. The proposed reorganization (see Appendix C), as planned by the department, structures the bureau along regulatory functions (e.g. standard-setting, enforcement, etc.) rather than environmental areas, such as air or radiation, which was previously the case.

Until this reorganization, the Air Compliance Unit had been a separate unit located within the Environmental Quality Division of the Connecticut Department of Environmental Protection. The unit was headed by a director who reported to the deputy commissioner of environmental quality. The organization and functions outlined in this section describes the unit as it existed prior to the proposed restructuring.

Organization

The unit has four major sections: 1) Field Enforcement; 2) Administrative Enforcement and New Source Review; 3) Technical Services; and 4) Air Monitoring. Each section is headed by an assistant director.

The Air Monitoring Section operates the state's air monitoring equipment at 76 field locations, audits private monitoring sites, and is responsible for monitoring toxic air pollutants. The Field Enforcement Section conducts required inspections of regulated sources, and investigates facilities in response to citizen complaints.

The Administrative Enforcement/New Source Review Section has two major responsibilities. It reviews applications and plans for facilities that need construction or operating permits. This section is also responsible for enforcement action, including issuing written notices to violators, developing orders to bring polluters into compliance, and assessing civil penalties on those who don't comply.

The Technical Services Section performs air quality modeling, analysis of monitoring data, develops air quality plans, and maintains a computerized inventory of all pollutant sources in the state. In addition to functions performed by the above sections, the unit also includes

support and administrative activities, such as data processing, purchasing, and business services.

Until September of 1989, managers of the unit consisted of one director and four assistant directors. Since the planned reorganization was begun, the bureau chief now directs four divisions, each headed by a division director, only one of whom has been named to date.

Resources

Current budget. The Bureau of Air Management appropriated budget for FY 90 totaled \$6,187,476. This appropriation comes from three sources -- \$2,982,476 from the General Fund, \$1,862,000 from federal funds, and \$1,343,000 from additional sources, such as the emissions enterprise fund.

Budget trends. Program review analyzed the bureau's budget from FY 83 through FY 90. This analysis appears in Table II-1 and is graphically depicted in Figure II-1. As the numbers show, the percentage of the bureau's budget has increased overall by 158 percent, with the state General Fund portion growing by a full 347 percent, in that 7-year period. In comparison, the federal funds to the bureau have increased by only 7.4 percent since FY 83. Further, since FY 84 the federal dollars have actually decreased. Thus, the federal fund portion of the bureau's budget has been decreasing -- from 70 percent of the bureau's budget in FY 83 to about 31 percent in FY 89.

The air management bureau's staffing trends were also examined, and the unit has experienced significant growth in personnel, as depicted in Figure II-2. In FY 83, it had 65 filled full-time positions, with 44 of those funded by federal dollars. In FY 90, the appropriated positions for ACU had increased to a total of 100 filled full-time positions. However, the federally funded positions had decreased to 41, and those allocated to General Fund had increased to 59. The bureau realized a substantial increase in personnel in FY 87, when appropriations were made to hire 19 additional people to control carcinogens and keep concentrations of hazardous air pollutants within allowable limits.

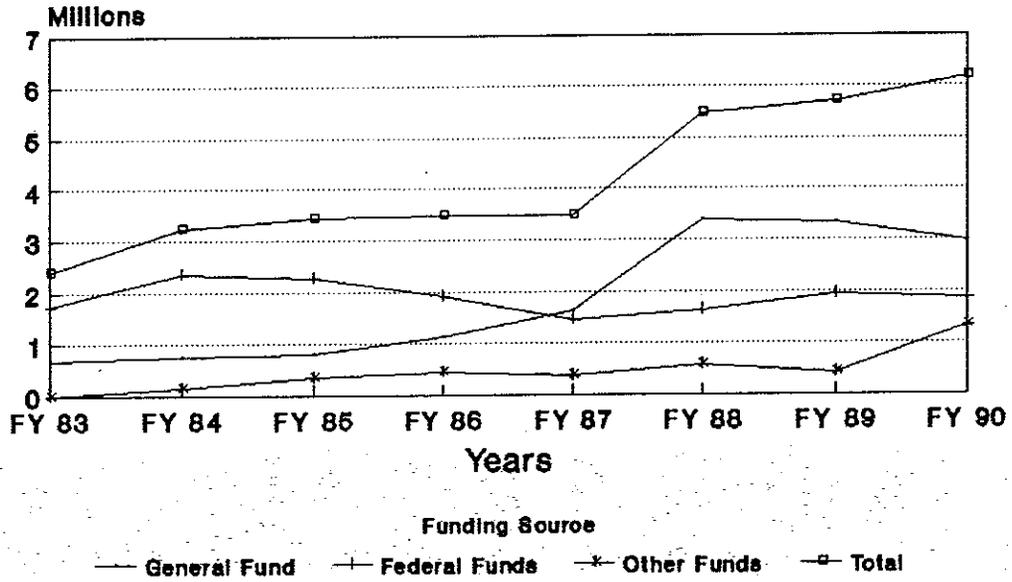
The personnel status report as of June 30, 1989, which also includes equivalent full-time positions, showed the bureau had 97 positions filled and 5 vacant.

Table II-1. Department of Environmental Protection - Bureau of Air Management
 Comparison of Resources: Fiscal Years 1983 to 1990

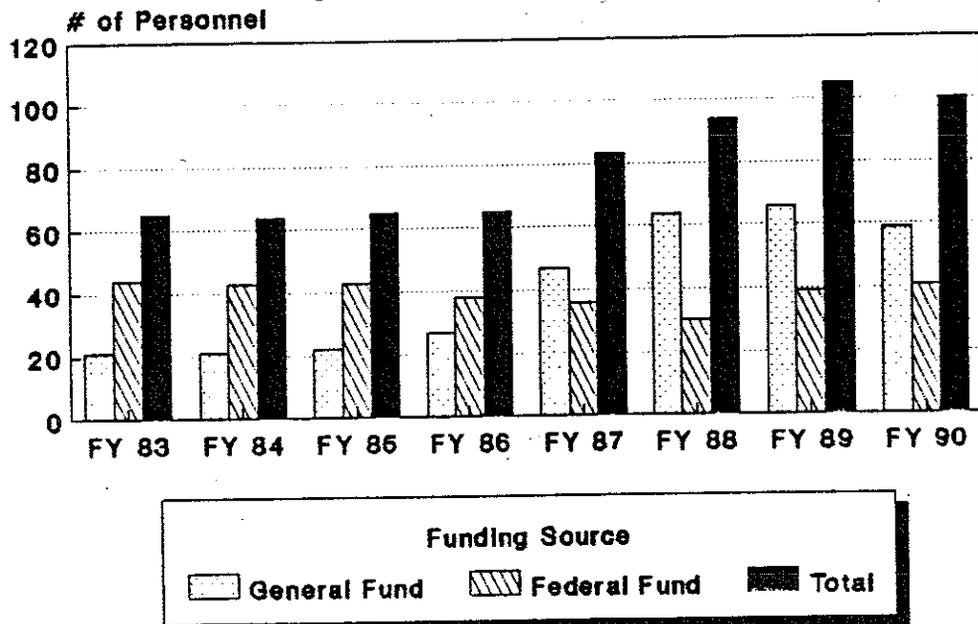
| BUDGET | FY 83 | FY 84 | % Change | FY 85 | % Change | FY 86 | % Change | FY 87 | % Change | FY 88 | % Change | FY 89 | % Change | FY 90 | % Change | % Change |
|--------------|-------------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|----------|
| General Fund | \$667,096 | \$745,227 | 11.7 | \$794,301 | 6.6 | \$1,120,455 | 41.1 | \$1,634,733 | 45.9 | \$3,384,315 | 107.0 | \$3,334,900 | -1.5 | \$2,982,476 | -10.6 | 347.1 |
| Federal Fund | \$1,734,492 | \$2,334,220 | 34.6 | \$2,269,851 | -2.8 | \$1,924,320 | -15.2 | \$1,460,679 | -24.1 | \$1,636,426 | 12.0 | \$1,952,000 | 19.3 | \$1,862,000 | -4.6 | 7.4 |
| Other | \$0 | \$141,239 | xxxxx | \$359,016 | 154.2 | \$440,217 | 22.6 | \$386,500 | -12.2 | \$566,521 | 46.6 | \$425,000 | -25.0 | \$1,343,000 | 216.0 | 850.9 |
| Total | \$2,401,588 | \$3,220,686 | 34.1 | \$3,423,168 | 6.3 | \$3,485,002 | 1.8 | \$3,481,912 | -0.1 | \$5,487,262 | 57.6 | \$5,711,900 | 4.1 | \$6,187,476 | 8.3 | 157.6 |
| PERSONNEL | | | | | | | | | | | | | | | | |
| General Fund | 21 | 21 | 0.0 | 22 | 4.8 | 27 | 22.7 | 47 | 74.1 | 64 | 36.2 | 66 | 3.1 | 59 | -10.6 | 181.0 |
| Federal Fund | 44 | 43 | -2.3 | 43 | 0.0 | 38 | -11.6 | 36 | -5.3 | 30 | -16.7 | 39 | 30.0 | 41 | 5.1 | -6.8 |
| Total | 65 | 64 | -1.5 | 65 | 1.6 | 65 | 0.0 | 83 | 27.7 | 94 | 13.3 | 105 | 11.7 | 100 | -4.8 | 53.8 |

Figures II-1 and II-2. Analysis of ACU Budget and Personnel.

ACU Resources Yearly Comparison



ACU Personnel Yearly Comparison



Information Systems

The Bureau of Air Management's operations are, to a large extent, computerized. The Environmental Information System contains three major components that handle information pertaining to administrative, regulatory, and air quality functions. The 3 major component areas are comprised of 17 various subsystems that contain data related to a specific function, such as permitting, testing, or enforcement. Most of the subsystems are operational but some are still in the planning stages.

It is currently possible to integrate the data contained in one subsystem with another subsystem so a staff person can obtain information on a particular facility, including source emissions, permit parameters, enforcement actions pending, etc.

The information systems could potentially provide a valuable management tool, and are being used in some bureau sections to assess workload, and track tasks and schedules for permitting and enforcement activities. Also, the data in the computerized system could be used by the unit to perform analysis on facilities, air quality, and source inventory.

REGULATORY PROGRAMS

The Bureau of Air Management regulates over 7,000 facilities in Connecticut to ensure they comply with federal and state air pollution control laws and regulations. The bureau develops standards, registers or permits facilities, responds to citizen complaints, inspects sites to ensure compliance, and takes enforcement action against those in noncompliance.

Development of Standards

As part of the federal Clean Air Act, the United States Environmental Protection Agency (EPA) sets standards for the major pollutants, such as particulates, ozone, and lead. Further, under the federal law each state prepares and submits a State Implementation Plan (SIP), indicating how it will meet those standards. These SIPs must be approved by EPA. If the SIPs, as revised after the federal 1979 revisions to the Clean Air Act, are not approved a state could face serious financial penalties.

Also, as a result of the 1979 amendments, any state in nonattainment of the standards had to revise its SIP to show it was making "reasonable further progress" in attaining

those standards. One of the methods states must employ in showing reasonable further progress is to require that all existing stationary sources apply reasonably available control technology (RACT) -- both economically and technologically -- to their industrial processes. Also the SIPs had to demonstrate that public participation was encouraged; and that the state would maintain an inventory of all pollutant sources and the quantities emitted.

Connecticut's standards, adopted in department regulations, provide for the control of: open burning; odors; and the emissions of particulates, sulphur compounds, organic compounds, carbon monoxide, nitrogen oxide, and hazardous air pollutants.

As part of the federal oversight of individual states' programs, the EPA conducts audits in each state, which examine adequacy of regulations that have been developed and how each state is implementing its program. The audit consists of records review and on-site inspections. In both the 1986 and 1988 audits, EPA rated Connecticut's program very highly. According to the 1988 audit, the Bureau of Air Management "has maintained a high level of technical competency in developing, implementing, and enforcing both federally mandated and state-initiated air pollution abatement regulations and measures."

Permitting

The Bureau of Air Management within DEP administers a permitting program that requires certain air pollution sources (industries or businesses) to obtain construction and/or operating permits before being allowed to begin operating. The Administrative Enforcement/New Source Review Section has primary responsibility for permitting activity, and eight engineers are assigned to this function.

The type of permit required differs depending on the type of source. Stationary sources -- buildings, structures, equipment, or operations that do not move from place to place during normal business hours, and whose processes emit or may emit any air pollutant -- must obtain both construction and operating permits. Construction permits are for the erection or installation of the building, equipment, etc.. A final operating permit is not issued until the equipment is fully installed, and the results of testing shows that the standards issued in the permit application can be met. Any regulated stationary source that does not fall into the permitting categories listed above must only register with DEP.

Examples of regulated sources include: manufacturing processes that spray paint or spray clean; metal finishing, cleaning, degreasing, etc.; sources that use acids or volatile organic compounds in their processes; and those that use certain fuel burning equipment.

There are currently approximately 7,387 regulated facilities in Connecticut, of which about 450 are considered major sources. These are given federal designations of A1 or A2 sources, meaning these facilities emit, or have the potential to emit, 100 tons or more of pollutants each year. Figure II-3 shows the number of all types of facilities, both permitted and registered, in each of the state's EPA-designated air quality regions.

By state law, the commissioner of DEP has the authority, in accordance with adopted regulations, to require that certain categories of facilities be permitted. Generally, those categories include the following:

- any regulated source that has built or modified its facilities since July 1, 1972;
- any source that emits hazardous pollutants;
- certain sources that burn waste oil;
- any source that is allowed by the commissioner to exceed emissions for sulphur compounds; or
- any source under enforcement order to correct a regulatory violation, or that violates a regulation.

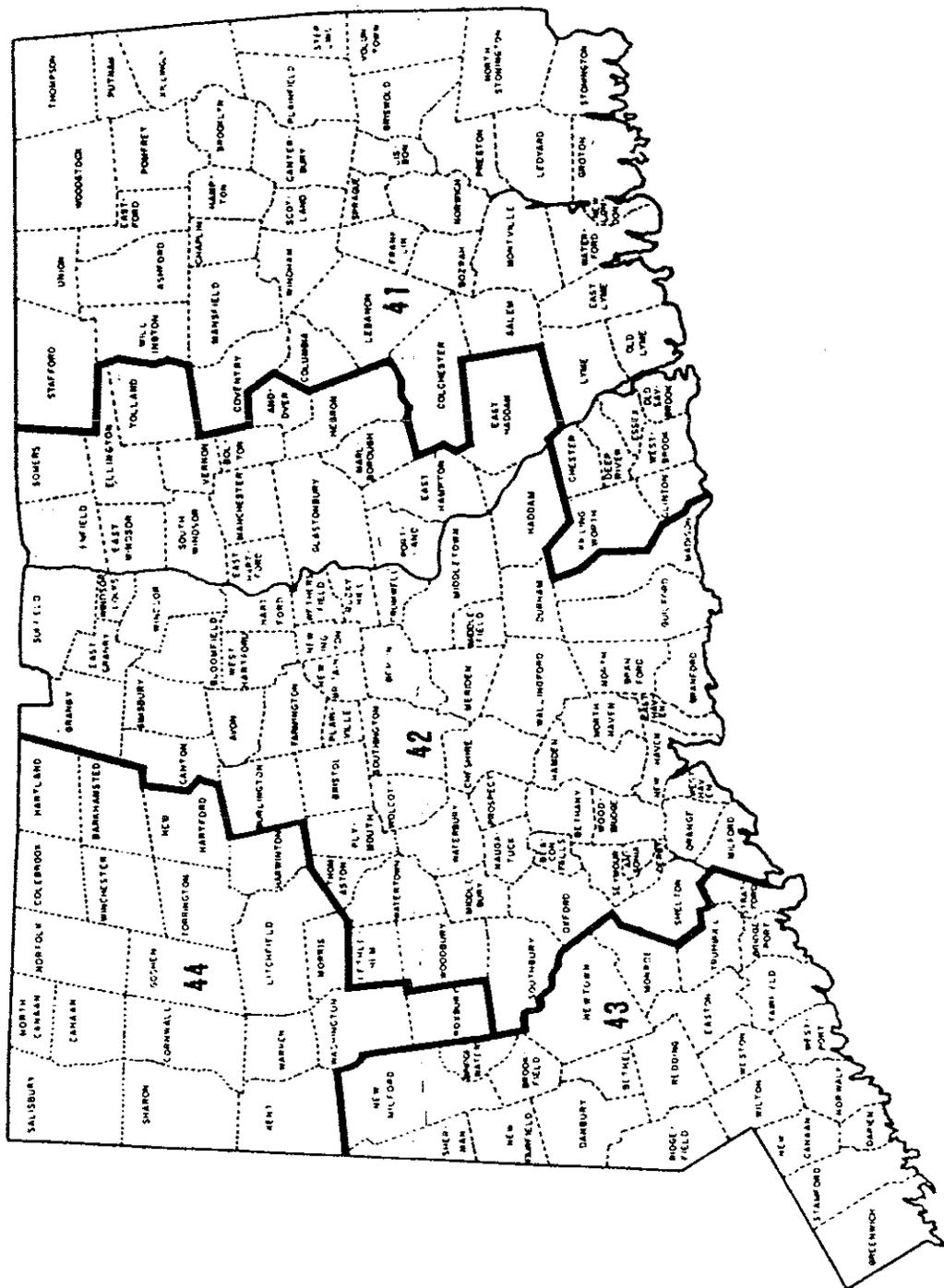
Facilities may be issued more than one permit, depending on the number and types of processes operating at a given facility.

The Bureau of Air Management uses the same criteria for approval of both construction and operating permits. The basis for granting the permit is that the source (or proposed source) will not be in violation of any applicable regulatory standards, and that it will not prevent, or directly interfere with any applicable ambient air quality standard.

The bureau goes through the following three basic steps in the permitting process:

- determines the existing air quality levels in the area of the proposed facility;

Figure II-3. Regulated Facilities by Connecticut Air Quality Control Regions



| Major Facilities | |
|------------------|------------|
| A1 | 13 |
| A2 | 135 |
| | 265 |
| | 35 |
| | <u>448</u> |

| All Regulated Facilities | |
|--------------------------|-------------|
| AQCR 44 | 197 |
| AQCR 43 | 1916 |
| AQCR 42 | 4514 |
| AQCR 41 | 762 |
| TOTAL | <u>7387</u> |

- determines the degree of reduction in emissions that will be required to achieve the desired results; and
- approves the proposed control technologies aimed at achieving those reductions.

Staff engineers in the New Source Review Section are primarily responsible for the above functions, which involve review, analysis, and approval of comprehensive engineering plans. To determine the effect of the proposed permitted activity and its control technology on the ambient air, the review often includes computer modeling. If the proposed plan passes the modeling test, then a permit to construct would be issued. If the proposed plan fails, the model may suggest improvements to the control technology so that a permit could be issued, otherwise the permit would be denied.

Before a final permit is issued, facilities are required to conduct compliance testing to verify that the control technology is achieving the reduction in emissions stated in the permit application. If the reductions' results cannot be achieved, the facility is only granted a temporary permit, and required to continue testing to try and achieve the desired results. If the results cannot be met after a certain period of time, the bureau issues a state order to change the treatment technology.

Most operating permits are currently issued for an indefinite period. The department is statutorily authorized to charge permit fees, which are calculated based on state regulatory provisions. In FY 88, permit fees totaled \$112,137. Permit applications are to be approved within 45 days of receiving a completed permit application. The department must follow special procedures aimed at allowing public input, as required under the Clean Air Act. The public must be informed of the application through legal notice in the newspaper, and the application itself must be available for public review. Further, DEP must allow a certain period for written comment after the legal notice and must hold a public hearing in the case of a major source, or, for a minor source, hold a hearing if one is requested.

Monitoring

To ensure that regulated facilities are complying with established standards and/or their permit parameters, the Bureau of Air Management monitors the activities of these facilities. Monitoring includes both announced and unannounced inspections, review of inventory and production records, and compliance testing.

The degree of regulatory oversight to which a facility is subjected depends on the type and quantity of pollutants that facility emits. Larger facilities and those emitting hazardous pollutants face more stringent monitoring requirements than others. Below are descriptions of the types of testing that facilities are required to perform, and the types of polluters that fall under each. The other major monitoring activity, inspections, will be discussed separately.

Continuous emissions monitoring (CEM). This is the most stringent type of monitoring, and provides the most immediate and direct method of checking a source's compliance. This category of facility is required to conduct CEM as part of its permit to operate. However, this monitoring process currently applies to relatively few sources. Facilities must develop a plan, approved by the air management bureau, that will enable the source to continuously track emissions and relay those data to DEP, either through quarterly reports or a computer link-up with the air management bureau. According to department staff, there are currently only 8 sources -- waste-to-energy plants and sources that emit 100 tons or more of any one pollutant -- that will be required to transmit the computer data by telemetry. About 60 to 100 others submit periodic reports on their emissions.

Stack testing. A more typical testing requirement is that a facility test the emissions being released through its stacks (e.g. pipes or ducts) for a set period of time to ensure it is operating in compliance with department regulations or its permit. Stack testing is usually required prior to issuing a final permit to operate, or to determine compliance with a state enforcement order.

The actual testing is performed by a consultant hired by the facility and overseen by staff in the bureau's Air Monitoring Section to ensure its integrity. Data from the tests are checked in the Administrative Enforcement/New Source Review Section by the engineer or analyst responsible for overseeing the permitting or enforcement of that facility.

Ambient air monitoring. The Air Monitoring Section of the bureau is responsible for maintaining instruments that monitor the air quality at 76 different locations across the state. Data on certain aspects of air quality, such as ozone levels, are monitored from these stations and reported daily. Samples from these air monitoring stations are also taken to

the Department of Health Services laboratory to test for lead and other inorganics. The number of samples, as well as the number of tests run on those samples, has declined in the past few years. In FY 84, over 34,000 tests were run on 4,602 samples; this declined to 19,816 exams on 3,255 samples in FY 89. The decrease in testing is largely due to composite testing, which can check for a number of pollutants in one sample, rather than testing samples for single metal pollutants.

Other than ambient air testing at these 76 monitoring locations, the bureau does no testing of ambient air. For example, in response to a complaint or as part of a routine inspection, the inspectors do not collect samples, nor does the department test the ambient air at a specific facility.

Inspections

The Field Enforcement Section of the Bureau of Air Management performs inspections of all potential sources of air pollution. In general, field enforcement staff handle four different assignments: 1) complaint investigations, 2) compliance inspections, 3) plant inspections; and 4) open burning inspections.

Currently, the Field Enforcement Section has 12 field inspector positions for all inspection assignments. On average, the section's 12 inspectors are out in the field four days and spend one day in the section's office completing necessary paperwork. According to department personnel, assignments are made on a geographic basis, with inspectors being dispatched within the area in which they live.

Assignments and procedures. Complaint investigations are performed in response to public complaints received by the section alleging a violation of regulations and/or nuisance activity such as dust blowing over property lines. If, after a site visit by field enforcement staff, the complaint allegations are substantiated, the field inspectors refer the information to administrative enforcement staff for enforcement response.

Compliance inspections are follow-up inspections conducted at facilities that violated air regulations and have been subjected to enforcement action. The section's field staff visit the facilities to determine if violations have been corrected in accordance with administrative orders. At the request of engineers in the Administrative Enforcement and New Source Review Section, permit compliance inspections are also performed to verify compliance prior to final issuance of the permit.

In addition, the Bureau of Air Management receives quarterly listings on new businesses and industries locating in the state from the state Labor Department. Based on these listings, and additional information submitted by the company on the bureau's pre-inspection questionnaire (PIQ), the bureau may schedule an inspection of the new facility. Inspectors review information from the individual PIQs to determine if sources appear to be in compliance and to prepare for on-site inspection.

During the on-site visit the inspector determines if the source is in complete compliance with air regulations by checking that any necessary air pollution control equipment is installed and working properly, and confirms the information submitted in the PIQ is correct.

Plant inspections are also performed at any company with a past inspection record. If the source emits more than 100 tons of pollutant a year, the federal Environmental Protection Agency requires annual inspections. Sources of air pollution emitting less than 100 tons of pollutants a year are inspected at regular, but less frequent intervals.

Complaint Handling

All complaints concerning air pollution are handled by the Field Enforcement Section of the Bureau of Air Management. When a complaint is received by telephone, by mail, or in person, it is recorded in a complaint log and assigned to an inspector by a dispatcher within the section. Once a complaint assignment is made, the inspector investigates the complaint allegations and prepares a written report. Depending on the inspector's findings, enforcement action may or may not be taken.

For the most part, an inspector investigating a complaint takes an initial look around the area surrounding the alleged problem source to determine if any obvious problem (i.e. visible emissions or odor) can be detected.

The inspector then attempts, if possible, to contact the complainant to establish a better understanding of the complaint. If the complainant is not available, the inspector may attempt to contact other individuals who may have some knowledge of the alleged problem. Finally, the inspector visits the alleged source, meets with a source representative, and conducts an inspection documenting observations and/or recommendations.

Once the inspection is completed the inspector records any violations and/or recommendations. All observed violations are documented in a notice of violation citing the specific section of the violated air regulations and providing the maximum amount of time allowed for corrective action. The bureau sends notices of violations by certified mail. However, most sources are informed of the violation at the time of observation to allow immediate remedy, if possible.

Enforcement

All regulated air pollution sources, whether they are permitted or registered, must be in compliance with all air pollution control regulations. If a facility is found in violation, the Bureau of Air Management is statutorily authorized to take enforcement action.

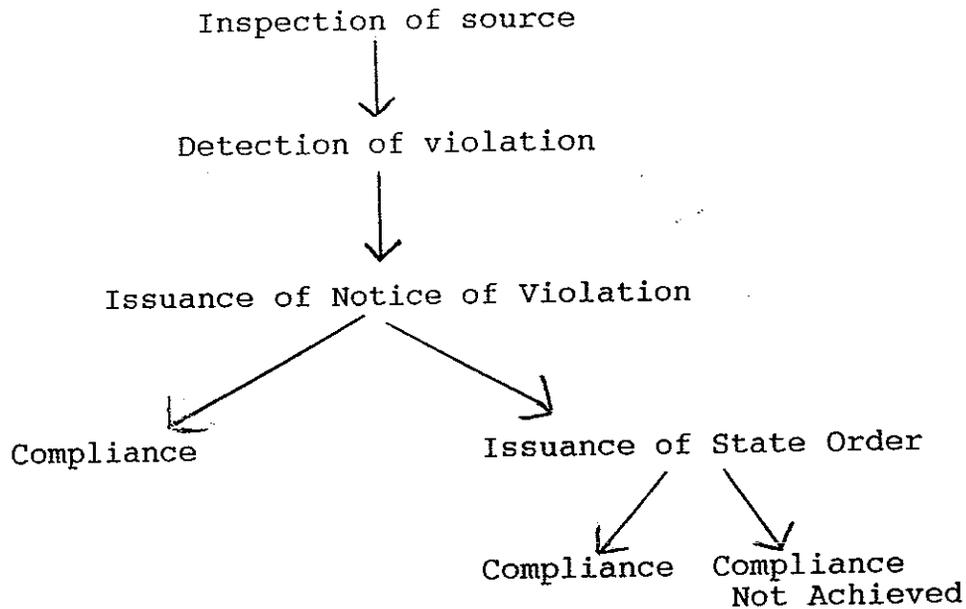
Enforcement action can be initiated by a complaint or by several other methods, including full plant inspections, special surveillance, or routine inspections carried out by inspectors in the Field Enforcement Section. Figure II-4 graphically displays the typical enforcement route.

If a violation is found by the inspector, a notice of violation (NV) -- which informs the source in writing that it was not in compliance with a specific section of the regulations -- is issued. The NV is drafted by the inspector but is reviewed and approved by staff in administrative enforcement, as well as the deputy commissioner.

As Figure II-4 shows, the first step in the enforcement proceedings is to issue a notice of violation. The notice informs the source that there is a maximum amount of time for correction.

If the source corrects the violation within the allotted time-frame, another inspection is conducted to verify compliance, and if compliance is found, the NV is closed. If the source indicates that it cannot comply within the time stated in the notice, or the company is found in non-compliance at the verification inspection, the facility and the department meet to discuss a compliance timetable. If an agreement can be reached, the timetable is incorporated into a state order. If no agreement is reached, then the air management bureau issues the order unilaterally.

Figure II-4. Bureau of Air Management -- Enforcement Route



Source: DEP

The enforcement orders usually include a number of steps, including: hiring a consultant; submitting engineering reports and plans for controlling pollution; construction and installation of equipment; and testing. The Administrative Enforcement Section staff must track and verify compliance with each step in the order. If facilities do not comply with orders, the bureau may take a number of actions, including imposing penalties, or referring the case to the Office of the Attorney General, the Environmental Protection Agency, or, in the case of criminal activity, to the Office of the Chief State's Attorney.

All orders are statutorily required to be filed on municipal land records. A statutory process exists for the

appeal of orders. First, a party is granted an administrative hearing before the commissioner, and if a party is aggrieved by this decision, may appeal to Superior Court.

The Bureau of Air Management maintains a computerized database of its enforcement activity. One file contains active enforcement records, and another file is an historical file containing all actions -- both notices of violations and state enforcement orders -- that have been complied with. Currently, there are approximately 250 outstanding enforcement actions on the active file, and over 1,800 records that have been complied with contained on the archive file. Analysis of the bureau's enforcement activities is discussed in the Findings and Recommendations chapter.

CHAPTER III: FINDINGS AND RECOMMENDATIONS

The Legislative Program Review and Investigations Committee findings and recommendations concerning the Bureau of Air Management concentrated on two major areas; management of the bureau and the bureau's operation of regulatory programs.

MANAGEMENT

Management of the bureau oversees approximately 100 people who are responsible for implementing programs that regulate several thousand facilities, and respond to mandates from the legislature, the Environmental Protection Agency, and demands from the general public. To do that effectively, management must set goals and objectives, plan and prioritize its activities accordingly, ensure that the unit has adequate resources to perform its functions in a timely fashion, adequately communicate essential information to its employees, and maintain high standards of performance by staff. Program review found that performance of these functions was lacking and makes recommendations to improve those capabilities.

Bureau Organization

As noted earlier in this report, the entire Department of Environmental Protection, including the former Air Compliance Unit, has been undergoing a reorganization. The Air Compliance Unit has been merged with two smaller units on Radiation and Noise into a new Bureau of Air Management under the direction of a new bureau chief. Written plans were developed in late summer for changes at the division and unit level; however, these plans have not yet been fully implemented. Thus, the program review committee believes that now -- before the department reorganization is finalized -- is an opportune time to recommend proposals for organizational restructuring to enhance the bureau's ability to respond to state mandates, citizen complaints and local concerns, as well as its federal directives.

The DEP's proposed reorganization of the Bureau of Air Management can be found in Appendix C of this report. Program review believes that the department's attempts to redirect its organization along regulatory functional lines, and less along single environmental areas, is an improvement over the old organization. However, program review finds, from reviewing the bureau's plans, that several areas appear to be put together without organizational foundation, without relationship to other units in that section, and without a sense of what the overall mission and objectives of the division should be. For example, the proposed reorganization calls for a Division of Planning and Standards, yet under

that division there is no unit responsible for planning and none for developing or setting standards.

Furthermore, the new organization does not establish a section that would be primarily responsible for conducting site or stationary source testing of air pollution. This functional area is critical to connect testing results to the bureau's enforcement or complaint handling activities, an area that program review believes is a serious deficiency in the air pollution control program. In addition to the lack of a unit to carry out air testing, the new organization plan continues to split enforcement between two units and two separate assistant directors, causing problems in the implementation of enforcement actions. This will be discussed further, later in this report.

To better align the bureau's divisions and units to address these problems, and to carry out functions that require greater attention, the Legislative Program Review and Investigations Committee recommends that the Bureau of Air Management shall be reorganized as shown in Figures III-1 to III-4.

This recommendation for reorganization of the Bureau of Air Management results from a number of committee conclusions. First, program review believes that this organizational structure will enhance the bureau's capability of responding to immediate concerns that require action in the community. For example, by placing the functions for air testing at specific sites, field inspections, and administrative enforcement all under the Enforcement Section of the Regulation and Enforcement Division it should allow the division and section directors to set priorities for site testing, and better respond to complaints, especially when violations, or reasons for the violations are not easily detectable. In addition, by placing the field and administrative enforcement functions under the same assistant director, problems of communication and a lack of common approach are less likely to occur. The result should be an enforcement program that is more responsive to local concerns through air testing, speedy enforcement action, and improved compliance monitoring.

Second, the proposed structure will enable the bureau to more effectively establish new and improve existing air quality standards to make Connecticut's air cleaner and to plan and monitor the bureau's own activities. To do this, program review recommends the creation of two new sections, under the Planning and Standards Division. One section, called Planning and Performance Monitoring, should be staffed by two engineers or environmental analysts. This unit would be responsible for developing long- and short-term goals and objectives for the bureau, and evaluating the bureau's performance.

Figure III-1: Bureau of Air Management

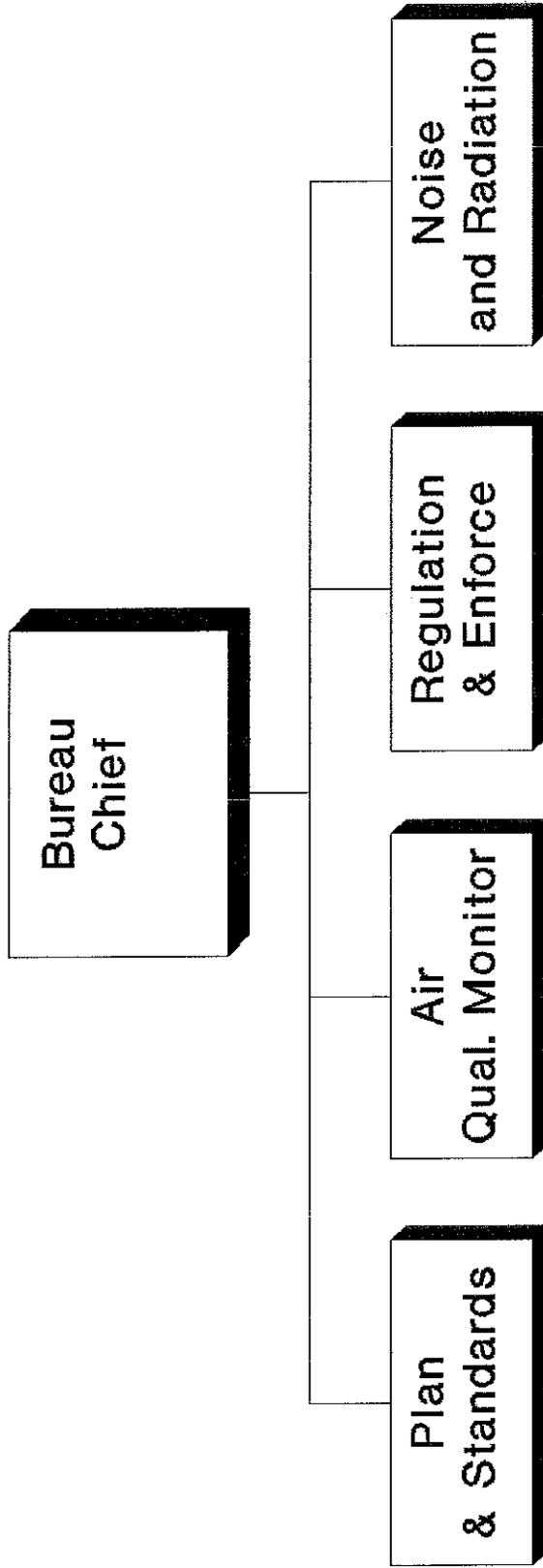


Figure III-2: Planning and Standards

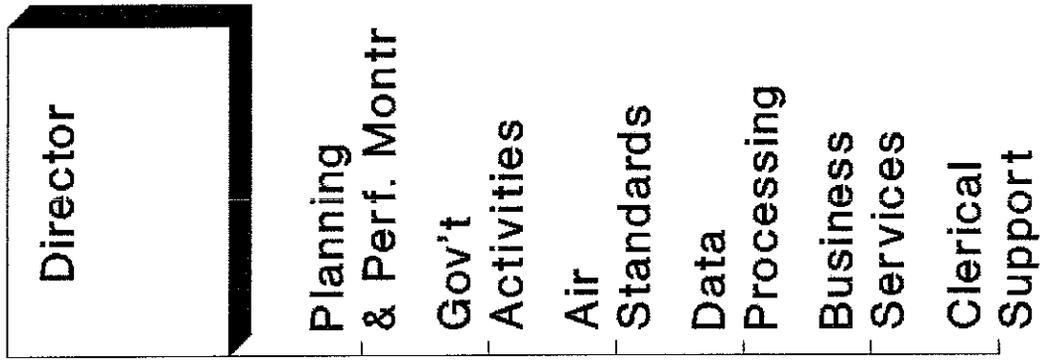


Figure III-3: Regulation and Enforcement

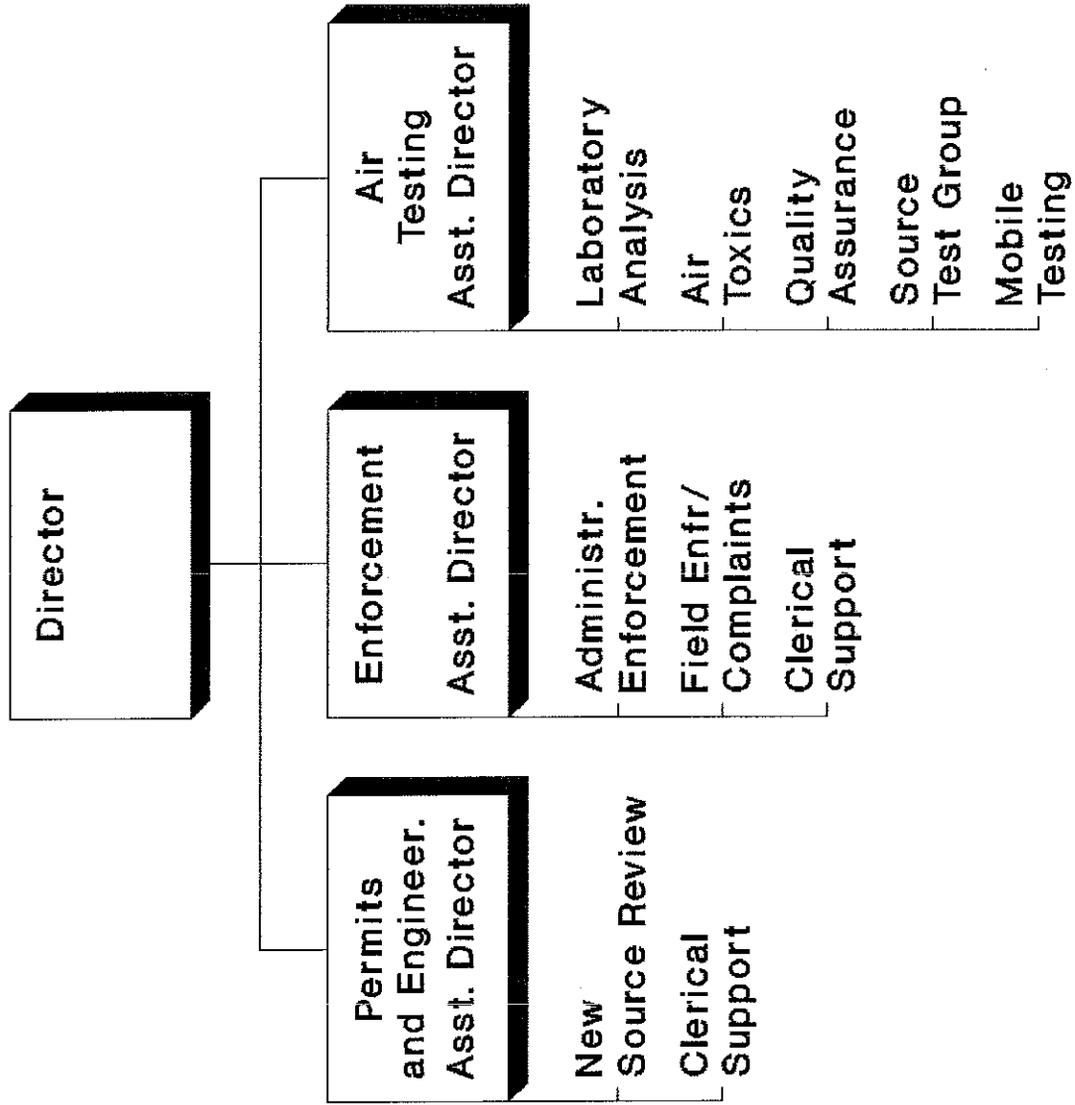
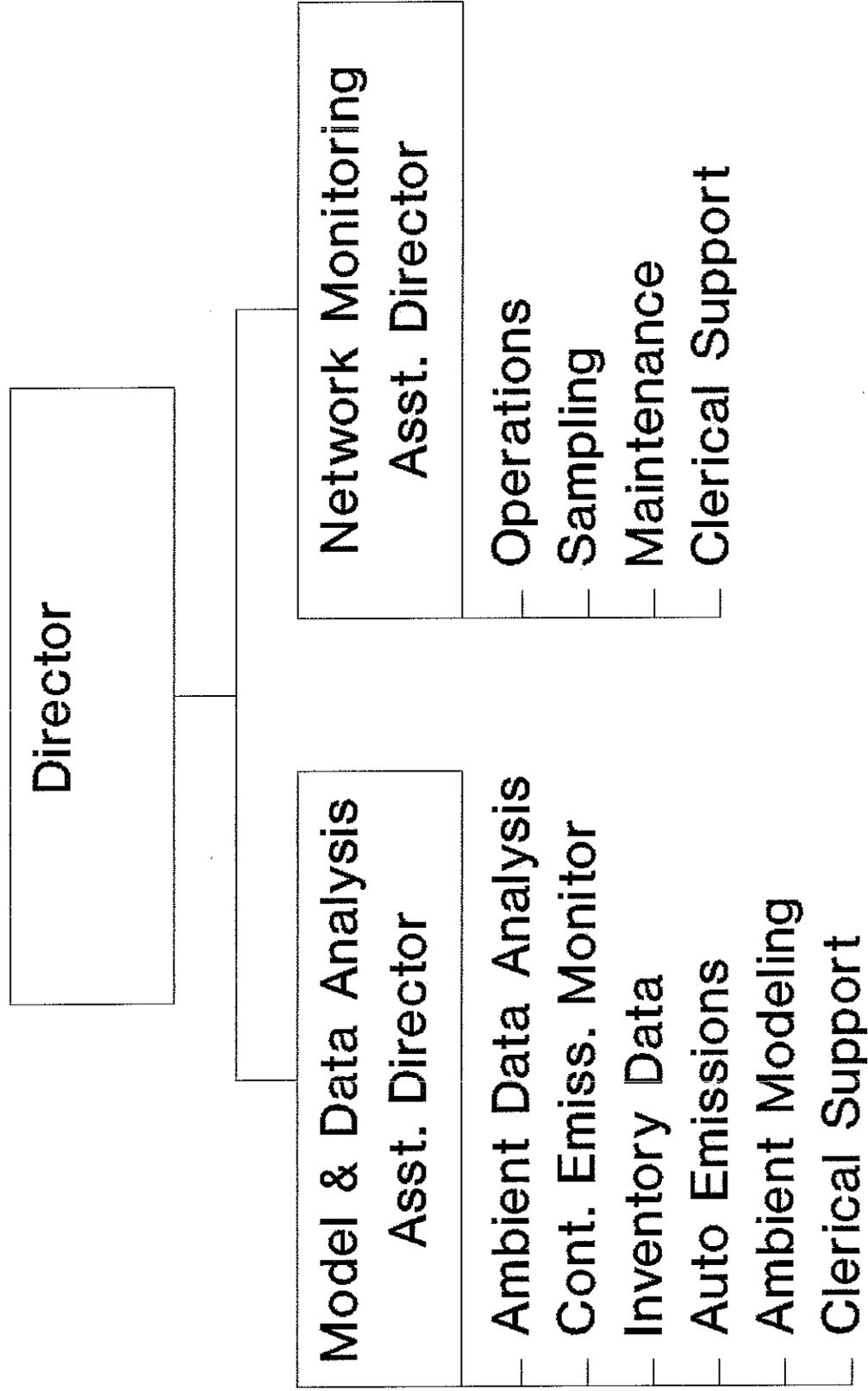


Figure III-4: Air Quality Monitoring



The other section, Standards, should also be staffed by two engineers or environmental analysts. The unit should be responsible for developing air quality standards, including all aspects of coordination with bureau divisions and outside agencies on the creation or updating of standards. Program review has determined that no new positions are needed, but rather that these two sections should be staffed by a reassignment of present bureau personnel.

Program Planning, Implementation and Monitoring

The program review committee found that the Bureau of Air Management has difficulty in implementing programs in a timely manner. This problem is especially apparent when the program in question has not been in response to an Environmental Protection Agency directive. For these federally mandated programs, the Bureau of Air Management has had substantial success, as discussed in the introduction of the report. However, where bureau programs have been mandated by the state legislature, with no reporting requirements, the bureau has met with significantly less success. Program review finds the following programs exemplify these problems.

Continuous emissions monitoring. In 1986, the state legislature passed Public Act 86-332, which required DEP to "establish a program for receiving, evaluating and responding to reports of dioxin or furan emissions from resource recovery plants." The requirements of that 1986 legislation, which are reflected in Sec. 22a-193 of the Connecticut General Statutes, call for this program to include continuous monitoring with remote telemetry for receipt of meteorological data and dioxin and furan indicators. However, the continuous emissions monitoring protocol, i.e., implementation strategy, has not yet been finalized, and bureau staff believe it will probably be January 1990 before the document is complete.

The department is now receiving periodic reports from the resource recovery plants on data the resource recovery facilities are continuously monitoring. However, the air management bureau does not yet have the equipment to receive that data via remote telemetry, as required in statute.

Regulations. The bureau's record in having regulations adopted in a timely manner is not consistent, and again appears to be related to whether the regulations are in response to a federal directive or not. In the spring of 1989, EPA required the department to adopt stricter requirements for volatile organic compound emissions. Despite opposition to the proposed regulations that developed toward the end of the regulation-making process, the Bureau of Air Management did succeed in having these regulations passed in October 1989.

However, the bureau has not proceeded nearly as quickly in having new odor regulations adopted. According to participants involved, the process to adopt these regulations was begun two years ago. The draft regulations have been through numerous revisions, are just now being sent out for formal public comment, and two public hearings were held on December 7, 1989. It will be at least spring 1990 before the regulations can finally be adopted.

Air testing. Program review finds that the air management bureau's focus on air testing has been its operation of the state's air monitoring network that measures criteria pollutants as set out in the federal Clean Air Act. As pointed out earlier in the report, the testing of these samples is done by the state Department of Health Services laboratory.

In 1983, the legislature required DEP to adopt regulations identifying and controlling emissions for hazardous air pollutants. In 1986, DEP adopted an air toxics program regulating over 850 toxic substances. The legislature appropriated \$700,000 to DEP in its FY 88 budget to purchase a mobile unit for toxic air testing but the unit is still not operational. The bureau does not yet have the ability to use the equipment to test the air at any given site because DEP has no laboratory facility of its own. In late November 1989, the department contracted for laboratory support services with the University of Connecticut. However, it has been over two years since the legislature initially appropriated funding for a testing program and no tests have yet been done.

Reporting. Connecticut has a network of 76 ambient air monitoring stations that feed data to the department on criteria pollutants -- ozone, particulates, lead, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The department analyzes and summarizes these data and submits them to EPA. While no written report is mandated, the Bureau of Air Management at one time issued a summary of these data in an annual report that analyzed the quality of Connecticut's air.

The document was technical in nature, supported by numerous charts, graphs, and trend analysis, but was a useful document in knowing Connecticut's progress in achieving cleaner air. However, the last issue of this Air Quality report was 1985.

Also, in 1985 the Air Management Bureau issued a report called To Breathe Clean Air - A Citizen's Guide to Connecticut's Air Pollution Control Program. Similarly to the air summary, the bureau was not mandated to issue the report, but it served a worthwhile purpose. The report was written in nontechnical language, and served to explain the laws

requiring air pollution control, what activities contributed to air pollution, the programs operated by the bureau to lessen that pollution, and what citizens could do to assist.

However, since that time there has been no document that informs state residents what programs are operating, what new laws or regulations have taken affect, and how these might affect the general population. Since the 1985 report was issued, several important programs have been mandated including the air toxic program, continuous emissions monitoring for the resource recovery plants, and oversight of asbestos removal.

The bureau does prepare papers and other informational presentations that are delivered to symposiums, conferences, and the State Implementation Plan Revision Advisory Committee. However, since most of the monetary resources for the bureau now come from state monies, the bureau must become more responsive in reporting its programs to the state's citizens.

The program review committee believes the deficiencies noted above are largely in state-sponsored programs. Further, the committee concludes that the bureau's federally supported programs are better implemented because EPA does ongoing program monitoring by requiring quarterly progress reports, and periodically auditing the bureau's performance. In comparison, while the state now funds about 70 percent of the bureau's programs, it requires little in the way of progress reporting on programs. Moreover, ongoing external oversight of its programs and their implementation is minimal, except for legislative oversight that happens infrequently.

Therefore, the Legislative Program Review and Investigations Committee recommends that the Bureau of Air Management shall develop an internal performance evaluation program that systematically plans for and monitors the operations and progress of the bureau and its programs.

The objective of the evaluation program is to require the bureau to develop program performance indicators, gather the necessary data and information to gauge the progress of each program, and evaluate the outcomes of each of its operations. The report, which shall include a summary of the state's air quality, will be submitted annually to the General Assembly, specifically to the committees of cognizance, and the Legislative Program Review and Investigations Committee. The first report will be due on September 1, 1990.

Implementation procedure. Since the reorganization of the Bureau of Air Management was begun in September 1989, it is an opportune time to initiate a new approach to the

bureau's programs that will stress responsiveness to state mandates, creation of goals and objectives, establishment of performance standards, internal monitoring of its own performance, and increased reporting on that performance to the legislature.

Initially, the bureau must identify each program operating within the bureau, establish goals and objectives and specify performance indicators for those programs. This report should also provide quantitative and qualitative information about the bureau's programs, including organizational responsibility, resources, staffing levels, and expected workloads, as well as specified tasks and activities assigned to units.

In its report, the bureau should connect the program goals and objectives to the annual goals and objectives of the entire bureau, and its four individual divisions. The plan should prioritize goals for all state and federal programs, unit operations, and provide implementation strategies on how best to meet the goals for each.

The initial performance evaluation report should provide a description of the DEP reorganization, including the Bureau of Air Management. The report should list inception dates and actual start-up dates of programs, staffing, management changes, cost to the department, and duties of the bureau and its units. It is also recommended that in several subsequent reports the department should evaluate its new reorganization and discuss any needed changes.

As called for in the reorganization of the bureau, the four divisions addressed in the report shall include: Planning and Standards; Regulation and Enforcement; Air Quality Monitoring; and Radiation and Noise. The report shall include a performance status on all programs administered in those divisions. New programs will be addressed in the evaluation report as they are brought into operation, and any programs scheduled for termination reviewed for effectiveness and performance.

The main focus of each performance evaluation report should be to monitor the bureau's performance. As was stated earlier, to conduct the analysis and evaluation certain background information and performance indicators must be used. Evaluation elements and performance indicators recommended by the program review committee include, but are not limited to, the following:

- a listing of all bureau programs and their inception dates, and actual start-up dates if they vary;
- description of pertinent state and federal legislation requiring programs;

- status of any regulation required to implement each of the programs;
- analysis of resource needs, both anticipated and/or actual;
- analysis of the benefits of each program;
- workload measures per unit and per employee;
- performance standards for each job position;
- identification of areas where the bureau or unit is having difficulty in implementing plans, what obstacles there are, and proposed strategies to overcome problems;
- average processing times for each type of activity, including enforcement actions, inspections, complaints, permits, etc.; and
- status of bureau reorganization, including any resulting improvements in program effectiveness.

To conduct the internal performance evaluation program, the bureau must develop and outline the databases needed to consistently collect and disseminate specific information and data. The performance indicators mentioned above and any others the bureau may find useful must be identified, and collection of information and data begun by all units for all programs.

The program review committee believes that this task should be accomplished without major difficulty, since the bureau has the computer capability to maintain and analyze the data, once collected. In addition, some of the information systems that contain necessary data already exist, and would only require aggregating and analyzing the data for the monitoring report. Other informational systems are planned but not yet running, and this recommendation will require that the bureau make the operation of those systems a priority.

Assistant directors of individual units and divisional directors shall be responsible for collecting and retaining information and data related to their programs. The bureau chief shall be responsible for ensuring the data are analyzed and reported.

Benefits from program. The annual performance evaluation report to be produced by DEP and the bureau will provide for regular monitoring of the Bureau of Air Management. The report will provide useful information to both the legislature and the department.

This recommendation will require the bureau to establish goals and objectives, which 29 percent of the bureau's employees felt were not well established, according to a survey conducted by program review. The goals of the bureau can be set and achieved once the day-to-day operations are focused toward that end. The goals and operations can also be compared to those set by the federal and other state governments to ensure that air quality is maintained at acceptable levels.

The performance indicators required for the report will provide the bureau with a valuable management tool in reviewing its programs, including demand for service, costs and personnel involved, staff performance, as well as compliance by regulated sources.

Information Systems

Many of the programs operated by the Bureau of Air Management use automated information systems. Compared to other units in DEP, and other agencies examined by program review, the bureau is advanced in the use of computer technology. However, the air management bureau is not as far along in automating its systems as its data processing plan indicates, and the bureau staff's use of those systems that are operational needs improvement.

In a document prepared in 1987, the air management bureau indicated its information system consists of three basic components -- administrative, regulatory, and air quality -- that are made up of 17 various subsystems. While the document indicated most were operational then, several were still in the planning stages. Of those in the planning stages in 1987, none have since become operational.

Of those subsystems that are still being planned, a number are related to state programs. For example, according to department staff the complaint data system planned in 1987 is still a long way from being operational. Further, the planned inspection data system is being held up because EPA is changing the data it wants collected nationwide.

In addition, program review found that several of the systems are not being used as planned, or data generated from the systems are not useful because of the manner in which the data are entered. For example, the bureau's task tracking could be an invaluable management tool, if the automated information from all programs was integrated and used for setting priorities and tasks. Instead, tasks that were generated from the director's office did not come from priorities and functions created by the information systems, but rather the director's own initiatives. According to some

staff, this problem of not relating tasks to programs implemented at the section level is one reason why some assistant directors largely ignored the task tracking system.

Communication

Management survey. To address how well the state's air pollution control programs are being managed, program review sent 103 questionnaires to all employees within the [then] Air Compliance Unit, in August of 1989. It should be noted that the survey was distributed prior to any reorganization, and the hiring of the new bureau chief. The survey addressed several management issues, including setting of goals and objectives, communication of information, morale of the unit, and leadership of managers. Seventy-three surveys were returned, a response rate of almost 71 percent. A copy of the survey, with tabulated responses and percentages, is attached as Appendix A.

Program review focused on several key management areas of the survey for analysis in this report. First, in response to whether "the unit has clear-cut, reasonable goals and objectives", 71 percent of the respondents said that the unit did, at least to some extent, while 29 percent believed these goals and objectives existed to a "little or very little" extent.

In terms of overall management of the unit, 52 percent of the employees rated it as inadequate or poor, while 23 percent believed that management to be adequate. Twenty-five percent of the staff rated their unit management as "good" or "excellent."

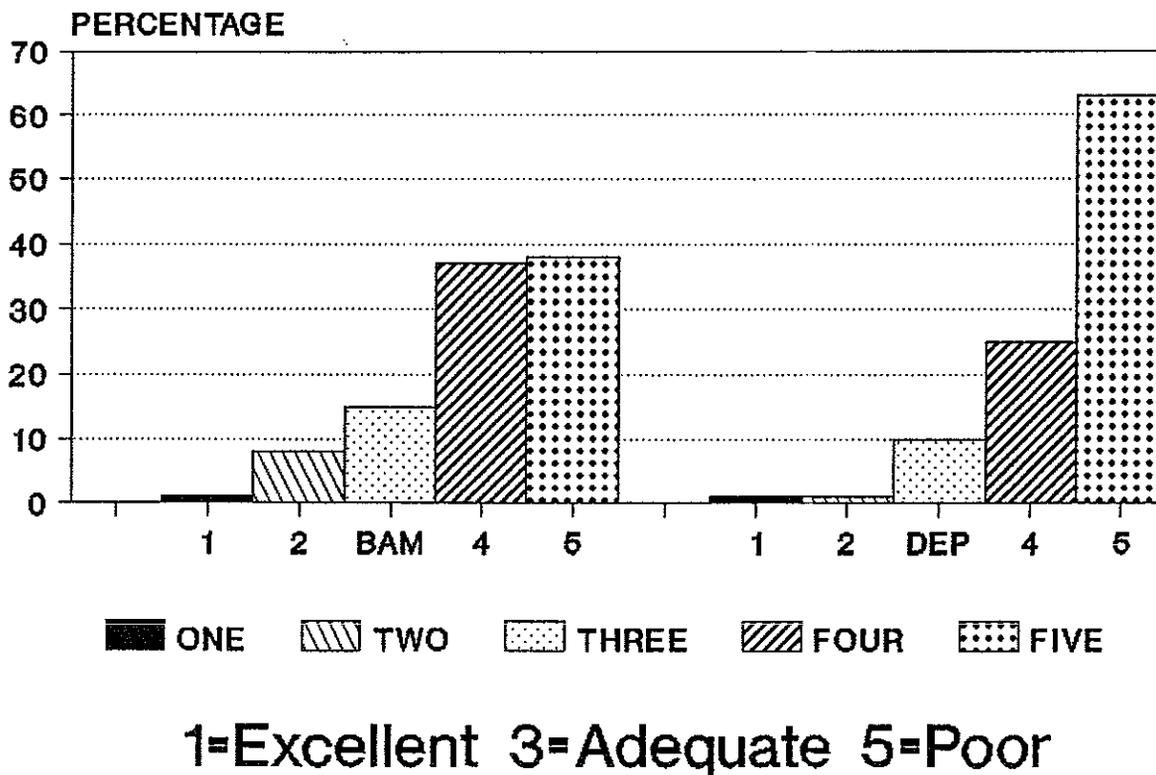
Further, in response to whether "management was getting better or worse", only 15 percent of the unit personnel believed it is improving. Twenty-six percent of the employees responded that management has been "the same" over the past few years, while 46 percent said that management is getting worse.

The area most criticized by staff appears to be the communication of information to unit staff. Generally, unit personnel gave poor ratings to the adequacy of information within the unit, and about other units within the department. These ratings are graphically displayed in Figure III-5. As shown, 75 percent respondents said the information they get about other unit sections is less than adequate, (i.e. a rating of 4 or 5), and 88 percent of respondents stated the information about other areas of the department was inadequate.

When asked to characterize the effect management of bureau has on their ability to perform their jobs, 55 percent of the staff stated that management has a negative impact. Twenty-seven percent believe it has a positive impact, and 18 percent of the respondents stated that it has no impact.

Despite the unfavorable ratings in some of these management areas, most of the respondents "believe doing their job well makes a difference". Seventy-three percent stated they believed that to be true, while only 10 percent said that it made no difference, and 18 percent said they "weren't sure".

Figure III-5. Adequacy of Information -- Survey Response.



The results of the survey indicate to the program review committee that the principal management weakness is the flow of information, both within the bureau, and the department as a whole. The survey results also indicate that a large segment of employees believed that management of the bureau had a negative impact on their job performance. Overall, employees seemed more satisfied with the managers they work more closely with -- assistant directors and/or their immediate supervisor -- than those at upper levels in the bureau and the department.

As already mentioned, the department has been reorganized and a new bureau chief hired. The program review committee believes that the new chief should closely examine the management shortcomings identified by the survey, and attempt to adopt a management approach that keeps staff informed about the bureau's operations. Further, employees have more favorable ratings for managers they work more closely with. Therefore, program review believes that the new bureau chief and upper department management should be more visible to line staff in the bureau, fostering a "team approach" to solving environmental problems.

To help develop this team approach and improve communications within the bureau, the Legislative Program Review and Investigations Committee recommends that management shall hold monthly meetings of all division directors, assistant directors, and principal-level staff to create bureau-wide goals and objectives, performance standards, and coordinate efforts to achieve them. Similar meetings of all DEP Environmental Quality managers (from bureau chiefs to assistant directors) should be held quarterly.

REGULATORY PROGRAMS

The Bureau of Air Management has significant regulatory responsibilities for the control of air pollution. The bureau sets air quality standards, issues permits for regulated facilities and monitors their compliance with those standards. The bureau also must conduct inspections to verify regulatory compliance, respond to citizen complaints, and take enforcement action when facilities are found in noncompliance.

At committee-held public hearings throughout the state, citizens repeatedly testified that they were dissatisfied with the way their complaints regarding air pollution were handled by the bureau. The testimony given also indicated that bureau was slow to take enforcement action, and once action was taken, delays in obtaining compliance were all too frequent. Thus, these public concerns prompted the committee and its staff to focus largely on the way the bureau: conducts inspections; handles complaints; monitors compliance

including air testing; and its timeliness and effectiveness in enforcing compliance. The findings and recommendations concerning these areas are discussed below. While the issuance of permits is certainly an important regulatory responsibility, the committee did not analyze the bureau's performance of this function, since permitting had received attention in the EPA audit. Further, no concerns were expressed to the committee about the permitting process.

Air Testing Unit

As noted above, one of the important functions of a regulatory program is to monitor compliance. A critical method of determining compliance in air pollution control is to conduct air testing. The committee found that a major deficiency of the Bureau of Air Management program is its inability to conduct site or stationary source air testing, hence limiting the bureau's ability to adequately monitor compliance.

As indicated earlier, the bureau received high marks from the Environmental Protection Agency for its ambient air monitoring program, which continuously checks the air for certain pollutants at 76 monitoring stations. This program is primarily responsible for measuring ozone and carbon monoxide pollutants from mobile sources. For stationary sources, the bureau does require facilities to conduct stack testing, which checks emissions being released through pipes, ducts, or exhausts. Facilities conduct stack testing pursuant to an enforcement order, or prior to issuance of a permit.

However, the Bureau of Air Management currently does no independent stack testing to confirm the facilities' findings or to periodically check regulatory compliance with air emissions standards. Further, the bureau does not have the ability to do ambient air testing around a site suspected of having an emissions problem.

The agency has taken steps to correct this deficiency through the purchase of air testing equipment. As noted previously, the bureau purchased a mobile van with an automated gas chromatograph in August 1988, but the equipment is still not operational. The bureau recently reached an agreement with the University of Connecticut's Environmental Research Institute to operate the equipment. However, even if this agreement is successfully implemented, program review foresees a need for the bureau to have a distinct administrative structure to oversee and coordinate the bureau's air testing operation.

The bureau faces a similar situation with the recent purchase of scentometers, devices used for odor testing. The bureau turned this equipment over to its field inspection

personnel without having an odor testing program or odor regulations firmly in place. The new odor regulations, which are the foundation of an objective standard-based odor detection program, will be going to public hearing soon. Several months are anticipated before the regulations will be finalized. However, there is no administrative structure in place to coordinate the odor testing activities with those of site-specific ambient air testing. Nor is there a plan to prioritize which sites will be tested, or how the equipment will be used by inspection staff.

Air testing activities need to be better planned and coordinated within the bureau. During committee public hearings, program review received testimony that pointed to a lack of confidence in DEP's ability to solve long-term emissions problems. The committee believes that public confidence could be improved dramatically if the department had a high profile unit involved in all aspects of air testing. This unit would be required to work closely with other bureau units so that testing resources are focused where they are most needed.

The Legislative Program Review and Investigations Committee recommends that an Air Testing Unit shall be established under the Regulation and Enforcement Division, as outlined in Figure III-3. The unit would be responsible for coordinating all the activities related to site-specific or stationary source air testing. The unit would further develop the necessary back-up laboratory facilities to carry out its air testing responsibilities. The Air Testing Unit would specifically be required to:

- develop policies and procedures for testing, including how the Bureau of Air Management will use the mobile air toxics van; when outside private laboratory facilities will be used; when consultant services should be used; and when the bureau is likely to perform its own testing. This overall strategy, along with performance indicators, such as sites tested, and results found, shall be included in the annual performance monitoring report;
- conduct stack testing of all major (A1) sources every three years to ensure that compliance with standards and permit parameters is maintained;
- implement the statutorily required continuous emissions monitoring strategies for resource recovery plants;
- conduct ambient air quality testing at sites where ambient air quality problems are persistent.

Persistent problems are defined as facilities or sites that are the subject of 5 documented complaints from different addresses within a 30-day period or less (this standard would be applied after a site has been tested for odor violations);

- review methodologies and results of testing conducted by consultants, pursuant to issuance of permits or enforcement action; and
- develop a program for odor testing and coordinate all activities related to the use of odor testing equipment as well as establish priorities for handling odor complaints.

Finally, the commissioner of the Department of Environmental Protection shall appoint a three-member panel of technical experts to assist the bureau in developing the Air Testing Unit, advise staff on the purchase of air testing equipment, and aid in the development of testing strategies and methodologies. The members shall be chosen from a list submitted by the Connecticut Academy of Science and Engineering.

The creation of this unit is necessary if DEP expects to fully utilize the equipment it has already purchased and to integrate air testing with other functions of the bureau, such as the handling of complaints, permit applications, and enforcement actions. The air testing program is needed if the state intends to adequately address the problems of odor and toxic air emissions, and foster public confidence in the bureau's ability to protect public health.

Field Inspections

As mentioned previously, the most common types of assignments carried out by field enforcement inspectors are complaint investigations, compliance inspections, plant inspections, and open burning inspections. Inspection assignments are made regionally and in proximity to the inspector's residence in order to reduce the amount of travelling time.

Assignments and workload. Table III-1 provides a breakdown of inspections, other than those done for open burning, conducted during 1988. As illustrated by Table III-1, inspector assignment and workload are varied. Program review was told this is primarily due to the fact that certain types of assignments take longer to conduct than others. In addition, since assignments are made regionally, the inspection workload is affected by the travel time involved and the industry concentration in a particular region.

Table III-1. Inspection Workload by Inspector -- 1988

| Inspector Number | Compliance Insp. | Complaint Insp. | Plant Insp. | Total Insp. |
|------------------|------------------|-----------------|-------------|-------------|
| 01 | 49 | 77 | 65 | 191 |
| 02 | 51 | 85 | 69 | 205 |
| 03 | 115 | 35 | 60 | 210 |
| 04 | 101 | 56 | 53 | 210 |
| 05 | 141 | 126 | 42 | 309 |
| 06 | 79 | 156 | -- | 235 |
| 07 | 56 | 102 | 57 | 215 |
| 08* | 53 | 78 | 33 | 164 |
| 09* | 74 | 87 | 11 | 172 |
| 10* | 65 | 64 | 14 | 143 |
| 11* | 48 | 73 | 15 | 136 |
| 12* | 60 | 90 | 9 | 159 |
| TOTAL | 892 | 1029 | 428 | 2349 |

* Inspectors hired during the year, inspector 12 is no longer employed with the Bureau of Air Management.

Source: LPR&IC staff analysis.

In order to allow inspectors' workload to become proportional to the amount of time needed to perform the assignment, program review staff believe the Field Enforcement Section should analyze inspector assignments and overall workload to determine if the current assignment procedure is efficient and effective. The committee believes a clear identification of an inspector's primary assignment responsibility as well as a regional outline of industry concentration and inspection needs would be helpful in determining an efficient and effective method of assignment.

To establish a better assignment method, the Legislative Program Review and Investigations Committee staff recommend that the Bureau of Air Management: 1) determine and examine the amount of time, including travel time, taken to conduct the various field inspections; and 2) compile and analyze inspector workload data for 1989 and annually thereafter.

Through these actions, the Field Enforcement Section will be better able to document workload demands and anticipate priority assignments. As a result, the section will also be able to use existing staff more efficiently and effectively. Furthermore, the section can conduct routine

inspections of regulated facilities on a regular basis and carry out other field work such as following up on public complaints and checking on enforcement compliance.

Standardized inspection procedures. Although inspection procedures vary according to the type of inspection being conducted, the department has not developed a written manual for field inspectors to guide them in conducting the various types of inspections. In order to assure the quality of inspections are acceptable, the Bureau of Air Management must establish guidelines and set standards for the various inspection assignments.

As a first step to assuring the quality of inspections, the Legislative Program Review and Investigations Committee recommends that the Bureau of Air Management shall prepare a written procedure manual establishing department guidelines and standards for the entire Field Enforcement Section. In addition, the Bureau of Air Management should establish training sessions for inspectors. Training should cover: an update of department policy regarding performing assignments; a review of any new federal/state regulations; writing inspection reports; and training in the use of the proposed computerized complaint system.

In preparing the procedure manual, the department should also develop a policy requiring unannounced inspections, in particular when investigating complaint allegations. Facilities should only be informed of scheduled inspections when the bureau considers it is necessary to complete the assignments.

By establishing guidelines and setting standards in a procedure manual, the Field Enforcement Section will maintain the quality of inspections at a level which is acceptable to the department. Further, the bureau management will be able to evaluate inspectors based on both the number of inspections conducted as well as measure their performance against given standards. In addition, committee staff believe the procedures manual will also allow the supervisory staff of field enforcement to evaluate the overall performance of the section. As a result, the section will produce a balanced workload and dedicate equal time for different types of assignments.

Complaint Handling

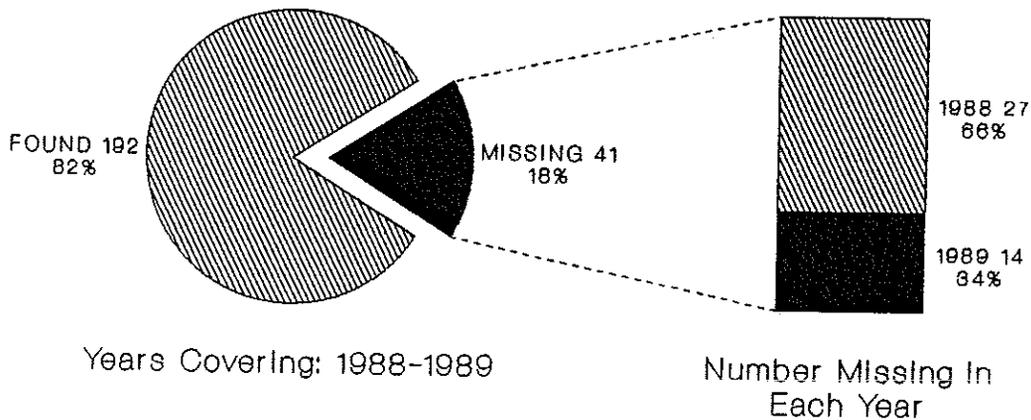
Complaints concerning air pollution -- either due to odor or some visible pollutant -- are frequent. In 1988, approximately 1,100 complaints were received by the Field Enforcement Section. Program review examined the log sheets for complaints received by field enforcement during 1988 and the first six months of 1989. Committee staff collected two

random samples of complaints from the log sheets to determine the type of complaints received by the section, the timeliness of processing, and the final disposition of those complaints.

Sample groups. The first random sample consisted of 135 complaints of approximately 1,100 total received during 1988. Of those 135 complaints, 108 were analyzed while the inspection reports for the remaining 27 could not be located by either committee staff or DEP personnel. The second random sample consisted of 98 complaints reported to DEP during the first six months of 1989. Of the 98 complaints, 84 were analyzed while 14 complaint inspection reports were missing.

As illustrated in Figure III-6, of the 233 total complaints requested by committee staff, 41 complaints or (18 percent) were not found. Thus, the total number of complaints examined by committee staff was 192.

Figure III-6: Random Samples of Citizens Complaints



Source: LPR&IC staff analysis.

Complaint analysis. Table III-2 examines the results of each random sample and compares them to the results of the overall complaint sample.

Table III-2. Analysis of Complaints.

| | <u>Complainant Type</u> | | |
|----------------|----------------------------|---------------------|-----------------------|
| | <u>1988</u> N=108 | <u>1989</u> N=84 | <u>TOTAL</u> N=192 |
| Resident | 82 (79%) | 68 (83%) | 150 (81%) |
| Other * | 21 (20%) | 14 (17%) | 35 (19%) |
| Missing *** | 5 (5%) | 2 (2%) | 7 (4%) |
| | <u>Complaint Submitted</u> | | |
| Telephone | 70 (93%) | 30 (88%) | 100 (92%) |
| Person | 2 (3%) | 1 (3%) | 3 (3%) |
| Mail | 3 (4%) | 3 (9%) | 6 (6%) |
| Missing *** | 33 (31%) | 50 (60%) | 83 (43%) |
| | <u>Complaint Type</u> | | |
| Smoke | 6 (6%) | 7 (8%) | 13 (7%) |
| Fugitive Dust | 19 (18%) | 8 (10%) | 27 (14%) |
| Odor | 58 (54%) | 51 (61%) | 109 (57%) |
| Exhaust | 2 (2%) | 1 (1%) | 3 (2%) |
| Combination ** | 6 (6%) | 9 (11%) | 15 (8%) |
| Smoke & Odor | 17 (16%) | 7 (8%) | 24 (13%) |
| Missing *** | 0 (--%) | 1 (1%) | 1 (.5%) |

* Neighbors, neighboring business, or municipal agencies.

** Combination of any of the categories.

*** Information was missing on inspection report.

Source: LPR&IC analysis of complaint log sheets and inspection reports.

In 1988, the most frequent type of complaint concerned odor problems with 54 percent of the random sample. Smoke and fugitive dust represented 6 and 18 percent respectively of all complaints. Sixteen percent mentioned both smoke and odor problems.

To assess recent handling of complaints, the second random sample was taken of complaints reported in 1989. Similar to the first random sample, complaints in the second sample group were frequently complaints regarding odor or some combination of odor, smoke, fugitive dust, and exhaust. For the most part complaints to DEP were received by telephone, with very few complaints submitted in person or by mail. Eighty-three percent of the complaints were made by residents. The remaining 17 percent of the complaints were made by local health departments, neighboring businesses, or referred by another agency.

In 1988, the median time for Field Enforcement to investigate complaints was 10 calendar days after the complaint was received. In 1989, the department took a median time of 7 calendar days to assign and investigate complaints. Recent increases in the section's field inspector staffing suggest an improved response time for all complaints.

Complaint inspections. To better understand the inspection process, program review staff spent a day with an inspector in the field. During this time, the inspector performed four assigned complaint inspections, checked on two sources with previous complaint record in the vicinity, and detected two new possible problem sources. Each assigned complaint inspection lasted approximately an hour and a half.

As mentioned previously, the field inspector may attempt to contact the complainant regarding the nature of the complaint. If the complainant is not available the inspector may contact another person with knowledge of the complaint allegations. Table III-3 compares the reported contacts made during the 1988 and 1989 random sample of complaint investigations.

In 38 percent of the 1988 cases, both the complainant and personnel from the alleged source named in the complaint were contacted, while in 54 percent of the cases the inspector spoke with either the complainant or source personnel. Also, in approximately 9 percent of the inspection reports, program review staff found either that inspectors attempted to contact the complainant but were unsuccessful, or had spoken with another contact, such as a resident or facility next door to a suspected source. In 13 percent of the inspection reports for 1988, the report indicated no attempt to contact either the complainant or the source personnel.

In the 1989 sample group, the inspector contacted both the complainant and the alleged source 38 percent of the time. In 35 percent of the cases, the inspector contacted the complainant and in 21 percent only the alleged source was contacted. The remaining three percent apply to other

contacts, such as complainants neighbor, neighboring business, or the local health department. However, in 18 percent of the cases it appeared no one was contacted.

In analyzing the second sample group, committee staff included the day of the week and the time of day the complaint was investigated. The investigations appeared to be assigned evenly over the week. Fifty-four percent of the complaints were investigated in the morning between the hours of 9:00 and 12:00. Thirty percent of the inspections were conducted in the afternoon. Sixteen percent of the investigations lasted a complete morning or afternoon. None of the complaint reports analyzed had inspections occur outside the normal work week or business hours.

Table III-3. Individuals Contacted Regarding Complaint.

| | <u>Contacted Regarding Complaint</u> | | | | | |
|---------------------------------|--------------------------------------|-------|----|-------|----|-------|
| Complainant | 24 | (26%) | 25 | (35%) | 49 | (30%) |
| Alleged Source | 26 | (28%) | 15 | (21%) | 41 | (25%) |
| Other * | 8 | (9%) | 1 | (1%) | 9 | (5%) |
| Complainant & Alleged Source | 36 | (38%) | 27 | (38%) | 63 | (38%) |
| Combination ** | 0 | (--%) | 1 | (1%) | 1 | (.6%) |
| Missing *** | 14 | (13%) | 15 | (18%) | 29 | (15%) |

* Neighbors, neighboring business, or municipal agencies.

** Combination of any of the categories.

*** Information was missing on inspection reports.

Source: LPR&IC staff analysis of complaint log sheets and inspection reports.

Action taken on complaints. The random sample of complaints collected by program review staff were reviewed to The results are shown in Table III-4.

As Table III-4 indicates, very few complaints resulted in a notice of violation being issued. Forty-one percent of the time there was no violation noted. Twenty-five percent of the recommended actions suggested the file be closed or that another inspection be scheduled. Eleven percent requested the alleged source be kept under surveillance. Only five percent lead to issuance of a notice of violation. One percent reported that on-the-spot correction had been made. In 17 percent of the reports, the inspector recommended a combination of steps be taken.

As indicated previously, the complaint is not investigated until about a week later. Often, the weather conditions and wind directions are not the same as when the complaint was filed and the odor or visible pollutant is not detected on the date of investigation. Further, the inspectors are limited in their ability to detect air pollution problems on a given site, since no samples are taken or testing done as part of the complaint follow-up.

Table III-4. Action Taken on Complaints

| | 1988 N=108 | 1989 N=84 | TOTAL N=192 |
|-------------------------|---------------|--------------|----------------|
| None, no violation | 35 (35%) | 37 (48%) | 72 (41%) |
| On the spot correction | 1 (1%) | 1 (1%) | 2 (1%) |
| Notice of violation | 7 (7%) | 2 (3%) | 9 (5%) |
| Keep under surveillance | 14 (14%) | 6 (8%) | 20 (11%) |
| Other * | 33 (33%) | 11 (14%) | 44 (25%) |
| Combination ** | 11 (11%) | 20 (26%) | 31 (17%) |
| Missing *** | 7 (7%) | 7 (9%) | 14 (8%) |

* Other includes: close out file or reschedule.

** Combination of any of the actions.

*** Information missing on the inspection reports.

Source: LPR&IC staff analysis.

Complaint files, reports, and automation. Program review also found that the bureau's complaint files were poorly maintained. Since an automated system has not been implemented, the unit relies heavily on paper files, which are cumbersome and accessible to many people. If material is misfiled, temporarily removed, or missing altogether, it delays the regulatory system. Due to the lack of an automated system, it is difficult to accurately document and determine the inspection record or the enforcement history of regulated facilities. Further, the lack of an automated system makes it difficult to aggregate and analyze how complaints have been handled.

Overall, the program review committee found several deficiencies in the complaint handling process used by the Field Enforcement Section. These include:

- no required response time for investigating complaints;

- complaint reports missing basic information such as dates complaints were received, assigned, or investigated;
- no policy requiring inspectors inspect both inside and outside of an alleged source;
- complaints missing the inspection report or containing a weak summary of the investigation;
- limited attempts to provide complainant with investigation findings; and
- little documented follow-up information regarding the final disposition of the complaint.

The committee also found that in some cases complaints are not pursued if the alleged source is under an enforcement order. Finally, program review found there is no automated system for processing complaints, and the record-keeping of the current paper complaint files needs improving.

To correct the above deficiencies, the Legislative Program Review and Investigations Committee recommends that the Bureau of Air Management, first, prepare a comprehensive written policy for responding to complaints. Second, the program review committee recommends that the Bureau of Air Management, by April 1, 1990, establish an automated system for processing and tracking the handling of complaints. At a minimum, the system should insure that supervisory staff will be able to analyze:

- the nature of the complaint;
- the time of day and day of week the complaint was observed;
- the weather and wind conditions during which the problem was observed;
- the location of the alleged source;
- the date the complaint was received, assigned, and investigated;
- the staff responsible for the investigation;
- the type of complainant (anonymous or known, employee or neighbor, etc.);
- the action taken as a result of the complaint investigation; and
- the final outcome of any action taken.

The Department of Environmental Protection, Bureau of Air Management, shall develop a form for distribution to complainants to document information concerning persistent odor or emissions problems.

Program review believes the written policy will provide clear guidelines to the Field Enforcement Section and to the public as to what is expected in responding to complaints. In developing a policy, program review proposes that the bureau develop a system enabling inspectors to respond to complaints quickly and efficiently. For example, the bureau should examine the possibility of upgrading the current beeper system for field inspectors and outline the specific steps an inspector must take to complete a full complaint inspection and complaint report.

The committee also believes an automated system will assist the Bureau of Air Management in evaluating the performance of the Field Enforcement Section on complaint handling. In particular, an automated system will allow the Bureau of Air Management to determine how the Field Enforcement Section tracks progress on complaint investigations and the promptness with which the section investigates complaint allegations, and to analyze the ultimate result of the investigation. Furthermore, analysis of the complaint information will provide valuable information for source profiles and best surveillance time. The analysis will also assist the bureau in targeting potential sites for air testing.

Enforcement

Administrative procedures. If a facility is found in violation of air pollution control laws, regulations, or permits, the Bureau of Air Management is authorized to take enforcement action. As outlined earlier in the report, this administrative process begins after a violation has been observed. A notice of violation (NV) is prepared and sent to the polluter, giving a maximum amount of time to correct the situation. If the violation cannot be corrected in that period, a state order is issued. The agency meets with the polluting source to work out an agreeable timeframe, but if one cannot be reached, then the bureau issues the order unilaterally.

If the facility is delinquent or fails to comply with an order, the Bureau of Air Management may issue civil penalties, refer a case to the Attorney General, or in the case of wilful violations, refer a case to the Office of the Chief State's Attorney. Program review found several deficiencies with the manner in which the bureau administers this enforcement process.

Timeliness of enforcement activity. Program review obtained access to the computerized enforcement files, and analyzed several areas of enforcement activity, including the timeliness of administrative actions taken, total fines, time for compliance with enforcement action, and use of information systems to track enforcement. In addition to examining the active computerized files, program review also inspected the paper files and documentation for 57 active enforcement cases.

Program review first examined the length of time between when a violation was first observed, and the date the notice of violation was issued. Based on 227 records in the active file, the median time for issuing an NV was 31 days. This means that half the NVs were issued in one month or less, and that half took longer.

The committee determined that the time the bureau takes to issue an order is prolonged. Based on 17 orders included in the sample of 57 enforcement files, the average time from the date a notice of violation is issued to the date the state order is issued is 295 days. Assuming that each of the cases took 60 days for the facilities involved to respond to the notices and for DEP to verify the response, it means that the average time to negotiate, draft, and issue an order is 14 months.

Program review believes that there are several reasons for the slow processing of administrative enforcement actions, and discusses those findings and recommendations below.

Organization and staffing. Staff are not organized to carry out the enforcement function effectively. The field inspection staff, who observe the violation and initially draft the notice, are located in the Field Enforcement Section under one assistant director, while the administrative enforcement staff, who prepare the notice for issuance, are in another section reporting to another supervisor. This split in the enforcement function has led to problems in administering enforcement cases.

In a random sample of 57 of the 258 cases on the active file, two notices of violation that were listed as active could not be located, nor could the documents surrounding the violation. Discussions with staff indicate that the notices were lost in the administrative transfer between divisions. Although field inspection staff recall that one violation was corrected on the spot, neither notice was sent to the facilities in question.

The organizational separation of enforcement activities also contributes to the amount of time it takes to issue a notice from when a violation is observed. As cited, the

median time for this is 31 days. Having the paperwork for a notice of violation go between two sections of line staff before it is reviewed by management adds unnecessary processing time and a greater chance of the case being misplaced or lost altogether.

Program review believes that understaffing in the Administrative Enforcement Section also contributes to the slow action on some enforcement cases. Currently, there are five staff assigned to administrative enforcement in addition to the Assistant Director. However, one of those five positions was only recently filled with the transfer of a staff person from the permitting section, and is unlikely to have any impact on the workload in administrative enforcement, since that person is expected to devote his time to continuous emissions monitoring.

Under current staffing levels, one person issues all the notices of violation (approximately 100 at any given time), tracks them, and works with field inspectors for follow-up inspections and compliance verification. This person is currently also responsible for enforcing 13 state orders. Program review believes that one person should not be expected to administer all the notices of violation and also have an active order caseload.

A check with national and regional organizations in air pollution control indicated that there are no staffing standards for enforcement caseload. However, if the current caseload were evenly divided among engineers with no other workload, it would mean slightly more than 23 cases each. Program review thinks that this number would be manageable, if those engineers were assigned no other workload, and therefore finds that a maximum caseload for an engineer should be 25 orders.

To correct the organizational and staffing problems that foster slow administrative processing of enforcement, the program review committee recommends that the Enforcement Section shall include both administrative and field enforcement activities, as previously recommended and that the Department of Environmental Protection be authorized to hire two additional positions in the Administrative Enforcement Section of the Bureau of Air Management.

Use of information systems. The program review committee believes that the enforcement staff does not adequately use its information systems, thereby also adding to the enforcement processing time. The automated enforcement tracking system is designed to help personnel monitor cases where action to bring a source into compliance has been imposed. However, program review found several areas where the information systems could have been used to follow the processing of cases, but was not used to its full capacity.

As noted previously, the median time for issuing a state order in the bureau is 14 months. In addition to the overall processing times, program review found that, of the 57 cases examined, two notices were never issued, one amended state order was drafted in June 1988, but never finally written or issued. The committee believes that the enforcement tracking system should have been used to detect these problems and to take corrective action.

Also, important information that should be included in a tracking system -- like cases that are sent to the Attorney General's office, the dates state orders are terminated, or the amounts of civil penalties assessed -- are not recorded on the automated system.

Program review committee staff also found that they could not use some of the information on the automated database because of unreliability of some of the dates. For example, a state order issue date is almost always the same as the notice of violation termination date, even though in actuality it is usually some months before a state order is issued after a notice is closed.

Repeated violations. The program review committee also found a problem with repeated violation notices being issued without the facility being tested or placed under an order. When a facility is issued a notice, it is given a period of time in which to respond. If the company responds that the violation has been corrected, a follow-up compliance inspection is conducted, and if no violation is detected at that time, the notice of violation is almost always closed. Given that no testing is done to clearly document a violation, observed violations may not be consistently found. In other words, violations may be related to processes, day of the week, or time of day, and may not be detected by an inspector on a repeat compliance inspection, even though the violation may occur again in the future.

An estimation of the ratio of notices to actual orders, based on program review's examination of the enforcement actions on the computerized files is four notices for every order issued. To address this issue, the Legislative Program Review and Investigations Committee recommends that if a facility has received two prior notices of violation in a one-year period, the third notice shall automatically require air testing, as prescribed by the bureau's air testing unit. If testing shows that the facility is in violation of any air regulation, standard, or permit, the facility shall pay the costs of the testing and given an order to abate such pollution.

Compliance with orders. Once an order is issued, the time for compliance is also lengthy. Program review examined all the cases on the active computer file and

excluded those orders that DEP indicated were issuances for operating parameters, and not a corrective action order. The results of the examination showed that the median time given by the bureau for final compliance with orders is 233 days, or less than 8 months. However, the median time that an order is active (i.e. the date the state order was issued to November 20, 1989) is 19 months, over twice as long.

In addition to the inadequate administrative processing in enforcement already cited above, program review finds that the enforcement order system to correct pollution problems may be inherently flawed. First, the air management bureau does not always know what is causing a problem at a facility, and therefore cannot require a specific remedy in the order. Instead, the order requires that the facility hire a consultant to study the problem and recommend a solution. Since the consultant is working for the facility named in the order, the consultant may recommend solutions that are more economical, but may not solve the problem in the long run. Although the air management bureau reviews the consultant's proposals, it is difficult for air management staff to require that a facility get another consultant to recommend another solution, when the facility has already incurred that initial consulting expense. This results in orders complied with but violations continuing, delays in compliance while the consultant revises testing protocols, and amended orders to recommend alternate solutions.

To strike a balance between allowing the facility to select the consultant, at a price the facility is willing to pay, yet having pollution problems corrected promptly, the Legislative Program Review and Investigations Committee recommends that the first time a facility is issued an order the facility shall be directed to hire its own consultant. If the order is complied with but does not correct the problem, the Bureau of Air Management shall hire a consultant qualified in the problem area, at the company's (named in the order) expense, to conduct any necessary testing and find a solution to the problem.

Correction of the problem is defined as a determination of compliance by a bureau inspector, and three months with no complaint related to the "corrected" violation. Further, any subsequent order issued to a facility, requiring air pollution abatement, shall require a consultant hired by the bureau, and paid for by the facility.

Delinquency in complying with steps in an order is also prevalent. As cited above, the median time for an order now on the active file is 19 months, even though the expected median compliance time -- given by the bureau when an order is issued -- is 8 months. To reconcile the differences in

time, the Legislative Program Review and Investigations Committee recommends that more time should be given for compliance when orders are developed, but that air management staff only allow delayed compliance in cases where hardship exists, as determined by the enforcement staff.

Program review also recommends that for any facility that is six months delinquent with any one step in an order, the Bureau of Air Management shall immediately refer the case to the Office of the Attorney General for legal action. After the case has been referred, the bureau shall continue to bring the source into compliance using administrative enforcement actions.

The program review committee believes that there must be greater deterrence for facilities not complying promptly with orders. The committee concludes that if a facility is six months out of compliance with any given action step (i.e. any step other than reporting progress on compliance) it shows a lack of good faith in meeting the intent of the order, and that stronger enforcement measures must be imposed.

One measure of enforcing compliance is the assessment of civil penalties against those in noncompliance. The Bureau of Air Management has statutory authority to assess civil penalties on a delinquent facility, and has used that enforcement measure with some success. Air management staff state that approximately \$300,000 in penalties have been assessed, however, only about half that amount has been collected. Thus, other enforcement routes must also be explored.

To date the staff in the air management bureau refer cases to the Attorney General quite infrequently. As pointed out earlier only 30 cases have been sent to the Attorney General's Office since 1974. Staff in the air management bureau state that they are reluctant to refer cases to the Attorney General's Office because they believe that it does not speed up the enforcement process. This is borne out by an examination of the average time cases are at the Attorney General's office. Of the 30 referred cases, the average time for processing is 18 months, including those cases where the Attorney General's Office decided not to proceed with action on the case.

However, program review believes that one of the reasons cases may take this long when they reach the Attorney General's Office is because of the infrequency with which this enforcement action is taken. If orders that were delinquent were sent to the Attorney General with regularity, staff from both agencies would be clearer on what information was needed to prepare a legal case, and procedures for expediting compliance, once delinquency is clear. Further, it is

the statutory responsibility of the Office of the Attorney General to represent state agencies in civil legal matters. If an administrative problem exists with the timeliness of matters referred, then those ought to be worked out between the two agencies rather than allowing environmental enforcement cases to linger without taking legal steps.

Therefore, Legislative Program Review and Investigations Committee recommends the Commissioner of the Department of Environmental Protection shall meet with the Attorney General to discuss ways in which their respective staffs can work together to speed processing of environmental cases.

Regulatory fee. According to state statutes, the Commissioner "shall require payment of a permit application fee sufficient to cover the reasonable costs of reviewing and acting upon an application for, and monitoring compliance with the terms and conditions of any state or federal permit . . ." (C.G.S. Sec. 22a-174(g)). Currently, sources pay an application and permit fee for the processing and issuance of a permit. The application fee is \$50 for all applicants while the permit fee is basically a set amount, depending on which of the three following categories the source belongs: \$2,000 for sources emitting over 100 tons, \$1,000 for sources that emit between 15 and 100 tons, and \$250 for those under 15 tons. For FY 88, air permit fees totalled \$112,137.

Only about 1,500 of the more than 7,000 regulated facilities pay a permit fee, since only facilities that have changed or enlarged their processes since 1972, or are required to install new equipment because of enforcement action, need a permit. Other sources need only register, requiring no fee. These registered facilities, however, still require some degree of monitoring for compliance.

The statutes authorize the Commissioner to establish in regulation payment of fees to cover DEP's conducting or monitoring an emissions test, but only fees for visual emission tests have been established. As indicated previously, the bureau does not conduct testing at facilities, but does monitor testing. According to bureau personnel, however, no fees are collected for this.

Program review calculates that the \$112,137 collected in permit fees in FY 88 falls far short of what is actually needed by air management to permit and monitor compliance. The committee estimates that the personnel costs associated with issuing permits alone is \$280,000.

The findings and recommendations contained in this report clearly call for increased monitoring and testing for compliance, and greater attention to enforcement when noncompliance is detected. However, these actions are unlikely to occur unless there are adequate resources for

increased staff in administrative enforcement, equipment and laboratory support for air testing, and monies available for consultant services, when the air management bureau deems them necessary.

To adequately fund a program that has the components necessary for regulating in this area, the committee proposes a new regulatory fee structure based on the amount of air emissions generated by each regulated facility.

Thus, Legislative Program Review and Investigations Committee recommends that the current statutory permit fee requirement be abolished, and that the Bureau of Air Management be statutorily required to establish an annual regulatory fee based on the total tons of emissions x \$30 a ton = dollar amount of regulatory fee due. All facilities required to be permitted or registered would be assessed a fee.

All payments received by the commissioner pursuant to this shall be deposited in the general fund and credited to the appropriations of the Department of Environmental Protection, as already outlined in Sec. 22a-174(h) of the Connecticut General Statutes. Further, to the extent possible, those funds shall be earmarked for the Bureau of Air Management's permitting, testing, and enforcement activities.

Implementation. The program review committee believes this formula realistically assesses industry and other sources for the costs related to regulating their air emissions. First, the formula makes facilities pay according to the precise amount they pollute, rather than on a set fee.

Secondly, the individual fees should not be overly burdensome to any one industry or facility, but at the same time the overall amount generated should pay for most of the regulatory activities of the bureau. Finally, because the formula is based on amount of total emissions -- both stack and fugitive emissions (those emissions that are not emitted through the stacks, but are not captured by the treatment processes, and are therefore assumed to be escaped emissions) -- it may provide large polluters with the monetary incentive to upgrade treatment processes as well as look for new ways to capture more fugitive emissions.

The program review committee realizes that the emissions data to calculate the fee may not be readily available for all sources now. Data on all emissions for all major sources are currently available, and information on all other sources are filed on paper pre-inspection questionnaires. The bureau plans to computerize all of this information, but the completion date is still some time off.

Therefore, the Legislative Program Review and Investigations Committee recommends a phased-in implementation of the regulatory fee be established as emissions information about facilities are computerized. Until data about a facility's emissions are computerized, those facilities shall be charged a regulatory fee of \$50 per year. All facilities shall be assessed based on the formula by January 1, 1993.



APPENDICES

APPENDIX A

Legislative Program Review and Investigations Committee
Survey of Air Compliance Unit Personnel

N=73*

1. How many years have you worked for the Department of Environmental Protection (DEP)? _____ years _____ months
2. How many years have you worked in the Air Compliance Unit (ACU)? _____ years _____ months
3. In which section of the Air Compliance Unit do you currently work?

4. What is your job title? _____
5. To what extent does the Air Compliance Unit have clear-cut, reasonable goals and objectives?

| | | |
|----------------|-------------------------|------|
| <u>3</u> (4) | To a very great extent | |
| <u>20</u> (28) | To a great extent | |
| <u>28</u> (39) | To some extent | |
| <u>6</u> (8) | To a little extent | |
| <u>15</u> (21) | To a very little extent | N=72 |

6. Overall, how would you rate the Air Compliance Unit's success in:
(Circle the most appropriate number)

| | Excellent | | Adequate | | Poor | |
|--------------------------------------|-----------|--------|----------------|----------------|--------|------|
| | 1----- | 2----- | 3----- | 4----- | 5----- | |
| Achieving its goals and objectives | 4(6) | 15(22) | <u>26</u> (38) | 11(16) | 12(18) | N=68 |
| Coordinating and planning activities | 4(6) | 5(7) | 19(27) | <u>31</u> (44) | 11(16) | N=70 |
| Setting standards of performance | 6(9) | 11(16) | <u>28</u> (40) | 12(17) | 13(19) | N=70 |
| Meeting standards of performance | 4(6) | 12(17) | <u>29</u> (41) | 15(21) | 10(14) | N=70 |
| Responding to usual work demands | 5(7) | 19(27) | <u>33</u> (47) | 12(17) | 2(3) | N=71 |

* Total responses to the survey. Not all respondents answered each question, so the number that answered each question is given following the question. The number in parenthesis is percentage of respondents. The highest frequency and percentage is underlined and highlighted.

7. Overall, how would you rate the Assistant Director of your section's ability to: (Circle the most appropriate number)

| | Excellent 1-----2-----3-----4-----5 | Adequate | Poor | |
|--|--|----------------|--------|-----------------|
| Represent your section | <u>30</u> (44) | 22(32) | 10(15) | 4 (6) 3(4) N=69 |
| Provide leadership and motivate staff | 20(29) | <u>28</u> (41) | 11(16) | 6 (9) 4(6) N=69 |
| Inform your section of important events and situations | 19(28) | <u>24</u> (35) | 17(25) | 5 (7) 4(6) N=69 |
| Meet with your section to identify and solve problems | 18(26) | <u>24</u> (35) | 16(23) | 8(12) 3(4) N=69 |
| Inform your section of decisions affecting its work | 23(33) | <u>24</u> (35) | 15(22) | 4 (6) 3(4) N=69 |

8. Overall, how would you rate the Director of the ACU's ability to: (Circle the most appropriate number)

| | Excellent | Adequate | Poor | |
|---|---------------------------|----------------|----------------|----------------------------|
| | 1-----2-----3-----4-----5 | | | |
| Represent your unit | 8(11) | <u>19</u> (27) | 15(21) | 15(21) 14(20) N=71 |
| Provide leadership and motivate staff | 4(6) | 9(13) | 14(19) | 17(24) <u>28</u> (39) N=72 |
| Inform the unit of important events and situations | 3(4) | 10(14) | 16(22) | <u>23</u> (32) 20(28) N=72 |
| Meet with ACU sections to identify and solve problems | 4(6) | 5(7) | 19(27) | <u>22</u> (31) 20(29) N=70 |
| Inform the unit of decisions affecting its work | 3(4) | 10(14) | <u>21</u> (30) | 20(29) 16(23) N=70 |

9. How would you rate the management of the Air Compliance Unit?

| | | |
|----------------|------------|------|
| <u>2</u> (3) | Excellent | |
| <u>16</u> (22) | Good | |
| <u>17</u> (23) | Adequate | |
| <u>31</u> (43) | Inadequate | |
| <u>7</u> (10) | Poor | N=73 |

10. Over the past few years, would you say that the management of the Air Compliance Unit has been: (Circle the most appropriate number; 6=Don't Know or Not Applicable.)

| 1-----2-----3-----4-----5 | 6 (Don't Know) | | |
|---------------------------|----------------|----------------|------------------------|
| Getting Better | The Same | Getting Worse | |
| 2 (3) | 9 (12) | <u>19</u> (26) | 17 (23) 17 (23) 9 (12) |

N=73

11. How would you rate the adequacy of the information your section gets about: (Circle the most appropriate number)

| | Excellent | Adequate | Poor | |
|--|---------------------------|----------|--------|---------------------------|
| | 1-----2-----3-----4-----5 | | | |
| What is going on in other sections of the ACU? | 1(1) | 6(8) | 11(15) | 27(37) <u>28(38)</u> N=73 |
| What is going on in other units of the DEP? | 1(1) | 1(1) | 7(10) | 18(25) <u>46(63)</u> N=73 |

12. To what extent is your section adequately staffed to perform the functions it is assigned?

| | |
|----------------|-------------------------|
| <u>6</u> (8) | To a very great extent |
| <u>13</u> (18) | To a great extent |
| <u>35</u> (48) | To some extent |
| <u>18</u> (25) | To a little extent |
| <u>1</u> (1) | To a very little extent |

N=73

13. How would you describe the equipment and resources you have to work with?

| | |
|----------------|------------|
| <u>15</u> (21) | Excellent |
| <u>21</u> (29) | Good |
| <u>18</u> (25) | Adequate |
| <u>15</u> (21) | Inadequate |
| <u>4</u> (5) | Poor |

N=73

14. In your opinion, on a scale of 1 = Very Concerned to 5 = Not at all Concerned, to what degree are the following concerned about how well you do your job? (Circle the most appropriate number)

| | Very Concerned | Not at all Concerned | | | | |
|---|---------------------------|----------------------|----------------|----------------|--------|------|
| | 1-----2-----3-----4-----5 | | | | | |
| Commissioner of DEP | 4(6) | 9(13) | <u>23</u> (34) | 17(25) | 15(22) | N=68 |
| Deputy Commissioner for Environmental Quality | 4(6) | 12(18) | <u>28</u> (41) | 14(21) | 10(15) | N=68 |
| Director of the ACU | 8(11) | 14(20) | <u>19</u> (27) | <u>21</u> (30) | 9(13) | N=71 |
| Asst. Director of your section | 27(39) | <u>30</u> (44) | 9(13) | 2(3) | 1(1) | N=69 |
| Your Supervisor | <u>42</u> (65) | <u>14</u> (22) | 5(8) | 4(6) | 0 | N=65 |

15. When it comes to the work of the Air Compliance Unit, do you believe that doing your job well makes any difference?

53 (73) yes 7 (10) no 13 (18) not sure

N=73

16. Overall, how would you characterize the morale within the Air Compliance Unit?

| | |
|----------------|-----------|
| <u>1</u> (2) | Excellent |
| <u>20</u> (35) | Good |
| <u>36</u> (63) | Fair |

N=57

17. Overall, how would you characterize the impact the management of the Air Compliance Unit has on your ability to perform your job?

| | |
|----------------|--------------------------|
| <u>3</u> (4) | Very positive impact |
| <u>16</u> (23) | Somewhat positive impact |
| <u>13</u> (18) | Has no impact |
| <u>29</u> (41) | Somewhat negative impact |
| <u>10</u> (14) | Very negative impact |

N=71

18. In your opinion, what are the goals of the Air Compliance Unit?

See Attached

19. Please add any comments you would like to make concerning the management of the Air Compliance Unit.

See Attached

| 18. <u>GOALS REPORTED BY RESPONDENTS</u> | <u>FREQ.</u> |
|---|--------------|
| Obtain, maintain, and improve air quality | <u>26</u> |
| Protect public health of Connecticut's citizens | <u>20</u> |
| Protect environment while allowing business to progress | 7 |
| Educate public about air pollution | 4 |
| Enforce air pollution legislation, regulations ect. | <u>25</u> |
| Insulate governor and commissioner from bad publicity; keep public happy; unless large corporation involved | 3 |
| Research causes and new solutions for air pollution | 4 |
| Follow legislated environmental policy in CGS 22A-1 | 4 |
| Respond to complaints | 1 |
| Only selfish and personal goals exist here | 1 |
| None that I'm aware of/Don't know | <u>15</u> |

19.

COMMENTS REGARDING MANAGEMENTFREQ.

| | |
|---|-----------|
| Change in management for ACU to accomplish anything | 4 |
| Too much politics in management's decision-making | 7 |
| Very disorganized | 3 |
| No opportunity for promotion/advancement | 2 |
| Lack of direction and cooperation within ACU | 18 |
| No consultation with technical or engineering staff before decisions are made affecting them or programs they implement | 3 |
| Director innovative, resourceful; motivates those who can be motivated | 6 |
| Some managers are obstructionists, critical, uncooperative, and perform little constructive work | 3 |
| Managers technically very competent but cannot manage or motivate people | 2 |
| Management insensitive to minorities, hampering career goals and upward mobility | 1 |
| Director's personality makes it difficult to work for him | 3 |
| ACU accomplishes programs by small group efforts and despite management | 2 |
| Lack of communication at all levels | 12 |
| Director circumvents management; gives work directly to people he knows will do it instead of confronting managers | 5 |
| Competition and distrust among sections exists to the point where it hampers work efforts | 7 |
| Director does not manage or motivate people: he directs through impersonal means | 3 |
| Director is too extravagant in purchasing equipment | 2 |
| Director requires too much control technology that is too expensive and of little benefit environmentally | 3 |
| Management geared to individuals; not to organization or environment | 5 |
| Management is adequate; quite productive with employees | 2 |
| Help! | 2 |
| Need better trained people not just filling positions | 3 |
| Non-existent training program | 2 |
| Reorganization should wait until new bureau chief arrives and gets more input from people in the units | 2 |
| Management unsuccessful in obtaining needed equipment for certain programs | 5 |
| Commissioner should have been harsher in disciplining director after wrongdoing was clearly found | 2 |
| Denying managers COLA and lack of implementation of OJE for managers has made it difficult | 2 |
| Management does no planning or goal-setting | 3 |
| More teamwork needed | 6 |
| Unit polarized; oppose/supporting director | 3 |
| Personality conflicts within ACU | 13 |
| Lack of direction and cooperation in upper management of department | 13 |

Appendix B

Bureau of Air Management Summary of Legislative Mandates

Location: Department of Environmental Protection
Environmental Quality Division

Budget: FY 90 (Approp.) \$6,187,476

Staff: 97 Filled 5 Vacant

Statutory Authority: C.G.S. Chapter 446c
Sections 22a-170 to 22a-206

Major Functions:

- Set regulatory standards for emissions;
- Permit facilities that are required to obtain them;
- Monitor permit and regulatory emission requirements;
- Inspect regulated facilities;
- Enforce compliance where violations are found;
- Monitor and report on the quality of Connecticut's air;
- Develop and revise the State Implementation Plan, as required by federal law;
- Respond to citizen complaints;
- Maintain an inventory of all emission sources in the state; and
- Require and oversee testing at facilities to ensure compliance with regulations and permits.

Significant Legislation Affecting the Bureau of Air Management

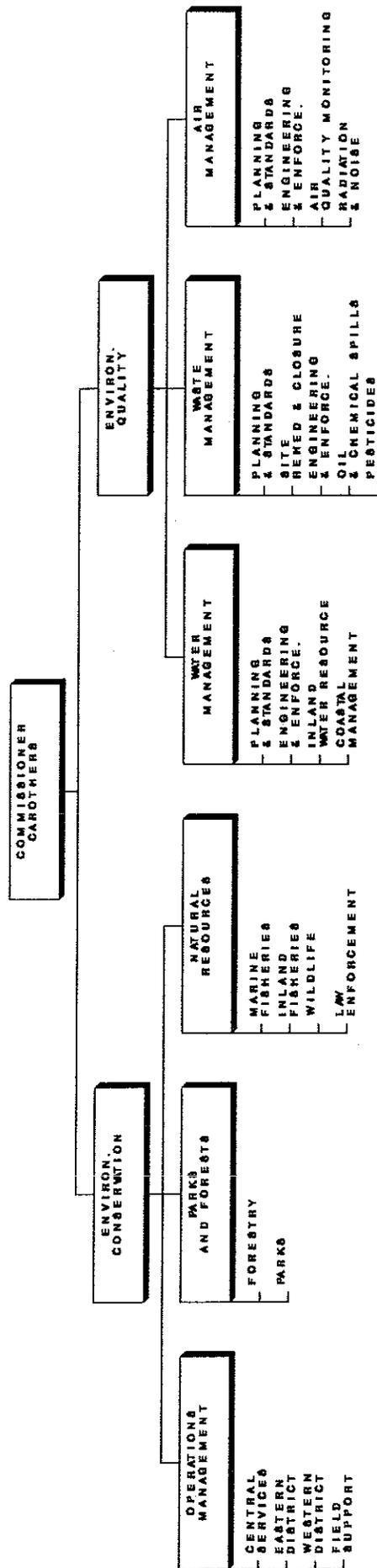
1967
P.A. 754 Connecticut creates an Air Pollution Control Commission, under the state Dept. of Health, to adopt and enforce air pollution control regulations.

1971
P.A. 872 State Department of Environmental Protection created; given responsibilities for all environmental matters, including air pollution.

1983
P.A. 83-159 Clarifies that sources may not operate under a construction permit, unless allowed by DEP. Gives DEP commissioner authority to require an emissions test before an operating permit is issued. Test results must be made available to the source's town. Allows DEP to revoke an operating permit for any regulatory violation.

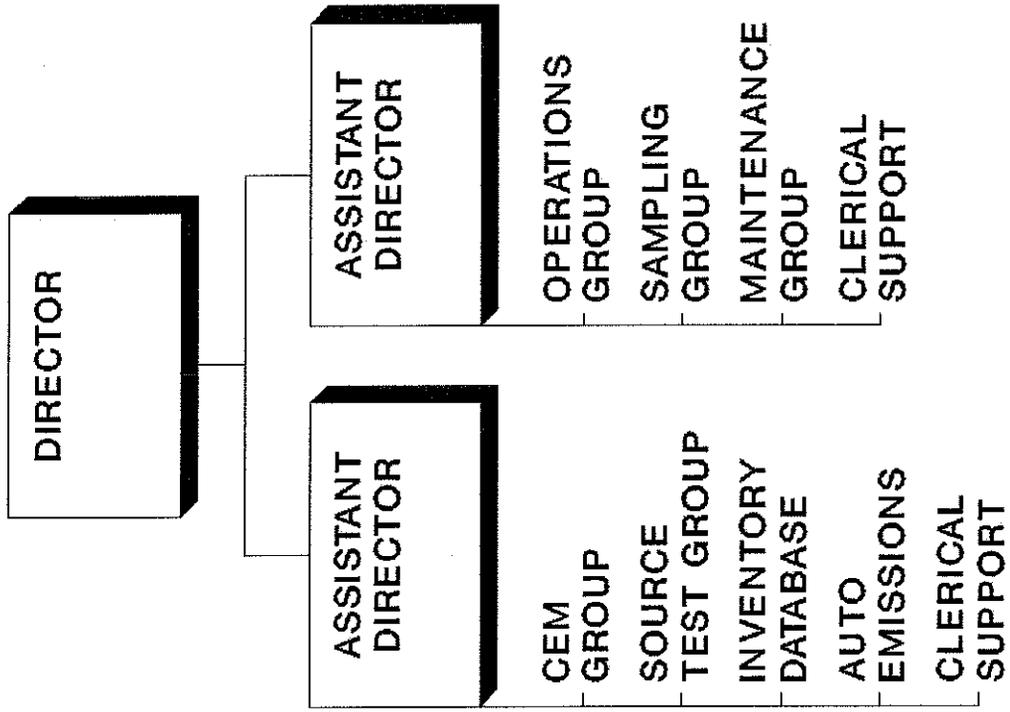
- 1983
S.A. 83-46 Requires the DEP commissioner to adopt regulations identifying high risk hazardous air pollutants and to submit a report to the Environment Committee with recommendations for a comprehensive program for controlling emissions of these pollutants, including consideration of standards, or technology for their control.
- 1985
P.A. 85-590 Creates a Hazardous Air Pollutant Advisory Panel to make proposals to the commissioner on definitions of hazardous air pollutant groups, and maximum allowable levels for those pollutants.
- 1986
P.A. 86-332 Requires commissioners of DEP and DOHS to adopt regulations establishing ambient and stack emission standards for dioxins, furans, and other toxic chemical compounds emitted by resource recovery facilities, and forbids emissions in excess of those standards. Also requires DEP to establish a program for receiving, evaluating and responding to reports of dioxin and furan emissions.
- 1987
P.A. 87-338 Expands violations to include not operating within terms and conditions of a permit in addition to regulatory violations. Increases the amount of civil penalties from \$5,000 per week to \$1,000 per offense for each day the violation continues.
- 1989
P.A. 89-225 Requires the commissioner of DEP, before issuing renewing or modifying a permit, to consider: an applicant's prior compliance with environmental laws; other air pollution sources on the site, their conformance with standards; and any prior permit violations and the source's progress in correcting them. Also requires a permit applicant to give written notice to the town and property owners abutting the source.

Department of Environmental Protection Organizational Chart



Bureau of Air Management

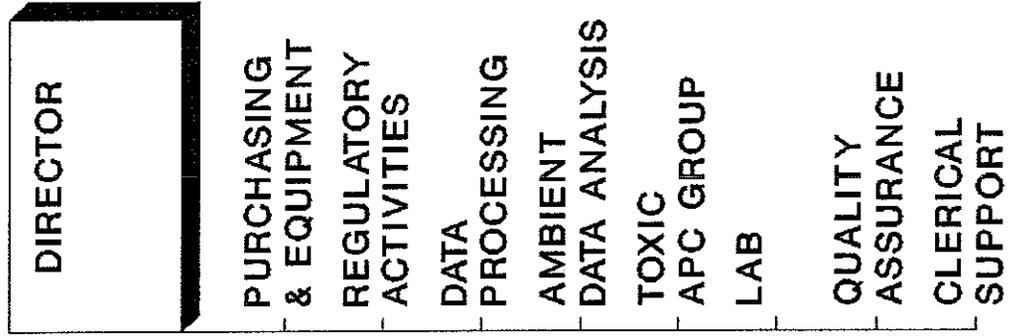
Air Quality Monitoring



DEP Proposed Reorganization

Bureau of Air Management

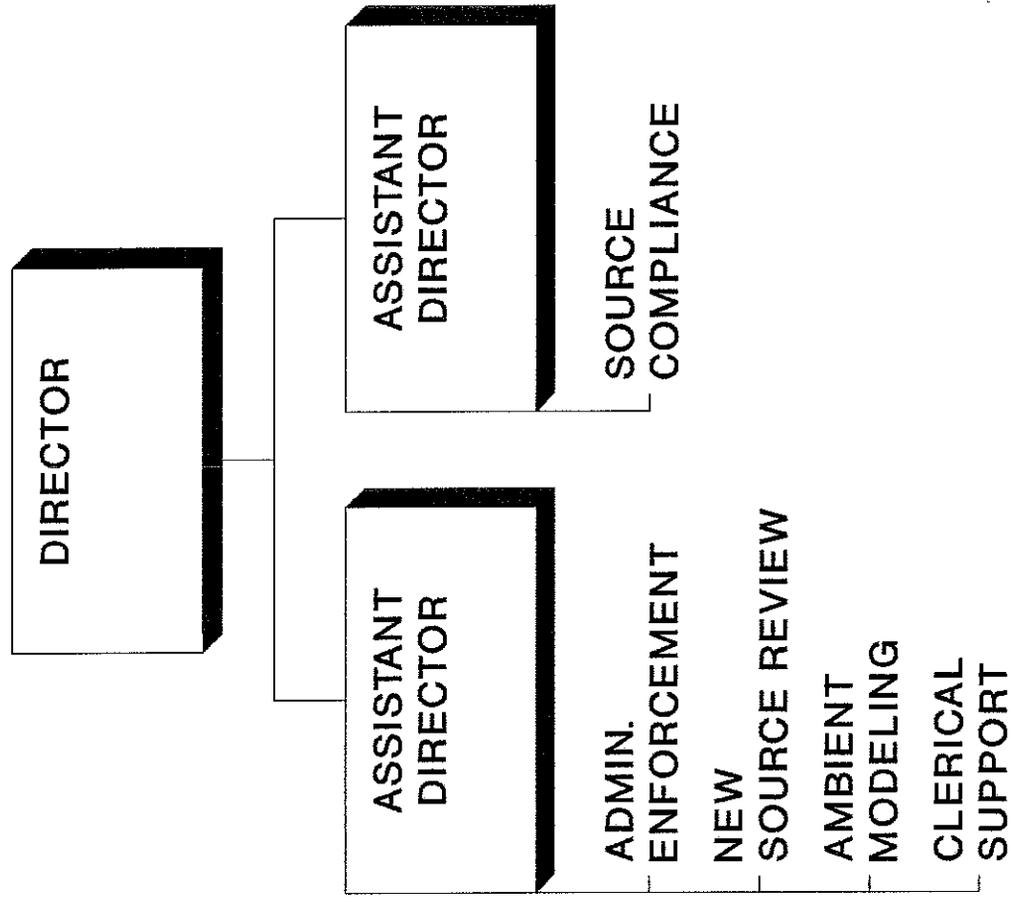
Air Planning and Standards



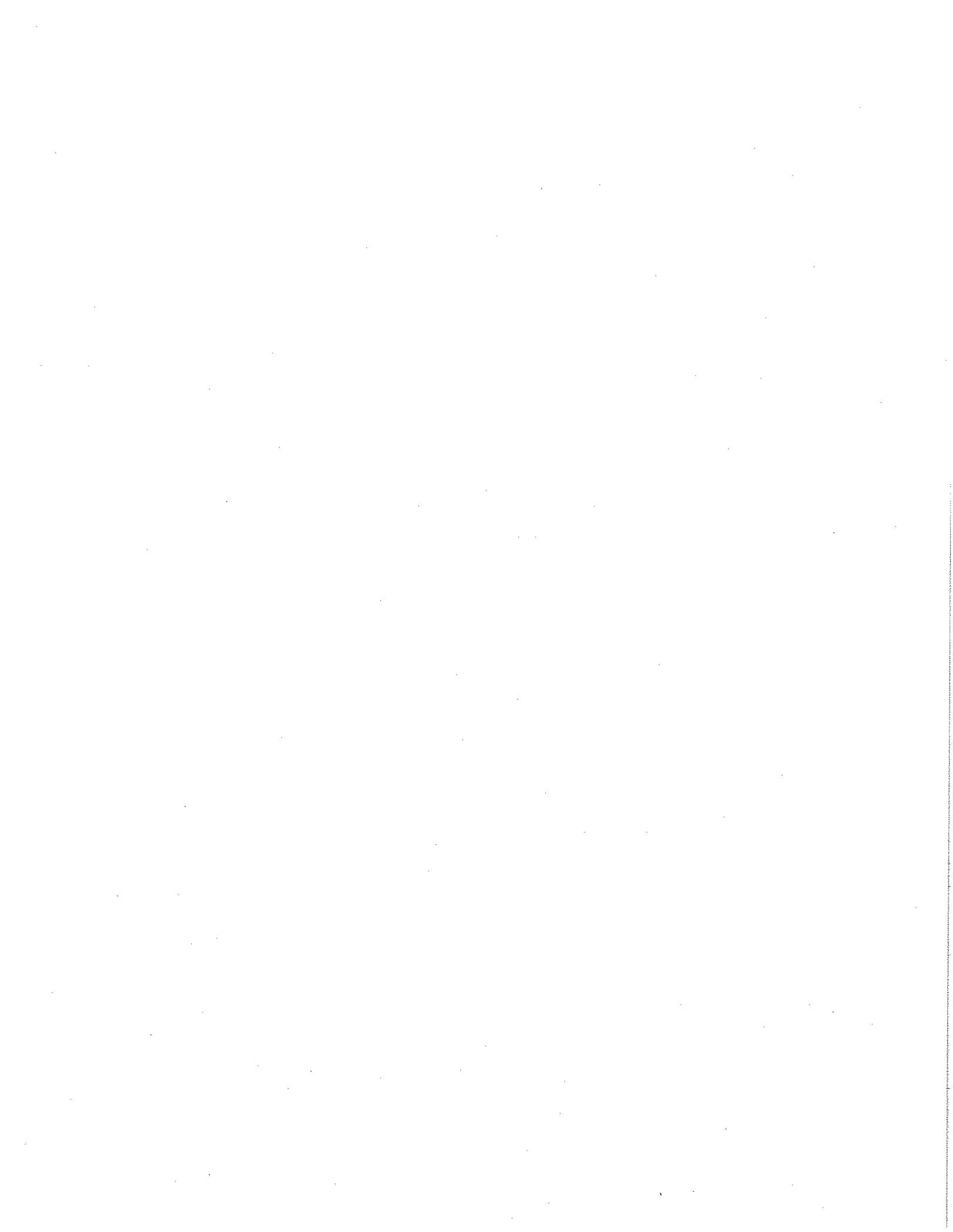
DEP Proposed Reorganization

Bureau of Air Management

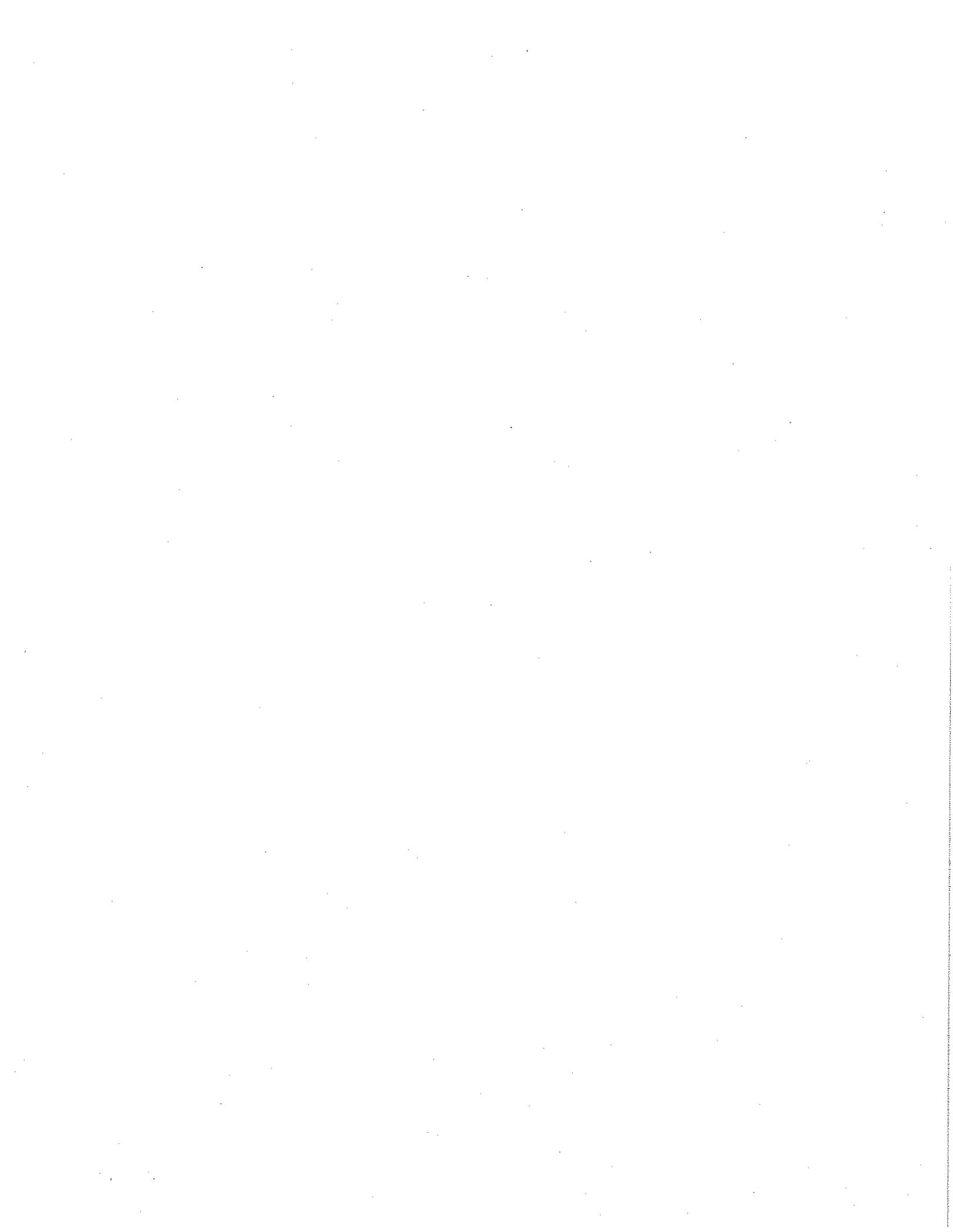
Engineering & Enforcement



DEP Proposed Reorganization



APPENDIX D
AGENCY RESPONSE





STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

165 CAPITOL AVENUE HARTFORD, CONNECTICUT 06106



Leslie Carothers
Commissioner

January 10, 1990

Mr. Michael L. Nauer, Director
Legislative Program Review and
Investigations Committee
State Capitol - Room 506
Hartford, CT 06106

Dear Mr. Nauer:

Thank you for providing me with a copy of the final report on the performance audit of the Department's Bureau of Air Management and for the opportunity to provide you with our comments.

As you know, the preparation of your report has coincided with the implementation of a reorganization of the Department, including the air program, that has been in the works for nearly two years. My reasons for making the changes now finally underway were, in part, to remedy some of the management and programmatic problems your report addresses in the context of the air program. Consequently, it should come as no surprise that many of the changes recommended in the report have already been made or are in the process of being made.

I do regret that I did not have the opportunity to discuss the basis for the reorganization in more depth with the Committee and its staff, because I could have cleared up some apparent confusion about what was being done and why. The establishment of an Engineering and Enforcement Division, responsible for permits and enforcement, was precisely for the purpose of putting these regulatory functions under one Director and strengthening these programs. The same organization has been established for the waste program, and for surface water and ground water regulation. I found this to be the best structure for the enforcement programs I ran at EPA and am confident that it will get results here. In addition, there are significant advantages to having units with parallel regulatory responsibilities in the three Bureaus in developing consistent practices and promoting inter-Bureau coordination on multi-media cases. (All three Bureaus also have a Planning and Standards Division to serve as a focal point for coordinating development of Bureau plans and regulations. This, too, has been lacking.)

Mr. Michael L. Nauer, Director
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The Air Bureau is unique, however, in that it is the only Bureau with a division devoted solely to testing, the Monitoring Division. Ambient and source testing are a very significant activity in the air program, and the Source Testing subunit in fact includes most of the functions you desire to see consolidated. I believe, therefore, that the changes I have made effectively address the Committee's concerns that both enforcement and source testing be strengthened in the Air Bureau organization.

The report's recommendations are primarily addressed to improving the management of the air program and, particularly, upgrading its response to citizen complaints and violations of the standards and regulations. My comments on those areas are as follows:

Management Issues

As I stated in my session with the Committee, I made communication and management skills the most important factors in selecting DEP's new Bureau Chiefs. Mr. Pavetto has already made major changes in the way the Air Bureau communicates, as I expected he would. Regular staff meetings are certainly an important element of that, though I see no present need to prescribe the meeting frequency or format for DEP's Bureau Chiefs or Deputy Commissioners.

Improved internal planning is a priority for the whole Department and not just the air program. We are developing a new departmental as well as Bureau level goal-setting and progress monitoring effort. Also, we are working on a set of program and environmental measures to track our accomplishments in carrying out the Environment-2000 state environmental plan. The Environment-2000 measures will be reported on to the General Assembly and the public by the Council on Environmental Quality. These planning and evaluation initiatives should respond to the management system recommendations in the report.

We will be glad to report to the Committee on the air program's progress in September 1990. However, I question the need for legislation requiring such reports from one Bureau on an annual basis for an indefinite period.

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Complaint Response and Enforcement

I am pleased that the report acknowledges the high marks our air program has received from EPA for administering federal air pollution programs. I do want to point out that the unit has also done a fine job in enforcing the program for control of hazardous air pollutants, an innovative and important state program. We have issued 16 orders reducing hazardous emissions such as chromium and solvents under that program, and another dozen are in preparation.

We agree that improvements are needed in documenting and tracking response to citizen complaints. Automation of these records would be useful and will be investigated, but resources for automating files and tracking the time spent on inspections will be hard to find. Training is another Department-wide priority and will be made available to the air inspectors. An improved procedures manual will also be prepared.

My choice of an engineer-lawyer with a strong enforcement background to run the Air Bureau should be evidence that my goal is timely and aggressive enforcement of state and federal requirements. Your report and his discussions with the Committee staff have definitely helped him understand the areas where the responsiveness of air enforcement needs improvement. We have no higher priority for the Bureau.

I have carefully reviewed the analysis in the report as well as its recommendations in developing possible legislative proposals to improve enforcement. Although I do not endorse the report's specific approaches to legislation, (items 11 and 14), I do expect to propose amendments to strengthen DEP's authority to require testing and other enforcement powers to deal with some of the problems highlighted in the Committee's report. I will send copies of those proposals to the Committee as soon as they are available.

Program Resources

I cannot disagree that additional resources would enhance our ability to improve operations. The air program lost seven positions last year. Although some changes -- notably an increase in administrative enforcement -- will be made through internal transfers, position increases have not been requested nor are they expected given the pressure on the state budget.

Mr. Michael L. Nauer, Director
Legislative Program Review
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The Committee's proposal for emission fees is an interesting one. I would like to see more of the Department's operations supported by the fees paid by the regulated community and by service users. However, this has not been a practice favored by the budget development units in either the Executive or the Legislative branches in Connecticut, to put it mildly. While I believe the Committee's ideas merit a closer look in the context of overall DEP funding, this does not look like a very favorable year for major changes in that area.

In conclusion, I compliment the Committee and its staff on a conscientious and useful critique of some portions of our air program. While we may differ on some of the details, I am committed to making all parts of our air enforcement program meet high professional standards and high public expectations.

Sincerely yours,



Leslie Carothers
Commissioner

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