

ENVIRONMENTAL AUDITING  
OPINION LEADERS' WORKSHOP  
OLD COLONY INN  
ALEXANDRIA, VA

June 9, 1983

SUMMARY OF PROCEEDINGS

Prepared by:

REGULATORY REFORM STAFF  
OFFICE OF POLICY AND RESOURCE MANAGEMENT  
U.S. Environmental Protection Agency

WASHINGTON, D.C.

October 1983

## ENVIRONMENTAL AUDITING WORKSHOP SUMMARY

### PREFACE

On June 9, 1983 EPA sponsored an Environmental Auditing Opinion Leaders' Workshop in Alexandria, Virginia to bring together key individuals instrumental in shaping both private-sector auditing programs and developing public-sector responses to them. The workshop was attended by approximately ninety representatives from state and local governments, industry, environmental groups, academia and EPA Headquarters and Regional Offices. Judged by participants' reactions it successfully met its four objectives.

First, the Workshop brought together opinion leaders knowledgeable about environmental auditing (EA) to share information and experiences with each other, accelerating EPA's role as an information clearing-house in this area. Second, new interpersonal networks were created among participants -- networks that could in time result in better understanding and wider application of EA principles. Third, the day's activities gave EPA a much clearer picture of participants' evolving attitudes and perceptions on EA issues, helping shape the Agency's agenda. Fourth, participants addressed numerous key substantive issues raised by auditing and compliance management, including how these activities differ from and can complement each other to assure more effective and efficient attainment of environmental goals.

The following pages briefly summarize highlights of: (a) prepared remarks by the morning's seven speakers; (b) a short morning question and answer session; (c) an afternoon panel discussion; and (d) EA "issues and answers" reports from each of seven small discussion groups into which participants divided during the early afternoon.

Such summaries inevitably fail to do justice to the humor, energy and nuances of the kind of give-and-take which characterized much of this workshop. Just as inevitably, a full transcript is too bulky and expensive to provide. We have attempted fairly to capture the essence of participants' remarks and conclusions, giving due weight to how views appeared to evolve and modify each other over the course of the day. We apologize in advance for any errors, omissions or misplaced emphases. A full transcript or any part thereof, as well as prepared remarks or outlines for most of the morning speakers, are available at normal copying charges to those who may wish more detail or seek to pursue particular issues further.

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JOSEPH A. CANNON

Associate Administrator  
for Policy and Resource Management  
U.S. EPA

Washington, D.C.

(Keynote)

- ° EPA views private-sector environmental auditing as a socially responsible corporate practice with resulting benefits to industry, public health, the environment and EPA.
- ° A critical question to be addressed at this Workshop is how to assure ongoing compliance with environmental requirements and how to develop workable new ways to deal with compliance over time.
- ° As the air and water acts mature, regulators' focus is shifting from initial compliance (installation of required control equipment) to compliance over time (assuring the proper operation and maintenance of equipment).
- ° Even with strengthened government enforcement resources to deal with statutory responsibilities, those resources are shrinking in real terms as those responsibilities expand.
- ° For large corporations, compliance assurance is more challenging due to more diverse and dispersed facilities.
- ° Smaller companies are also challenged since they lack the information, the means or the management tools necessary to assure compliance. This class of sources needs special attention and help in assuring its own compliance, since it is often difficult for agencies to inspect them with any frequency.
- ° This Workshop should open more channels of communication between traditionally "adverse" groups (EPA, industry and environmentalists) to help shape future directions in assuring ongoing environmental compliance.

GRAHAM T.T. MOLITOR

President  
Public Policy Forecasters, Inc.  
Potomac, MD

- ° Major public policy changes tend to evolve and be diffused in predictable patterned ways, both between and within countries. An historic overview of the patterns of development and diffusion of social innovations such as the steam engine and Social Security allows general conclusions about the likely future path of contemporary ideas (e.g., environmental auditing) to be drawn.
- ° Models for tracking the evolution of social policies exist and can be applied to environmental auditing.
- ° Over the last 150 years ideas for changing or adopting new social policies have tended to emanate from Western Europe and slowly make their way to the United States. Usually there is a significant lag time associated with U.S. adoption of new policies -- though this lag time appears to be diminishing.
- ° Once generalized responses to perceived problems are in place, then innovative, more effective and efficient methods are devised to fine-tune the general policy. Environmental auditing is one such innovative refinement in the area of pollution control.
- ° Environmental auditing evolved as a response to several discernable trends -- increased tort liability, SEC regulations, public demand for environmental protection, slowing gains achieved by traditional command and control regulation, and necessary delegation of program elements to states and the private-sector.
- ° Incentives which encourage private-sector initiatives will continue to grow and environmental auditing will be part of that growth.
- ° Patterns of growth can be predicted by such techniques as graphing the number of articles on a particular topic which appear in professional journals. Such literature reflects growing interest and anticipates actual implementation and use. For example, the number of articles on Emissions Trading elements in law reviews, engineering and other "trade" journals increased rapidly in the years before the major policy change, and dropped off after threshold issues were resolved and implementation gathered steam. The literature references for auditing have increased geometrically over the last three years.

J. LADD GREENO

Senior Consultant  
Center for Environmental Assurance  
Arthur D. Little, Inc.  
Cambridge, MA

- ° Based on our experience designing, evaluating and sometimes operating environmental audit programs for individual firms, we tend to define environmental auditing as a methodological examination, involving analyses, tests, and confirmations of procedures and practices, leading to a verification of compliance with legal requirements, internal policies and/or accepted practices. It helps firms evaluate their environmental performance.
- ° Auditing is not one set of prescribed procedures. Rather, programs must be tailored to fit diverse needs of particular companies.
- ° Audits generally include two categories of activity:
  - a) assessment - expert judgement on environmental hazards, risks, control measures, and management system effectiveness, and
  - b) verification - "tests" conducted to examine the accurate application of and adherence to environmental policies and procedures.
- ° Audit programs are established to verify, confirm, and demonstrate compliance; to provide assurances to corporate management; to train people in compliance and abatement; and to help anticipate, and avoid problems; or for all these reasons.
- ° Several factors enter into a company's decision to set up an audit program:
  - a) management's perception of significant environmental hazards or liabilities;
  - b) the extent of regulatory activity affecting a company (e.g., government enforcement activities); and,
  - c) the company's basic philosophy about managing, including managing its environmental affairs.
- ° Conceptually, companies may be said to manage their environmental affairs through three evolving stages. Stage I is a problem solving approach where specific problems are found and addressed.

Stage II is a compliance management approach where companies set standards or goals and manage against them. Stage III is a risk management approach where potentially unacceptable impacts of corporate operations are anticipated and assessment and verification are also included. It is in this last stage that mature auditing programs, with verification systems, are established.

- ° Creating an audit program requires explicit decisions about how to manage and staff it. The positions can be filled with full time auditors, or a full time manager using others from the corporate staff, or by a part time manager and part time staff. These positions can also be filled by outside consultants.
- ° Private sector auditing seems to be growing rapidly, at least among larger firms. An Opinion Research Corporation survey of just over 100 leading companies conducted four years ago produced a two-thirds affirmative indication that some form of auditing program was contemplated or in place.
- ° It's important to keep in mind that about one-third of the companies involved in auditing for four or more years include activities beyond environmental, such as health and safety, in their auditing programs.

KAREN BLUMENFELD

Environmental Auditing Project Manager  
Regulatory Reform Staff,  
U.S. EPA  
Washington, D.C.

- ° From the Federal perspective environmental auditing is the result of converging forces in both the private and public sectors. Some of these forces are increased regulatory requirements and tort liability, a need for better management controls at the corporate level, increasing EPA responsibilities with relatively fewer EPA resources, a desire to better internalize corporate environmental responsibility, continued public demand for a clean and healthy environment, and the need for better compliance over time (i.e., proper operation and maintenance of pollution control equipment).
- ° Benefits expected to accrue to industry may be generally categorized as greater management effectiveness and greater management comfort. Greater management effectiveness means identifying compliance status, sharing information among geographically dispersed facilities and developing reporting and response systems to ensure identified problems are corrected before they become crises.



Greater management comfort involves making management feel secure in the knowledge that operations are under control and that investments are protected.

- ° Benefits expected to accrue to government include a more efficient allocation of resources for addressing the greatest environmental risks, better enforcement targeting and decreased levels of pollution because emission or effluent profiles will decrease.
- ° Environmental benefits will result by helping companies manage information to identify actual or potential environmental problems, take immediate responsive action to control those problems, and make sure responses are effective.
- ° EPA could respond to private-sector environmental auditing in a variety of ways: do nothing; encourage auditing; create direct incentives for firms to adopt EA systems; or mandate auditing for some or all firms in some or all industry categories. The current threepronged policy has been extremely constructive in reducing anxieties, developing and sharing state-of-the-art EA information, and accelerating private developments without inhibiting or stifling them.
- ° The three-pronged approach involves endorsement, analysis and assistance. Endorsement means that EPA will participate in conferences, workshops and seminars. Analysis refers to the series of studies which EPA has carried out on aspects of EA. Assistance refers to EPA working with states and industry to identify and ameliorate EA problems, issues or concerns.

JAY LANGFELDER

Assistant Secretary for  
Natural Resources and Community Development  
State of North Carolina  
Raleigh, N.C.

- ° From a state agency perspective our State is enthusiastic about environmental auditing as a program to help achieve the Natural Resources and Community Development's general goal of environmental protection.
- ° Environmental auditing is not an alternative to active permitting and enforcement programs, but it is complementary to those programs.
- ° It is very important to understand that auditing in North Carolina is not used to compromise environmental standards. But some routine flexibility in the implementation of standards helps open better lines of communication with business.

- ° North Carolina uses a "manager to manager" approach to encourage environmental auditing efforts. This approach requires top corporate and top agency managers to sit down and discuss activities with each other. On the corporate side, top management informs employees of the corporation's commitment to achieving environmental compliance. In the agency, the permit writers get word the agency wants to work with, not against, businesses with auditing programs.
- ° North Carolina has already used the manager to manager auditing approach:
  - a) to solve a fertilizer operation's nitrogen discharge problem, and
  - b) to solve air pollution problems and facilitate permit granting for other aspects of business operations.
- ° Based on these experiences North Carolina expects at least three benefits from environmental auditing which will result in greater environmental protection:
  - a) more open communications between the State and regulated firms;
  - b) greater and more dependable voluntary compliance; and
  - c) more movement of local industry into the area of Pollution Prevention Pays (PPP) (i.e., the idea that process changes, waste exchanges, or other innovative pollution control procedures can turn a profit or produce large savings as well as reduce end-of-the-pipe pollution.)

DAVID DONIGER

Senior Staff Attorney  
Natural Resources Defense Council  
Washington, D.C.

- ° From NRDC's environmental perspective environmental auditing is a very good idea in principle and something that very much needs to be encouraged and expanded -- at least under specified circumstances.
- ° We think auditing should be mandated by EPA and such a program should include some form of self-evaluation and public reporting of the results without inducements or promises not to penalize violations.

- ° Auditing can encourage adherence to standards, continuous compliance, continuous monitoring and take up some of the enforcement slack.
- ° As a way to shift the enforcement burden to polluters, auditing is both fair and not new -- precedents are found, for example, in the Clean Air Act at §110 (a)(2)(k) and §173.
- ° In line with Congressional intent (in the Clean Air and Clean Water Acts, RCRA and TSCA) regarding full disclosure of emissions and effluent data, information developed by private-sector environmental auditing should be made public, though there is a problem with the "fish bowl" aspect that will have to be worked out. The "fish bowl" problem arises from corporate concerns over disclosure of audit findings.
- ° Current uncertainty surrounding potential disclosure of audit information, which is cited as a factor discouraging auditing, could be alleviated by a mandatory audit program which requires information disclosure.

ROBERT W. CUTLER

Manager, Regulatory Auditing  
Olin Corporation  
Stamford, Conn.

- ° From a corporate perspective environmental auditing, at least at Olin, is a set of procedures used to manage myriad environmental requirements.
- ° At Olin auditing began (but soon expanded beyond) an effort to assure that required regulatory reports were accurate.
- ° Olin submits over 4,300 reports per year to various government agencies and decided to implement controls over the preparation of these reports. Olin initiated a three-step approach to carry this out:
  - a) identification of report information required by all government agencies,
  - b) assignment of specific individuals responsible for preparing each report, and
  - c) assignment of other individuals to ensure these reports' accuracy.
- ° Each of these reports is prepared by a professional outside the auditing department. The auditing department's role is to assure

compliance with governmental regulations and to ensure that systems, procedures and controls are in place to develop accurate data and ensure compliance.

- ° The basic goal of the audit department is to verify the accuracy of information, not to monitor or make rules. The department also takes charge in determining whether corrective actions were taken and that problems will not recur.
- ° Olin's auditors review the reports generated to determine whether they contain the truth (good or bad), and if there is a problem that appropriate corrective actions are taken immediately so the problem won't recur. Olin staff also ensures that systems are established to create the best opportunity of facilities remaining in compliance.

### Question and Answer Session

Moderated by Edwin Clark  
Senior Associate  
The Conservation Foundation  
Washington, D.C.

Mr. Clark moderated a short question and answer session at the conclusion of the morning presentations. A brief synopsis of principal audience questions and speakers' answers follows.

Question: How does auditing affect different size businesses, and can smaller companies take advantage of auditing the way the larger ones can?

Answer: (Greeno, A. D. Little). Environmental auditing for small companies is not just a scaled down program, it's a different activity. Auditing can be just as important to a small firm, but what is essential is to be sure there is top management commitment to make auditing work. Small companies have established auditing programs to increase management effectiveness...

Question: Several questions concerned the Pollution Prevention Pays (PPP) principle and whether auditing programs could be, or were, designed to save money by reducing resource input or increasing process efficiency?

Answer: (Greeno). Saving resources to save money is not the prime goal of the large majority of companies with auditing programs. However, where companies do operate under the PPP principle they are emphatic that money is saved. Generally, saving money by this means

is an issue for plant managers to decide and is considered outside the scope of most environmental audits...

Question: Compliance is just one aspect of auditing. A good program should develop strong systems for basic control as well as identify cost savings. Perhaps programs should go beyond making regulatory reports and get into more internal resource management issues?

Answer: (Cutler, Olin Corporation). Basically that is true and is actually what occurs at the Olin Corporation. We do more at Olin than focus on reports. However, a lot of effort does go into report preparation. Many hours of laboratory testing, obtaining appropriate instruments, calibrating the instruments, monitoring emissions and effluents, are carried out. An audit is performed to ensure that everything in a report is correct. The way to make sure a report is correct is to make sure the methods behind them are correct. These results are then compared to a set of objectives or standards -- whether they are laws or corporate policy...

Question: Once auditing has been adopted by a regulatory agency, when and how does the transition occur between approving a company's audit program and the agency assuring actual compliance?

Answer: (Langfelder, North Carolina). One way to look at a firm's compliance, once an audit program is in place, is to meet periodically and work closely with a company to establish a good working relationship. Direct communication with regulators is a part of EA systems designed to help resolve problems. Neither standards nor permit requirements are relaxed. But, as trust in a company grows, a state (based on its own enforcement priorities) may modify its inspection or enforcement activities...

(Doniger, NRDC). Once a mandatory auditing program is implemented, the government inspection function to check compliance should consist of auditing the auditors. If a company proves it has a good audit program, then it will benefit by having EPA enforcement resources targeted toward other firms. But, in order to know what constitutes a good program, criteria must be developed for evaluating auditing systems...

Question: Confidentiality is a problem. One reason that corporate insiders are able to obtain full and complete answers to their inquiries (e.g., admissions of existing problems rather than cover-ups) is because they are in-house, part of the corporate team. Have those that advocate a mandatory program with full disclosure requirements considered the likely negative impact on this open and frank exchange of information within the corporation?

Answer: (Doniger, NRDC). Disclosure is definitely a problem and there are many countervailing incentives to the disclosure of information. Disclosure of information acts as a heavy incentive on a company to do the right thing. This may be the deciding factor causing management to act when it otherwise would not. The most important factor here is "having the company's laundry public, when it's dirty."

### Panel Discussion

Moderated by Michael H. Levin  
Chief, Regulatory Reform Staff  
U.S. EPA  
Washington, D.C.

This panel consisted of Eugene Bardach, Professor, Graduate School of Public Policy; University of California at Berkeley, and author of several books on regulatory implementation and enforcement problems; Angus MacBeth, Bergson, Borkland, Margolis and Adler, Washington, D.C., former Deputy Assistant Attorney General, Lands and Natural Resources Division, U.S. Department of Justice and one of the founders of The Natural Resources Defense Council; S. William Becker, Executive Director, State and Territorial Air Pollution Program Administrators (STAPPA) and Association of Local Air Pollution Control Officials (ALAPCO), Washington, D.C.; and Frank Friedman, Vice President for Health, Safety, and Environment, Occidental Petroleum Corporation, Los Angeles, California.

#### Michael Levin:

- ° From EPA's perspective, assuring better compliance over time and getting firms to affirmatively manage their environmental impacts, instead of reacting to crises, are major concerns.
- ° Based on Graham Molitor's presentation one may conclude that there will be much more activity in the EA area -- ideas have definite phases or patterns, we are only in the birth phase and developments are taking off.
- ° Whatever else we've heard, I think we've heard a ringing endorsement today of EPA's clearinghouse role in the EA sphere.
- ° It's important to recognize that the line between private-sector EA and a "government program" is not as clear as people tend to assume. Even if an agency only takes the presence of an auditing program "into account" by reducing inspection because the firm has a good track record, you've got a "government program". The agency can do that because consistently good compliance over time does not happen by accident. Whatever the specifics of the EA program, the firm must be doing something right. And of course agencies make that kind of implicit decision to take EA "into

account" now.

- It's also important to recognize that EA can force us all to rethink traditional notions of compliance and enforcement. (1) You'd like a system that rewards superior performances as well as punishing bad performance. But there's a danger now that the more EPA knows about a particular firm's performance, the harder it is likely to hit, even if performance is "good". (2) A violation is often not just an exceedance; it partially depends on how far down into the pile of exceedances a particular Region or enforcement program wants to reach. One thing you may want to say is, if a firm has an EA program and has an exceedance, it's got a problem it has to fix; if you don't have an EA program, it's got a violation. (3) Whether an EA program is "private" or "public" it implies precise standards you're auditing against. But even emission limits are not precise due to unspecified averaging times or different test methods, and it's not clear an absolutely precise standard is worth the trouble. That raises the question of whether we can let firms define what compliance is. If that sounds like heresy, we should remember it happens all the time now too, and auditing might make it happen better.
- EA is only a small part of a firm's overall management tools. But if you have EA and a compliance assurance program, you have information organized in ways which lets you capitalize on other opportunities like recycle/reuse and air or water trading. EA ties everything together. If information management and strategic planning are the name of the game, EA will play a larger role.

Eugene Bardach:

- There are three very different types of firms, just as there are three different types of children.
- The first type is very orderly and organized, knows the rules and does not require an omnipresent body explaining how to act and to check on performance. This type of firm's behavior can allow government to get off its back and the firm to get out from under government's thumb.
- The second type is the complete opposite -- ill-disposed toward concepts of order, neatness and social responsibility. For this type, knowing the rules of the game serves to increase personal responsibility and accountability. The only way to deal with this type of firm is to keep after them, tell them what to do and when to do it, and impose sanctions when warranted.
- The third type falls into the middle category -- neither slovenly nor well ordered. These firms present a subtle problem for regulators who must encourage orderly, organized activities

without creating animosity or negatively polarizing behavior. Perhaps a little stick waving as well as holding out carrots is the correct treatment. This middle-of-the-road firm presents the real difficulty because there is a fine line between encouragement and alienation.

Angus MacBeth:

I first became involved in auditing as a prosecutor in an SEC fraud case, and I'm beginning to see there are a lot of different ways to accomplish the same end.

- ° Under the securities laws there are true outside financial auditors who certify a company's books based on prescribed standards. However, in environmental auditing the discussion presumes internal mechanisms developed by companies to assure regulatory compliance -- the use of external auditors has not developed.
- ° "Corporate culture" is very important in understanding particular audit systems within firms. This culture has a lot to do with the type of auditing done or program developed. Much of the richness and variation we now see in auditing may be lost if the government gets directly involved.
- ° If audit findings must be disclosed, there is a real possibility that companies will alter their self-analyses in order to deal with certain findings internally rather than risk having them dealt with in a public forum.
- ° Potential government regulations and incentives would probably reduce some of the value EA has for firms and could curtail the implementation of new auditing programs by reducing flexibility.
- ° Government should not mandate or create incentives to audit, but at the same time it will have to take auditing into account as part of its enforcement program since the presence of an audit program reflects positively on a firm's compliance record.

S. William Becker:

- ° The earlier EPA idea of providing incentives to firms which establish EA systems initially appeared to be a classic case of the wolf guarding the hen house. Today's discussions on EPA's current policy have convinced me that this idea is legitimate and can produce real benefits.
- ° At the very least, government can serve a useful role in advertising and accelerating EA, and large companies' progress in the area has been substantial and should not be impeded.



- ° However, to the extent EA would require greater resource expenditures by state and local agencies, the tougher it becomes to widely implement the idea -- especially in light of current agencies' resource limitations and increasing regulatory/statutory burdens.

Frank Friedman:

- ° Auditing is really a management systems question. It's a way of setting corporate environmental goals, defining measures for reaching those goals, and setting up a system to track progress, let you know what is really going on, and make sure those goals are being reached.
- ° Top managers now recognize that what they don't know in terms of their firm's environmental performance can hurt them. This is the case either because citizens may sue the company for personal injuries or injunctive relief or because regulators may bring unanticipated enforcement actions when standards are not met.
- ° The information base developed in an audit is important to ensure that top management knows what is happening at facilities and that problems are prevented, not merely reacted to. This gives management a feeling of comfort -- that compliance will follow from a good management system.
- ° Management systems must go beyond determining compliance and begin systematically anticipating and dealing with problem situations before they arise. To this end Occidental has developed computer data bases to assist assuring compliance at its facilities.
- ° EPA does not need to work so much with the Fortune 500 companies because managers in those companies already recognize auditing as a good management practice. At most, in respect to the large companies, EPA need only encourage the spread of EA as a good management system currently available, and keep sharing information because we can all learn from each other.

DISCUSSION GROUP REPORTS

Small groups of seven to ten people met for nearly two hours in the early afternoon to discuss EA and record their perceptions of issues and recommended courses of action. During the final session these groups reported back to the full workshop and the Plenary Panel. Many group perceptions overlapped. The following highlights the major topics presented by the group reporters, without distinguishing which recorder or panel member actually made the point.

- Municipalities or other government entities represent a potentially major route to carry out demonstration projects, develop model EA procedures, and identify potential costs, benefits and transferability of EA to the private-sector.
- Environmental agencies can learn from the experience gained from other types of audits (e.g., financial audits, FDA audits, DOE and NRC audits) as well as from other federal facilities involved in auditing (e.g., National Institutes of Health and the Air Force).
- State governments should basically follow EPA's endorsement, analysis and assistance approach. But states should also take advantage of their greater ability to deal directly, one-on-one, with firms interested in auditing.
- Important roles can be played by other organizations outside the government: universities to research EA issues, trade associations to provide technical assistance and disseminate EA information, even professional standards organizations to reinforce environmental auditors' status as an emerging new profession.
- When EA systems are first implemented they appear to heighten disclosure concerns, since more exceedances may initially be discovered by a firm when the data generated is verified and centralized. More exceedances may also be found because EA encompasses and summarizes results of compliance assurance activities. These factors, it is argued, could make a firm more vulnerable to government enforcement actions than compliance assurance alone without auditing. But, in time, exceedances will drop as managers are able to focus in on and resolve particular problems.
- If it ever comes to the point where EPA receives audit reports, disclosure of audit information should not be accepted as proof of compliance, but such information should be used as an indicator when deciding how often to inspect a firm.
- When discussing reporting requirements, privacy and trust are critical. Privacy, distinguished from secrecy, connotes the idea of corporate problem-solving in something other than a fishbowl. Trust, as a form of give-and-take between regulators and the regulated, is important to solve complicated problems. But the process of give-and-take should remain pretty informal.
- It is important to understand what constitutes a "good" or "bad" actor because this may affect how EA is taken into account by regulators. "Good" and "bad" are partially dependent on a firm's compliance record. However, compliance records are dependent on frequency and quality of agency inspections and what caused particular reported exceedances. Therefore, compliance is an extremely fuzzy and difficult-to-measure factor.

- A firm's environmental performance over time is the important trend when classifying firms as "good" or "bad" actors. It is the ultimate indicator of the success or failure of a particular EA program. If other factors remain unchanged, then a decline in reported exceedances indicates a particular program is effective.
- EA is not an end in itself and should not be viewed as either a surrogate for compliance or a strong government enforcement program. But an EA system is a useful tool to attain compliance when there are follow-up procedures to ensure problems are taken care of.
- EA needs to be "decoupled" from the idea of enforcement. This means that auditing is a good business practice which government has good reason to encourage. But it should not be coupled directly to a regulatory incentives program that would distort its goals and could reduce its environmental and management benefits.
- One of the benefits of private-sector EA is that it offers the opportunity to address a whole range of problems with the same management tool. Environmental, health, safety and other regulatory affairs may be addressed at once to take advantage of economies of scale, and to begin dealing with intermedia problems at the plant level instead of treating each program by itself.
- Besides better regulatory compliance, benefits that might accrue to firms using auditing could include: lower insurance premiums, discovery of process changes that may reduce production or cleanup costs and discovery of cost-effective alternative pollution control strategies.
- There are some unique problems in expanding EA to smaller firms because they tend to be less knowledgeable about environmental regulations, and possibly more concerned about disclosure of proprietary information. This concern would be particularly acute if third party auditors had to be used because such firms lack the staff or expertise to perform audits themselves.
- The inevitability of a government-based audit program is not a given at this point. If a mandatory program acts as a disincentive, then fewer voluntary EA programs may be established, and federal and state resource burdens may increase as compliance decreases. A mandatory EA program could be the kiss of death for EA as we currently know it.
- Since auditing, at a minimum, has a built-in benefit of creating information valuable for better environmental performance, EPA and states should develop incentives to promote experimentation with auditing programs to create as many corporate auditing systems as possible.

- ° Two components were identified that could become part of EPA's clearinghouse role. First, EPA should circulate case studies. Second, EPA should develop and circulate model auditing procedures, particularly for smaller firms.