PERCEPTIONS OF ENVIRONMENTAL AUDITING

- A MARKETING RESEARCH ANALYSIS -

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BASED ON FOCUS GROUP INTERVIEWS

CONDUCTED

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Preface to "Perceptions of Environmental Auditing -- A Marketing Research Analysis"

EPA's Regulatory Reform Staff (RRS) engaged Professor B. J. Calder of Northwestern University, a well-known marketing research consultant, to conduct four environmental auditing focus group interviews during June 1983. The groups interviewed consisted of individuals from state regulatory agencies, industry, environmental organizations, and EPA program staff, respectively. The Regulatory Reform Staff did not participate in the interviews. Professor Calder's resulting report, "Perceptions of Environmental Auditing -- A Marketing Research Analysis," follows.

The focus group technique is widely used in qualitative marketing research and was chosen to provide potentially valuable insights into recent developments and future directions of private-sector environmental auditing (EA). We especially wanted to investigate whether and how EPA, states, and the private sector might better encourage EA. The focus group method seemed well-suited to this investigation, since focus groups are designed not to develop statistically-valid survey information, but to identify key perceptions held by participants.

This report contains many quotes from participants which indicate the content and tone of such perceptions as of June 1983. The responses and information in the report provide insight into different perceptions across and within different groups concerning EA issues. EPA does not vouch for the accuracy of any of the statements, facts or opinions quoted in the report. By agreement with participants the selection of quoted comments and the interpretation of those comments are Professor Calder's alone, and quotes are not attributed to specific individuals.

Several invitees were unexpectedly not able to participate in this study. Group participants are, however, identified below to allow readers to begin to place the material in this report in context. Related EPA reports on the reasons firms install EA systems, and of detailed characteristics of various operating EA programs, should also help such contextual evaluation.

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INTRODUCTION

1. Objective

This report contains marketing research information intended to assist the EPA in formulating policy with respect to environmental auditing. The rationale is to better understand the perceptions that industry personnel, EPA program staff, state regulators, and environmental group members have of auditing. The objective is to provide policy guidance by identifying key issues seen by these groups and comparing their points of view.

Methodology

The focus group interview technique was used for this study. The interviews followed an unstructured, open discussion format. From four to ten people participated in each session and each session lasted about two hours.

The group process results in a high level of spontaneity and candor. The discussion is controlled only to the extent of making sure that topics of interest are covered. The technique is a standard one in marketing research.

Four sessions in June 1983 were held for this study - one each with industry personnel, EPA program staff, state regulators, and environmental group members. The sessions were tape recorded with permission, and subjected to detailed content analysis.

3. Scope of the Findings

The focus group interview is a technique designed to provide indepth rather than statistical information. No attempt is made to quantify or to statistically generalize the findings of this research. The goal is to attempt to discover broad patterns of perception that hold across people rather than to document individual, specific reactions among people.

It should be emphasized that the findings deal with perceptions as of the time of the interviews. This report should not be interpreted as endorsing the objective correctness of any finding. However, what people believe to be true influences their behavior and must be considered in policy analysis.

FINDINGS

The findings of the focus group interviews are described below. Differences among the industry, environmental, EPA program staff and state regulator groups are noted where appropriate.

Quotes from the interviews are included to convey the way in which the respondents expressed themselves and allow the reader to better judge the exact tenor of people's responses. The quotes are also intended to provide a better appreciation of the basis of the findings. All quotes are typical in that they are similar to those made by a number of respondents.

1. Definition of Auditing

Among EPA program staff, state regulators, and environmental members --- but not among industry personnel --- there is no clear concept of what environmental auditing is. There is a variety of opinion as to what auditing could be, but no clear consensus as to what the term refers to at the present time. People think more in terms of a range of possibilities. This makes communication about specific issues related to auditing difficult. It is hard to consider specific issues when the basic concept of auditing is nebulous.

The concept of auditing can range from that of a label applied to a range of activities that some companies engage in to a specific program subject to objective guidelines. In the former case, auditing is more a descriptive term used to refer loosely to a variety of activities that happen to be employed. In the latter, auditing is a prescriptive term implying a consensus (or future consensus) about specific preventive activities that should be employed. Those who think of auditing in the latter vein realize that auditing is currently an ambiguous concept. The following comments by EPA program staff and state regulators are illustrative.

- "Environmental auditing is pretty much a label for on-site inspections that may already be taking place."
- "Environmental auditing is a label for a company determining whether or not the facility is in compliance with government regulations."
- "Environmental auditing is really a new name for what is already being done. Someone is just trying to come up with new and exciting ways to sell it."

- "Environmental auditing is a method by which companies attempt to keep their company from fouling the air or water. It involves the use of specific practices and procedures that companies can adopt."
- "Environmental auditing goes beyond just reporting data on your effluent or your product. There's a lot more attention to prevention. The company puts in specific procedures to assure prevention."
- "Part of our inspection program is doing environmental audits now we do it all the time. Though, if done properly by the company it probably should be done in more detail in terms of preventive maintenance. And it should also be done more frequently. It is just the company taking on itself this kind of program."
- "We, the EPA, is confused about what we want. We don't really have a definition of the terms or of the program we really want to promote."

The semantics of auditing is further complicated by whether it is thought of as basically voluntary or as legally imposed. Many EPA program staff and state regulators associate the term with court orders for mandated auditing programs. They do so even though they realize that others are using the term more broadly. The connection between auditing and enforcement will be discussed more fully later. It is important to note, however, that the voluntary-mandatory dimension colors the basic concept with which people begin thinking about auditing. It is also a major source of ambiguity.

- "We have to stick to a voluntary approach and take the best out of the system that it has to offer and use it to augment those regulations you know you have to have."
- "You'd have a much less difficult time selling the concept in areas where there are mandatory penalties as opposed to areas where there are flexible penalties."
- "Concepts like this are the second wave for agencies who are responsible. The limits were put in place in the first round. But there is concern over continuing compliance. Someone wants environmental auditing to be put in place to assure continuing compliance."

- "We seem to have two different approaches in mind. The first is to foster this voluntary audit to have us accrue all the environmental benefits. On the other hand is the mandatory approach connected to an enforcement action. We want to push people into thinking prevention instead of correction. I worry, though, about our lack of credibility of enforcement that we have in this agency."

Environmental-group members tend to consider auditing as simply a label that describes the activities of some companies. They feel that companies should engage in such activities for their own purposes, and that auditing as such is not an issue of general concern. There is also some sentiment, however, that auditing could be expanded to a broader concept of companies seeking actively to assess their actual environmental impact. While such a broader concept is of much more interest to environmental members than the narrower concept, they are not optimistic that auditing will become so broadly defined.

- "I'm interested in the end-of-pipeline results. The air and water needs to be cleaned up. I'm not interested in anybody's saying they are doing a good job especially to each other, internally. Now if they want to go out and do something extra take new measures, push for better results . . . that would make <u>auditing</u> something entirely different."
- "The function of an audit is to bring things up to normalcy. Anything else is a pleasant bonus."
- "I'm not sure this is what is meant by auditing . . . in fact, I'm pretty sure it is not . . . but they could go out and really audit what they're doing. I mean audit the environment for problems. Beyond regulations."

The semantic ambiguity surrounding auditing in the minds of EPA program staff, state regulators, and environmental members contrasts sharply with the view of industry personnel. Industry, as discussed in the next section, sees auditing as a much more sharply defined set of practices.

2. Industry Practices

Industry views auditing as primarily a label applied to a set of internal activities. The main purpose of auditing is not to check data or obtain new data. It is to assure decision-makers that appropriate procedures to assure compliance with environmental regulations and policies are actually being followed. To respondents from the larger companies included in this study, the prototype

situation is one involving corporate decision-makers checking on field personnel. The audit is basically a check that agreed-upon corporate compliance procedures are being followed in the field. The primary thrust of auditing for industry is thus to establish procedural compliance, on the rationale that if proper procedures are followed, proper results will generally follow.

- "We do it yearly from the corporate office; there is no auditing, per se, from the plants. Our people go out and audit. We think we have pretty well fixed everything. We are looking for risks as well. We want to make sure things are as they are supposed to be people really doing what they are supposed to be doing."
- "We ask individual plants to develop auditing for their site - set up procedures which are evaluated for what they are as well as how well they are being followed."
- "We do several kinds of audits. We do it by division and also may look at one element such as asbestos, and look at it all the way across one agency. The audits are conducted by the corporate staff, perhaps including division experts. The reports are computerized and follow-up is done. The main thing is to check on what people are really doing out there."

Coupled with this procedural focus is the notion that one of the biggest benefits, if not the biggest benefit, of auditing is to increase field personnel's awareness of corporate directives, and its value as an educational tool. As such, auditing is viewed as an instrument of change at the field level. Most industry personnel see auditing as a top-down change process rather than as a bottom-up reporting requirement.

- "We started auditng in the divisions in 1978. Starting this year it is a corporate function. We have audit teams (technical environmentalists). We study the facility before the on-site audit. We check awareness, concern and level of expertise with on-site people. We meet with facility people both before and after the audit. The plan requests 30-day compliance or fixing of problem."
- "We have an audit in place [at the corporate level] and it is only a part of our total program: corporate comes in and audits the divisions on a yearly basis. The divisions have a team [that does the corporate audit] that goes in 3-4 times a year. The audit is complete and deep and four days long. We audit technology and awareness. When finished we present both a verbal and a written report. The site has 90 days to respond."

- "Our first assessment audit was 1978. Today we are on our third variation. It has evolved into making more frequent but shorter visits. We get our report to plant management right then and decide with them what to do at the time of the assessment. We recently entered all the plans into the computer and are now beginning to monitor."
- "One of the best things that comes out of our program is almost an education, to the people in the field. They really aren't aware. The auditor is well versed, can help solve problems. This shows the company cares."

There is a feeling that auditing is not really a new development among larger companies. Some curiosity was expressed in the focus groups as to whether medium-level companies, companies that do not have as large a gap between corporate and field operations, will find auditing as useful as larger companies. The few companies in the focus groups with more recent programs were optimistic.

- "Auditing isn't really anything new. We've been doing it for a long time."
- "We're in the process of developing our audit program. We're convinced it is a useful tool for us."

When industry personnel think of expanding auditing beyond the concept of an internal check to verify and validate compliance procedures, they think of expanding the same set of practices to new areas. They do not think in terms of broadening their concept of auditing activities. Auditing vendors [firms from which materials or services are purchased] is a good example of this.

- "We don't use any disposal contractor until we've gone to the site, inspected, looked at their practices, looked at their permits and licenses. That's the kind of thing you can get into."
- "We look at permits, regs and contracts with outside vendors. For example we want to make sure there's no PCB contaminant introduced into our system. Companies could do more along these lines."

Although some industry personnel use the term "environmental auditing" for their activities, many do not. Moreover, there is

considerable sentiment that "environmental auditing" may not be the best term, or even a very good term. Many feel that assessment is a more neutral term and that auditing does not sufficiently capture the review-like nature of the activities.

- "We don't use the term auditing. We have systems review: look at procedures and systems; then have our environmental assessment program. It will look at compliance. We are now in the process of setting the program up."
- "We use rather than environmental audit, environmental assessment."
- "We started out with assessment, then to audit, then back to assessment. We didn't like audit because it means comparing with something. What we are really doing is reviewing."
- "Our policy indicates review and audit, rather than just audit."
- "Actually you can call it whatever you want as long as you define what you mean. Audit may not be the best word."

Finally, industry does not see auditing as being defined entirely in terms of monitoring compliance with regulations. The focus is more on internal policies that have been developed in part to reflect regulations. The audit is conducted to assess whether these policies are being carried out.

- "There are two things you do in an audit. There are the routine things you do when you're observing and recording facts, records and permits. Then you get into the second area where you are making judgments, make decisions based on management attitudes, knowledge of regulations, condition of maintenance equipment."
- "We are looking for compliance with the law, but we're also looking for compliance with company procedures and policies."
- "The way we audit goes beyond comparing ourselves to a standard. We make moral judgments, too. Judgments based on company policy.

In this connection there is concern that the very vagueness of regulations is a major hindrance in that it is difficult to review against them.

- "We try to get as much information in advance because some state laws are different than federal regs screwy, really, and we want to know in advance what we're measuring against."
- "We've developed our own specifications against which to audit because the regulations are so vague."
- "Ours is on-going, changing things as regulations change."

3. Role of Top Management

For industry, environmental auditing is a label designating procedural reviews of field operations. As already noted, auditing at this point is a much less specific concept for EPA program staff, state regulators, and environmental members. An important consequence of these differing views has to do with the role of top management.

In some companies auditing was initiated by top management. In others, the main impetus came from farther down in the organization.

- "The driving force in our company came from upper management."
- "For our company each plant has much autonomy almost each is a small company. The impetus for auditing came from corporate management."
- "We see ourselves as working with the line people, providing them with an incentive rather than top management incentive [directives]. They are interested but it was not initiated by them. In fact, they have the idea that the environmental problems are already handled."
- "The driving force to do an audit really came from the division people - the division environmental people not from on top, but from the bottom."
- "Our plants are also autonomous, but the impetus came from the plants."
- "When our program began I think upper management thought we'd go a couple of rounds, get everything into line and stick these people back in licensing, and everything would be over. That was eight years ago and we're still going strong."

Regardless of whether top management had provided the impetus for auditing, industry participants felt their auditing to be primarily targeted at field operations. The goal is to make sure that field employees are actually following procedures. If they are not, the audit serves as a tool for changing their behavior. Providing information to top management is incidental. Along these lines, auditing is not intended to ascertain risk. A study different from the audit would be used to advise top management about legal exposure. There is considerable interest in risk assessment. But auditing is somewhat tangential to this.

- "An audit is not done to keep management informed. The purpose is to make sure that people in the plants are doing things right."
- "It's not a management information tool."
- "Audits are not done to determine risk or anything like that."
- "If you were going to do a risk assessment, that is what you would do."

In contrast, participating EPA program staff and state regulators tend to see environmental auditing as a source of information and even illumination for top management. They believe that auditing will create more awareness of problems and elicit greater involvement. Auditing information is thought to be critical for risk minimization.

- "Some plant managers are real difficult but the corporate level may get involved as a result of the audit."
- "What the audit could do is let management know what's happening. If they knew, they would take more action."
- "Management has a broad picture of what they want. But dealing with people two or three rungs down is different. The legal people hassle, the plant managers see only their plant and their production. Auditing might get management more involved in details."
- "To assess risk they really need an audit. It gives management the information needed to evaluate risks."

Environmental group participants also see auditing as increasing the awareness and involvement of top management. They are, however, skeptical that this alone will have much impact.

- "Auditing will make management better informed. If laws were enforced, then management would want to make changes. But the laws aren't strictly enforced now."
- "I think the audit is an excellent tool for the management of a company to use if the management cares about the environment. But the government also needs a good enforcement plan to encourage company compliance."
- "I'm enough of a cynic to believe that change will come about only when upper management believes that the information they are learning will make a difference. And why would you bother upper management that things are out of order when no one was doing anything about it anyway."

4. Information and Data

Industry personnel point to interviews with employees as a major source of audit information. Checking documentation, such as job descriptions, is also important. Effort is mainly directed at discovering actual problems, although discovering potential problems receives attention, too.

- "We found in one case by questioning people that sample collection was not being correctly taken and because of that they got very low counts."
- "We audit to see if environmental responsibilities are formally spelled out in a job description. We also have a formal goals/results program to make sure that we are in compliance and doing more."
- "We have done some checking ourselves and have found some problems that wouldn't have come up if we had just looked at records."
- "Sometimes you find a lot of noncompliances out of one area. You go back and try to figure it out and help that guy come into compliance."
- "We are auditing for vulnerabilities that could lead to noncompliance. And we do find problems in the making."

Primary data is seldom collected by company auditors. Audits include checks to confirm that quality assurance procedures are being followed but quality assurance is not part of the audit itself.

- "Continuous monitoring is fairly easy to check. For non-continuous you have to rely on company logs and recordkeeping for direction."
- "Quality assurance is important. We make sure the correct assurance procedures are in place and operating correctly and then monitor to make sure."
- "We look at samples and equipment and performance for quality assurance, but rarely do we actually collect data."
- "We feel uncomfortable about something, we may collect data ourselves, but rarely."

EPA program staff do not have a fixed conception of what information and data should be included in an audit. But there is a feeling that the audit should involve more complete data than is normally compiled — data that give a better picture of actual operations. And an audit should ideally delve into improving control processes. Several EPA program staff participants characterized what they had in mind as a "deluxe" audit.

- "Deluxe would mean someone was in there watching the people, viewing the circumstances, not just re-viewing the data. An on-site evaluation during the physical operation."
- "A deluxe program is the one that gives you the most data about actual compliance daily in air and water."
- "A deluxe audit would go a level beyond compliance with regulations to identifying opportunities which would further eliminate environmental problems. You could get to better safety, better awareness on the part of all employees."

Environmental group members assume that a meaningful audit would necessarily go beyond inspecting records. Collecting original data would be essential.

- "The only way to have a reliable audit is to do original testing. Not in all cases, but in some suspect areas."
- "The audits would have to be all inclusive, not only checking recordkeeping and procedures, but getting raw information. Auditors would have to make sure that the equipment was working as intended."

5. Incentives for Auditing

There is consensus among respondents that formal incentives should not be awarded by regulators for environmental auditing, since the appropriate incentives are inherent in the regulatory process and the kind of additional incentives available are not likely to improve auditing.

EPA program staff appear to believe that auditing should be treated informally as with any other indication that a company is making a real effort. Companies with auditing programs are more likely to be "good guys." Evidence of a serious auditing program can thus be taken into account in dealing with a company. More formal incentives might even compromise regulatory control. It is thought that the basic incentive for auditing lies not with the regulator but with the company. Auditing assures the company that it is in compliance and minimizes exposure.

- "Companies that have environmental auditing want to talk to each other, like to see what other companies are doing to improve their program. This serves as a sign to us and we take it into account."
- "We can offer a benefit of self-auditing. It changes the adversarial relationship between agency and company when the company is trying."
- "An industry can say, 'Look at what we did we found a a problem, and corrected it and the agency didn't take us to court. There are these kinds of self-positives that a lot of companies are going to capitalize on."
- "I don't think they need a particular incentive. What they are doing cuts down on the liability. To me that's an incentive."
- "You can't come up with a system that gives carrots to both sides - incentives, that is. You can't give concrete incentives to companies without losing some of the regulatory oversight."
- "If the company is in an area where they have millions and billions in liability penalties, you are more likely to see environmental auditing in place."
- "The motivating forces are not going to be the regulations. The company is going to do it because of a stronger financial incentive, reduced performance bonds, changing insurance rates, and reducing liability."

- "We [state regulators] feel that the greatest benefit of environmental auditing is for the companies in terms of liability prevention: toxic waste, pollution, that auditing is a low-cost insurance program."

Reduced inspections are considered a possible incentive by state regulators but are not thought to be especially meaningful.

- "In practice what are the real benefits to industry. We talk about reduced inspections. I can't even keep up with the inspections I'm supposed to do."

Environmental group respondents resist incentives on more philosophical grounds. They argue that not polluting the environment should be the major incentive for auditing. Auditing is something that "good guys" should do as a matter of course. A company that does not audit cannot be trusted simply because it suddenly initiates an auditing program.

- "To me, the audit's principal benefit is to the managers and stockholders and their own self-interest in not getting caught with their pants down when it comes to environment. To the degree that it helps the EPA [that] would be a pleasant bonus."
- "If the audit were to keep you from being fined or publicly embarrassed or dragged through the courts, then you might decide to adopt it."
- "Companies aren't supposed to pollute, aren't supposed to be fouling up. You are supposed to go on without harming the environment."
- "As I understand the EPA, they are using it as a way of identifying 'bad actors,' showing better compliance, avoiding environmental problems. But just auditing, by itself, doesn't prove much."

Industry respondents do not look to regulators for incentives. They do not believe that regulators have anything very meaningful to offer as incentives. Auditing is not undertaken with the idea of incentives in mind. Companies expect to be acknowledged as "good guys" because of activities such as auditing. The public relations benefits of auditing are obvious and are a natural by-product of auditing rather than an incentive per se. The basic incentives for auditing are internal financial and management control considerations.

- "The benefit to the regulated company is finding the problem. By preventing it itself the company can save something."
- "The real benefits fall into some financial benefit to the company in some form reduced insurance premiums, feeling comfortable that they can defend themselves a little more quickly, whether they can offer something in mitigation and reduce a penalty by convincing an agency that the company is doing their best. Other than that it won't change things very much."
- "The bottom line is a cost benefit to the regulated person."
- "If a company is going to pay less for an audit to keep on top of things than they are going to pay for penalties, you'll probably see audit programs."

6. Enforcement

Any link between auditing and enforcement activities is resisted by industry respondents. In their opinion such a link would damage the acceptance of auditing within the company.

- "The program should be voluntary and flexible, not mandatory. Forced auditing would kill our program."
- "Auditing has a role within the company. Tying it to outside, external pressures would change how it is done. It would destroy our effectiveness."
- "If the EPA were to come in [with formal enforcement of auditing] we would do something like compliance assessment. We certainly wouldn't go above and beyond."

The view that enforced audits could reduce the effectiveness of current auditing efforts is shared by EPA program staff. They do see a positive impact from enforcement, however. Better enforcement of existing regulations would increase auditing among companies. Auditing is seen as a logical response to greater enforcement activity. The audit would become a major tool for avoiding the consequences of noncompliance.

- "I think we have the mechanism now in the acts to drive auditing into every company that has enough money to put it in by defining noncompliance as any violation greater than what the standards call for on the basis that that is the minimum they are supposed to do."

- "The more the regulated community sees the need [intention] to enforce, the more incentive they have to audit."
- "A sure enforcement program will generate audits. If the company is sure the state will turn up on the doorstep any time, then they might take steps to avoid liability."
- "I think we should force the hell out of the law and we'd get auditing like crazy."
- "The audit process could make companies much more aware of the problems. If the laws were enforced, companies seeking compliance could and would audit. That audit would help the regulated company by pointing out needy areas, elevating the company interest in the environment."
- "Our regulations really aren't sufficient, really adequate. The companies who are really doing the most creditable job are doing a lot more than the regs require."

This relationship does not require that auditing be an arm of enforcement.

- "Enforcement will make companies audit, but the agencies shouldn't use the audits to enforce. We really can't use the audit against a company on technicalities."
- "I can see enforcement driving the need for audits. But audits are not to enforce."

State regulators share the concern about mandatory auditing, but some feel that some enforced auditing would lead to more auditing.

- "Every company that I've run into who has auditing says, 'Don't regulate it.' One state agency can't really give anything as an incentive. We don't have enough people to inspect as much as we should now. In the hazardous waste program we couldn't stop or decrease our inspections because we'd get lynched by the public, so strong is their interest."
- "The larger companies, many of them already have environmental auditing and don't tell the EPA about it because they are afraid of having it become mandatory."
- "We don't need to mandate this at all. If it is good, as we seem to think it is, the companies will discover it on their own."

- "How companies react depends on how auditing is set up. It's one thing to say, 'Thou shalt audit.' It's another to prescribe just what the audit should be. It has to fit the company. How do you tailor it to fit different kinds of companies, different management philosophies."
- "Companies that have auditing in place have seen real benefits. Those who don't may think it is a joke, but as time goes on they will learn from those companies who use it, and will implement it on their own. This could be accelerated if it were a regulation."
- "EPA should do a better job of enforcing the law and that might stimulate more audits. They also should look into whether it is good to institutionalize the audit, not just encourage it."
- "We want to adopt a reasonable enforcement posture. We have to have reasonable criteria to justify what we have done enforcement-wise. We have to defend our actions."

Environmental group members do not object to forced auditing in principle. Since they see auditing as presently an internal corporate matter, however, they put more emphasis on greater overall enforcement of regulations. Such enforcement would cause a dramatic increase in the desire of companies to audit effectively.

- "Better enforcement will produce more audits. The biggest problem we see is the lack of enforcement - not only in Washington but in state governments as well. We see a real reluctance to enforce the law vigorously. When all else fails - negotiations, promises - only then is there enforcement."
- "The EPA should enforce the law and make it attractive for these specialists to develop."
- "If you have a vigorous enforcement program and go after the bad actors, that sort of encourages companies to audit. It might also encourage some state governments to get on the stick."
- "This has to be tied to the enforcement program.

 Enforcement becomes the steam that drives the engine."

7. Disclosure of Audit Findings

Industry respondents are very much against requiring public disclosure for audits. There is concern over exposing proprietary information and risking attacks by the press and environmental groups. There is also the more general feeling that disclosure, as with enforced mandatory auditing, would undercut the ability to conduct a truly useful audit.

- "We're concerned about disclosure. We use block-flow diagrams, much information in which is proprietary and secret."
- "Once the regulatory agencies have copies of your documents, they become available, under the Freedom of Information Act, and newspapers or competitors can get them."
- "Many technical violations come up for several reasons and you can come up against violations that have no real value to environment. And if disclosed, you can really get tied up."
- "Disclosure will discourage those people who don't have programs started and dramatically affect the way we run our programs."
- "Disclosure could force the company to keep two sets of books one public disclosure, the other down to brass tacks for company use."

Industry personnel also worry that public disclosure would greatly increase the involvement of legal staff in auditing. At present legal departments are either uninvolved or are involved in an equal working relationship with auditors. The fear is that disclosure would create a "review" relationship that would hinder the auditing process.

- "We spent a year selling our audit to management, particularly the legal department who had problems over disclosure."
- "If legal had to worry about disclosure they would just sit on us."

However, EPA program respondents see a time dimension for the issue of public disclosure of audit information. For now auditing is internally focused and disclosure, while perhaps desirable in the long run, might do more harm than good. Eventually, however, an external role for auditing may develop. This would in part be due to the requirements of insurance companies and the like, since firms audited by third-party insurers may want to have audit results made available to regulators.

- "If we had public disclosure, we'd quickly find ourselves in technical, legal and mechanical difficulty. We don't have clear standards, tested laws or the accounting procedures."
- "Doing an internal audit will be complete for the company. They have more expertise about their facility than any outside auditor could have now. Though I could see an external audit being done in the future, particularly for publicly held companies. That information would be made public."
- "At some point you'll see disclosure. It wouldn't be appropriate now. In the future, insurance companies will do audits in order to insure. This is what is going on in hazardous waste now. Anyway, this should lead to disclosure and acceptance of disclosure."

EPA program staff's reserved attitude toward disclosure is further prompted by the feeling that disclosure could potentially have a boomerang effect. The EPA could be pressured into pursuing cases that it would otherwise not pursue.

- "Could we really hope to pursue everything that public disclosures might reveal."
- "Disclosure could boomerang. Out comes something and you have to take action."

State regulator respondents share these EPA program staff concerns about disclosure. However, some think information that might have an impact on environmental quality ought necessarily to be public. Disclosure is a matter of the public's right-to-know, and the public concern caused by disclosure of unfavorable facts could be useful, especially as an alternative to stimulate auditing.

- "If we ask a question, they have to answer. This goes for audit results as well as anything else."
- "We keep information that is secret from the public, but theoretically the industry shouldn't keep secrets from us - secrets dealing with environmental impact."
- "An alternative to environmental auditing . . . look at what occurs with drinking water a public notice disclosure that announces noncompliance. Minor municipalities are a lot more attentive when angry constituents want to know why their drinking water doesn't meet standards. This could work for industries because they would be embarrassed to have to explain why they don't comply with environmental standards."

Opinion among environmental group members is sharply divided over whether disclosure would be beneficial. But environmental respondents tend to see disclosure as less of an issue in and of itself than do other groups. This is because they believe that, if audits do uncover valuable data, then regulators should already be requesting that data. And if the data are really important, they should be collected by the regulators. Disclosing audit data is therefore something of a moot point.

- "When they find dirt they have to report it and correct it. That's the law. You don't need requirements about audit disclosures for that. So, yes, disclosure is a good idea. But it is really beside the point."
- "I'm more interested in results, not how they got there."
- "Except for disclosing the presence of a violation, they don't have to disclose but the normal ways: a lawsuit or under 308 letter request."

8. The Accounting Model

Use of the term "auditing" unavoidably gives rise to connotations associated with accounting audits. The term implies a distinction between internal versus external auditing, as well as the existence of audit standards and professionally certified auditors.

Consistent with their other views, industry respondents resist any parallel with the external financial audit. They do not feel that any outside auditor could accurately report on their company or industry. The accounting model thus does not really apply.

- "Setting up an audit is a totally internal process that is unique to each company and I don't see a role for them [outside auditors]."
- "I don't want EPA to mandate a program or to license a contractor and make you use a licensed contractor."
- "They, independent auditors, can't do as good a job as internal."
- "How money flows is pretty common from company to company, but when you get into the environmental process it differs from company or plant to plant."
- "We were charged to hire an external auditing firm. We did; they had good people; they wrote some nice reports giving us visible credibility. I don't think it improved the air or water quality or reduced hazardous wastes."
- "We had an outside audit to kick off our environmental program. We wrote a description of the facility and gave the bidding companies the opportunity to visit the sites in order to know what to bid on. The bids came in and they varied from \$30,000 to in excess of \$300,000. They had no idea how to do it."
- "I don't see a compelling urge to create this group of third party auditors. If they are out there, fine. I don't see them doing much good."

EPA program staff respondents, on balance, appear favorably disposed toward the eventual emergence of external auditing and professional auditors, although they realize that this alternative has been proposed and rejected and that the state of environmental regulations and standards would make this difficult. However, there is some hope that much could eventually be accomplished within an accounting-type model.

- "If all the conditions are in place an environmental audit is not unlike a financial audit."
- "You'd like to have something analogous to the C.P.A. system a profession called 'environmental auditors' who are certified. We have to rely on them to represent us honestly. There has to be some vehicle in place so that where they don't, they can be exorcised from that group. They would have clear standards of performance and professional equipment for monitoring."

- "Financial auditing has a long historical development; we've reached a point about how it's done and what's relevant. Environmental auditing ... is just beginning, and is on top of laws which are not very old and full of all sorts of holes."
- "I think it's a good idea to use a third party person as a permanent day-to-day watchdog at the particularly severe and complex companies."
- "If a third party is 'auditing' day-to-day, that becomes inspection and enforcement. Despite the problems, the accounting idea is attractive. It could work well."

Environmental group respondents find the eventual emergence of some form of "external" auditing out of internal auditing a possible scenario. But there is almost as much concern over the quality of outside auditors and how much they can be trusted, as there is over the quality or meaning of internal audits. Procedures would have to be developed to make sure that outside auditors were thoroughly independent.

Some environmental group respondents also suggested that outside audits would have to go beyond the financial model with its focus on assessing the company to focus instead on assessing environmental impact itself.

- "It may be that the C.P.A. industry created the financial audit, rather than the other way around. Environmental audit management teams might come into being. But we don't want just another window-dressing layer of bureaucrats!"
- "Maybe ten years down the road when each type of audit has a history, you might be able to choose one as much more reliable, then you can give an incentive to the companies doing the outside [the company] audit - maybe a Class A certificate."
- "Auditors need to have a real good independent system with almost an enforcement built into the audit."
- "Audits of publicly held companies should be done by qualified people, secondly they have to be outside the company and there are fairly rigid rules to be followed in order to issue a statement. All publicly held companies should have a strong statement that the company indeed is doing what it says it does and doing the right thing."
- "Most environmentalists believe consultants to the industry no more than they believe industry when it comes to a matter in dispute. I don't know if you can develop independent outside auditors."

- "The audit can't be [wholly] internal. There has to be some interaction between the company and EPA or the state agency to make sure that the audit is being properly conducted and that the right things are being audited."
- "This concern about environmental auditing as compared to financial auditing goes beyond investors' concerns because life quality is concerned. Not only may investors lose money because of judgments incurred, the environment is often damaged. There is an order of magnitude difference."

The third-party audit scenario is considered by both EPA program staff and environmental respondents to be a potential future development. However, it does not appear to be seen as an exclusive development, but rather as a supplement or option to internal audits. The underlying concern seems to be assuring the reliability of audits, regardless of how they are done.

9. Type of Companies

There is agreement that size of company is the critical variable affecting the spread of auditing. Larger companies have been the first to adopt auditing. It remains to be seen whether smaller, medium-size companies will find audits useful.

As noted earlier, industry personnel are curious as to whether auditing is needed in companies with less of a gap between corporate and field operations. There is some feeling that an incentive of some kind might be necessary for these companies.

- "For some smaller and medium-sized companies maybe there would have to be some sort of incentive to at least entice those management types to want to work out a long range plan."
- "Smaller companies need an incentive to go out to find the problems. If you don't know about them, you can't go after them."

EPA program staff sees medium-sized companies as an important target for auditing. Like industrial personnel they are uncertain about how attractive auditing will be to these firms or how attractive it could be made.

- "There are tiers of companies. In the first tier of large companies, auditing occurs and will increase. The second tier, middle-sized companies have not yet caught the idea. They should be our target. We don't know how interested they will be."

- "The problem is how to get to the second tier because they lack the R&D budgets, the policy shops, whatever, and they haven't caught fire yet."

Auditing is viewed by state regulators as a potential new tool for assisting smaller companies. It is these companies who have the most problems and auditing could be positioned as a means of assistance.

- "Smaller industries have the most needs and the most problems. Auditing for them could be held up as a solution."
- "We're interested in learning about how auditing can be applied to smaller companies. We think there is cost benefit here. The smaller a company gets it may not be effective for a company to audit. We're working on a workshop to spread the message to smaller and medium-sized companies to help them develop. We're looking at this from a technical assistance viewpoint, a way of helping companies and to supplement our regulatory approach."
- "There is promise for the smaller companies and smaller industries if they have any associations or groups which could provide an auditing service, probably at a less expensive rate than any other rate. An example is coal mining in one state, an expert on the association staff can prevent a lot of problems if the individual coal companies cooperate."

In addition to medium-sized companies, state regulators view municipalities and municipal enforcement problems as especially likely to benefit from auditing.

- "It's difficult to enforce [regulations] against municipalities. What do you do? Put the city officials in jail? Shut down the incinerators or waste treatment facilities? They can't get funding from state or federal government. They have to tax the people, if they can. It's a real problem."
- "Small municipalities and small industries often do not have competent people whose job it is to make sure of environmental compliance. It is part of someone's job, someone not trained or who is more interested in some other facet of his job. Having audit models or examples for a given industry or facility would help these kinds of companies."

- "We intend to concentrate not on the industries, but on municipalities to make sure that they take care of treatment plants. We are looking at auditing as a way of keeping these in line and clean."

10. Type of Problem

Industry participants consider auditing to be a process that applies across media. They do not think in terms of auditing applying more to one problem than another.

For EPA program staff and state regulators, however, hazardous waste problems seem particularly to lend themselves to auditing. This is because of the severity of the problem and the public attention it has received. In addition, regulatory issues and enforcement are relatively less clear-cut than with other problems.

- "Can mandatory auditing prevent the catastrophic accidents?"
- "Hazardous waste inspection is different than other areas, given the public's concern over the issue."
- "In hazardous waste a tremendous liability can ensue rapidly. They damn well better figure out a way to learn what is going on."

Environmental group respondents agree that hazardous waste problems should be emphasized in using auditing. However, unlike other groups, environmental group members are also concerned that the vague standards associated with problems in other media might cause companies to prematurely conclude on the basis of audits that they are not having a negative impact.

- "The enforcement and monitoring scheme should pay more attention to the companies which are the most potentially dangerous to the environment, as with hazardous waste disposal."
- "The audit can persuade the company that it's doing a great job, when in fact it isn't. Once convinced that their audits are good they can become very difficult to persuade to improve their techniques. This is more prevalent in areas where standards are less certain."
- "Industry can use the lack of knowledge for the justification for less stringent standards and not commit itself to a thorough program of monitoring. Audits could increase this tendency in some areas."

11. EPA Role

Industry believes that the EPA should play a clearinghouse role in encouraging environmental auditing. To do more than this might create resistance to auditing within companies. The clearinghouse role is most compatible with auditing as an internal function. Emphasis should be on making known what other companies are doing.

- "I see as role for EPA as education and a clearinghouse."
- "EPA made it clear that they will not certify audit programs. They should serve as a clearinghouse. Nothing more."
- "We'd prefer to leave things just as they are. A useful role would be one of letting us know what others are doing - to give us ideas."

There also appeared to be little enthusiasm among EPA program staff for an extensive auditing program at this time. Most feel that the basic impetus for auditing is already in place. A clearing-house role is almost a given. This would go beyond industry's concept to emphasize technology transfer. Beyond this, some program staff see a need for more active promotion, but they did not believe the need for such activities (workshops, etc.) is pressing in view of the momentum already associated with auditing.

- "I think environmental auditing would go on even if we [EPA] stopped doing anything on it. I think our approach should be to encourage it: assisting, being a clearing-house, and analyzing. There should be no new crusade initiated."
- "EPA's role should be relatively minimum, an information exchange. We keep our own course, and give people latitude to decide what to do."
- "We can help with technology transfer from one company to another, especially in the area of hazardous waste. We can hope to see some kind of preventive behavior on the part of industry. It would help us target the likely candidates for inspection. It would also help us keep people in continuing compliance."
- "Maybe we can encourage through technology transfer or tell them about example cases they may want to use or perhaps point out their benefits of pursuing such a program."

There is also some feeling, not well crystallized, that EPA will eventually need some way of evaluating audits. It will be in a position of having, at least implicitly, to endorse individual audit programs. Related to this is the feeling that auditing should have some demonstrable environmental benefit, something more than its convenience for the company's own use.

- "There have to be safeguards for the agency so that we can testify to the courts or the public that the audit done by the industry was a valid one."
- "I think EPA should say to the companies some of the things we want out of it, something to help us. An audit does have to be program specific and enforcement specific. We would want certain things out of it."

Among state regulators there is some confusion over EPA's role. They see themselves as having a clearinghouse function and as already beginning to promote appropriate uses of auditing. It is not clear to them what else EPA could add.

- "We are going to put together a brochure for small and medium-sized companies about the benefits and programs available, what other companies have done, how implemented, cost and presenting a workshop for assistance. The economic position of our state stops us from being any kind of a leader in this program if industry doesn't want it."
- "We had a series of workshops about the same time that EPA was beginning to push auditing. The companies at these workshops thought it was something they should have the opportunity to do, the right to monitor their own compliance with the laws. We set up a task force, and heard increasingly that the EPA should provide technical assistance for auditing, but it should not be a requirement. Companies want to run it themseles."
- "We have an industrial assistance program where if we find noncompliance by a company we [the state] have 60 days to help them get into compliance. We help them understand the regulation."
- "I can't think of a role [for EPA] other than what we already do. We want to help companies who want help in compliance and we want to penalize those companies who try to get away with noncompliance. What else can we do?"

- "It's difficult for me to see more we can be doing beyond what we already do except going out to sell it to trade associations and industries. To tell them what we see as benefits, but really it's up to them to decide."

Environmental group respondents have one overriding concern about EPA's role: EPA should not "audit the audits." This would entail an unnecessary and probably ineffective expansion of the bureaucracy. EPA should, consistent with their other views, concentrate on enforcing the law. If this were clearly understood, then environmental respondents would see no harm in some minimal technical assistance and promotional efforts. However, these efforts should not be institutionalized as long-term programs. It should be emphasized that this view applies to the present auditing situation as understood by environmental group members. If the role of auditing were to change, or auditing were to be advocated as a major policy initiative, then environmental group members might see more of a need for "auditing the audit."

- "This is going to take several years to develop and I don't think anyone sitting in EPA orchestrating it is how it is going to happen. The free enterprise system will make it happen if it's a good idea with a little incentive from the government."
- "I want to see this whole thing evolve slowly. EPA shouldn't be in the business of compelling audits and selecting auditors and making audit rules. From the slow evolution standards and good auditors will rise to the top."
- "I'd rather see somebody make a buck out of it rather than have the EPA develop an audit staff and send a bunch of flying tigers out there who don't know anything about the business that they are auditing."
- "I think the EPA should have some technical involvement rather than just letting the company go out on its own."
- "EPA should be prepared to encourage auditing maybe staff people who for a fee advise companies in their audit. The EPA should tell companies that their experience shows that companies doing audits have fewer compliance problems and fewer judgments against them."
- "I'm not sure where there is a role for the EPA. The worst thing is for them running in to help."

12. The Future

With the exception of environmental group respondents, who do not see auditing, or at least internal audits, as a major force, there seems considerable optimism about the future. Although most respondents believe it is premature to develop a specific scenario for auditing, most foresee definite benefits emerging. The most often mentioned were the development of professional expertise in conjunction with the auditor role (whether internal or external to the facility, or external to the company), better data systems, and less need for outside monitoring to determine compliance.

- "Auditing would promote understanding of requirements.
 Also more people who are experts in the field would come into being. Maybe insurance rates may be affected. And it may start to meet the victim comp. issue."
- "I can see our saying that EPA needs less inspections because third party audits are working. It would appear that more companies are in compliance because of the audit function. This would require a long time, overtime, inspection of audits. And if compliance were better, we would not need as many inspections."
- "The direction will probably be to much better utilization of reporting through remote entry of data. Somebody will be doing the auditing whether it's the company or us [regulators]. There will be more and more emphasis on good monitoring."

DISCUSSION

This research indicates that conditions are fundamentally favorable for implementation and diffusion of environmental auditing. However, the course of this future development is unclear. Based on respondents' perceptions as of June 1983 the following key considerations will likely affect future development:

- Environmental auditing connotes different meanings to different segments of the environmental community. These meanings range from a label for programs instituted by industry in order to monitor plant operations, to broaderscale assessments of true environmental impact.
- ° If large companies are any indication, strong auditing programs are now in place. They see themselves as going beyond current regulations and are very interested in sharing the outline of their programs and procedures with other firms and EPA.
- Or Top management may or may not initiate the auditing program, but corporate environmental staff perceive their function as top-down reviewing and educating of plant managers and production people. EPA program staff see top management as being motivated by bottom-up risk minimization. State regulators perceive differences of perspective between management and the line, and along with environmentalists, see auditing as a method of getting top management involved.
- Precisely what information and data should be collected during an audit is open to debate. Industry appears to review data collected on site to make sure that procedures for compliance are in place and being followed at the plant level. EPA program staff and environmental group members envisage more of a deluxe, in-depth audit where the auditors may also be primary data collectors.
- Each of the groups sees external audits and disclosure issues from a different perspective, with industry opposed to external audits or certification of audit programs; states wanting at present to focus on internal audits with the eventual possibility of external audits and increased disclosure; and environmental group members viewing disclosure of audit findings as an essential tool for compliance if auditing is to go beyond being merely an internal corporate matter.

These considerations imply a policy question that is more long-run than short-run. In the short-run, the EPA's course of establishing a clearinghouse role and engaging in low-key promotional activities certainly fits a perceived need. There is basic agreement that such a role is and will remain appropriate for the EPA.

Longer-run policy may have to confront the issue of whether auditing is to remain a largely internal private-sector function. There is cautious sentiment on the part of some regulators, but not industry or environmental group members, that eventual future development along the lines of the accounting model might be desirable. The emergence of professionally certified auditors and clear audit standards, if not of external auditors per se, would be the objective of such a policy, though it inevitably implies some more formal method of taking the results of such "professionalized" audits "into account." The problems of reliability and disclosure of audit findings, the resistance this accounting model would entail, and whether any additional benefits would be worth the effort, would have to be explicitly addressed. One policy question is therefore whether or not to encourage such developments; or whether, in light of the length of time required for evolution of financial auditors and audit standards, the wide acceptance of EPA's clearinghouse role, and the accelerating spread of internal auditing, the issue may eventually resolve itself without explicit policy decisions by EPA or other participants.

(END)