

THEORETICAL PERSPECTIVES ON
ENVIRONMENTAL COMPLIANCE

Final Draft

October 1987

Prepared by:

Barry Boyer, Errol Meidinger, and John Thomas
State University of New York at Buffalo

and

Jasbinder Singh
Policy Planning & Evaluation, Inc.

Under Contract No. 68-01-7252

Submitted to:

Regulatory Innovations Staff
Office of Policy, Planning & Evaluation
Environmental Protection Agency
Washington, D.C.

DISCLAIMER

The information and opinions in this paper reflect those of the authors or cited references and not those of the U.S. Environmental Protection Agency or any other government entity.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the many helpful comments of the academic experts who discussed an earlier draft of this paper: Professors Colin Diver, Patricia Ewick, Barbara Gray, Keith Hawkins, Marc Roberts, and John Scholz. Any problems, of course, are the responsibility of the authors.

TABLE OF CONTENTS

	<u>Page No.</u>
I. INTRODUCTION	I-1
A. PURPOSE AND SCOPE OF STUDY	I-1
B. ORGANIZATION OF THE PAPER	I-1
C. DETERRENCE THEORY AND ITS LIMITATIONS	I-2
II. INTERNAL CORPORATE BEHAVIOR	II-1
A. UNDERSTANDING CORPORATE CULTURE	II-1
1. The Concept of Culture	II-1
2. Management Ideology	II-2
3. Decision-making Routines	II-4
B. CHANGING CORPORATE CULTURE	II-6
1. The Role of Environmental Management	II-6
2. The Role of Top Management	II-7
3. The Role of Line Management	II-8
4. Performance Criteria and Rewards	II-9
III. EXTERNAL INFLUENCES ON CORPORATE BEHAVIOR	III-1
A. INTRODUCTION	III-1
B. SOCIAL NETWORKS	III-2
C. SOCIAL EXPECTATIONS AND LABELING	III-4
D. SOCIAL EXPECTATIONS OF REGULATORY REASONABLENESS	III-7
1. Nature of the Harm	III-7
2. Nature of the Violator	III-8
3. Nature of the Enforcers	III-9
4. Nature of Enforcement Procedures	III-10
IV. CONCLUSION	IV-1
V. REFERENCES	V-1

I. INTRODUCTION

A. PURPOSE AND SCOPE OF STUDY

Deterrence theory has provided the primary framework for analyzing compliance behavior for many years. The purpose of this paper is to identify how corporate (rather than individual) compliance behavior can be affected by factors apart from deterrence theory factors (that is, other than size of penalty and probability of detection), describe how those factors are likely to operate in the environmental context, and relate them to current policy issues in order to contribute to a broader understanding of environmental compliance behavior, and help expand the policy options available to EPA to encourage greater corporate compliance with environmental requirements.

The paper examines major assumptions and findings of many analytical perspectives (including organizational theory, network analysis, cultural analysis, labeling theory, and legitimacy theory) and their possible applications to environmental compliance policy. Although these perspectives have been extensively applied to other areas, they have rarely been extensively applied to environmental compliance. Therefore, the discussion below often extrapolates from other areas of behavior to environmental compliance behavior.

B. ORGANIZATION OF THE PAPER

After a brief discussion in this section of the limitations of the traditional deterrence theory, this paper is divided into three chapters. Chapter II examines factors internal to corporations that appear to have an important effect on compliance behavior. The fundamental premise of Chapter II is that corporate culture, as expressed in both management ideology and decision routines, plays a major role in determining how organizations interpret and respond to regulatory requirements.

Chapter III focuses on compliance factors external to regulated corporations. These include understandings negotiated with regulatory agencies and interest groups, as well as networks of relationships that might be used to pressure regulated firms into improved compliance. The chapter also discusses how the expectations of the regulatory agency can facilitate or frustrate compliance efforts. The chapter also considers how the perceived reasonability of regulations can enhance compliance. Finally, Chapter IV recommends some strategies for incorporating this knowledge into EPA compliance/enforcement policies.

C. DETERRENCE THEORY AND ITS LIMITATIONS

The central assumption of deterrence theory is that compliance is promoted when the probability of detecting a violation, multiplied by the penalty imposed, exceeds the violator's benefits from noncompliance (G. Becker, 1968:169). The goal of an enforcement agency, therefore, is to set the probable costs of non-compliance just above those of compliance. The agency's ability to achieve this goal depends on overcoming several significant limitations.

The first limitation is that deterrence theory does not indicate whether it would be most appropriate to adjust the penalty or the probability of detection. In principle, for example, a violation netting the violator \$100 could be deterred by allocating sufficient enforcement resources to assure certain detection (that is, 100% probability of detection) and setting the penalty at \$101. Alternatively, a regulatory agency could deter the violation by allocating enough resources to create a one percent probability of detection and setting the fine at \$10,001. The alternatives appear equivalent in theory but they are not equivalent in practice. Because enforcement is itself costly, compliance would ordinarily be achieved, at lowest total cost, by the second option - a low probability of detection (and therefore minimal enforcement costs) combined with whopping fines. That option, however, would probably

be inequitable: those with less wealth would have more incentive to comply than those with more wealth. Moreover, such inequities, or simply the perception of a gross disproportion between violation and punishment, might result in reduced legitimacy or political backlash.

A second limitation is that regulated entities might have different attitudes toward risk. Some might prefer risk, others might avoid it. At risk-preferring companies, compliance can best be improved by increasing the probability of detection. On the other hand, at risk averse companies compliance can best be improved by increasing penalties.

A third limitation is that regulatees may not act in an economically rational way. The deterrence perspective assumes that regulatees are rational calculators, who systematically choose options most likely to maximize income in given enforcement environments. This assumption has several serious flaws. In practice, it is often very difficult for regulatees to ascertain the actual probability of detection or the magnitude of punishment. Regulated firms often have great difficulty obtaining and analyzing information on enforcement policies; doing so may be beyond their capacity. It may also be difficult for them to know if they are in compliance. The definition of compliance is often technically complex and subject to considerable negotiations. Furthermore firms will not search for and implement solutions involving costs and benefits over the long run (Russell, et. al 1986). In a given situation, the relatively small number of alternatives considered will ordinarily be limited by the basic assumptions and operating procedures guiding the organization. Therefore, not all cost-effective options are likely to receive serious consideration. Finally, a large and very important part of compliance behavior seems to be based on a commitment to law-abiding behavior in general, rather than to a fear of detection and punishment in particular (DiMento 1986). Therefore, the agency's strategies to improve compliance levels may depend on programs other than those based on deterrence theory.

II. INTERNAL CORPORATE BEHAVIOR

A. UNDERSTANDING CORPORATE CULTURE

1. The Concept of Culture

Understanding the complex idea of "corporate culture" can provide a significant insight into compliance behavior. It tells us why some firms seem to comply positively, others ineptly, and still others engage in overt resistance. Culture can be defined as a "set of shared understandings which makes it possible for a group of people to act in concert with each other." (See e.g. Becker, 1982:513-27; Van Maanen and Barley, 1985; and Meidinger, 1987; for more extended discussions). An organization's culture is based on a set of values and norms that evolve because they seem to work, and reveal the "way things should be done." (Van de Ven and Astley, 1981: 449). Corporate culture spans a wide range of issues that reflect the organization's approach to a variety of situations or problems. It is important to note that organization members (i.e. employees) may be unaware of the corporate culture of which they are a part. Procedures that reflect cultural norms become routinized, informal, and implicit.

Corporate culture embodies procedures which influence the issues that are placed on the firm's decision agenda (Arrow, 1974) and define how observations about problems are collected. (Pfeffer, 1982: 228). Thus, corporate culture can significantly affect the way the firm processes information about compliance problems. The culture of an organization can be changed, but it is not easy to change culture because it is the sum of established norms and expectations. As applied to environmental management, corporate culture affects the way a firm interprets regulations as part of an overall business strategy. This interpretation, in turn, has a direct impact on the firm's perception of the legitimacy of

environmental concerns and the attention these concerns receive. If a corporation's governing culture is that of an "amoral calculator," that is, one which will use any means to reduce costs and increase profits, that attitude will have to be changed to improve compliance performance (Stone, 1986). In another example, if management tries to comply with environmental obligations, but the organization has an entrenched culture that denigrates all but direct production work, that culture will also have to be changed. Varied situations require different remedies to change the corporate culture and improve compliance. The potential for change is especially relevant in two important dimensions of corporate culture: ideology of management and professionals within the firm, and decision routines which govern the management of environmental compliance problems.

2. Management Ideology

Corporate managers may hold strong beliefs about environmental regulation and compliance. Such beliefs constitute an ideology which can influence the relationship between the firm and regulatory officials and the degree of corporate compliance with regulatory requirements. Managers may, for example, hold extreme convictions about the legitimacy of both the substance of regulations and the procedures adopted for enforcing or negotiating compliance. They may believe that it is the firm's responsibility to obey simply the letter, rather than the spirit of the law. Another ideological perspective may view the firm-agency relationship as an arena for bargaining where either side may act opportunistically. Still other ideologies are based on the view that the goals of environmental compliance are legitimate and should be treated on a par with economic goals.

One way that management ideology can influence compliance activities is by controlling the use of information within the firm. The opportunistic firm may distort information, sometimes unconsciously, making it difficult to implement a strategy of

voluntary compliance. One study, for example, has concluded that "... much of the information in organizations is subject to strategic misrepresentation. It is collected and used in a context that makes the innocence of information problematic" (Feldman and March, 1981:182). Thus, information about environmental problems can be gathered for reasons that are more symbolic than indicative of the need for real action or a commitment to compliance. The same type of issue applies to the legitimacy of information provided by the environmental department of the firm. Information about the future financial impact of regulations may not be taken seriously, or an information management system developed by the department may not be fully integrated with line management decision-making. Therefore, compliance action plans may lack information that is directly relevant to decision-making.

Another aspect of ideology relates to the legitimacy of a particular organizational structure for delegating authority. The prevailing ideology may be that management will be individually responsible or liable for mistakes. This set of norms, however, will conflict with a formal structure that attempts to delegate authority to corporate personnel who have the knowledge to take corrective action. As the authors of an analysis of antitrust compliance have observed: "The conflict between protecting top management and imposing effective, efficient compliance programs is a real dilemma created by a view of enforcement bogged down by an overly simple model of corporate decision-making." (Beckenstein and Gabel, 1980:14). The same kind of disparity can exist between the formal corporate structure and corporate ideology about responsibility for environmental compliance.

Management ideology may be more concerned with creating a proper corporate image than with complying with regulations substantively. In a recent empirical study of the effects of compliance, it was found that an ideology of strict conformity to legal rules was no guarantee that a firm would comply with

the intent of environmental regulations. As the authors concluded "... managers should be aware of the possible consequence of blind conformity to legal dictates and ... regulators should take heed of companies that strictly obey the law" (Marcus and Goodman, 1986:179). Thus, this aspect of ideology does not necessarily translate directly into better environmental results. Rules governing environmental compliance may be viewed as little more than symbols of what is required to appear legitimate. The firm may be interested in projecting an image of compliance, yet be incapable of implementing the necessary procedures to achieve actual compliance.

3. Decision-making Routines

It is well known that firms develop decision-making routines or "programs" which control the way information is obtained, transmitted, analyzed, and used (March, 1981). These routines govern (often without a great deal of awareness on the part of decision-makers) major decisions about capital expenditures, maintenance and operation of environmental control equipments, and the selection of technology. Indeed, it can be said that the ideological factors discussed above are institutionalized as decision routines. Beliefs and values of the management and the plant-level personnel are reflected in informal procedures of decision-making. They:

- define the rules-of-thumb that managers use to make routine/structured decisions,
- affect the way decisions are made in unstructured situations,
- limit the search for alternatives, and
- establish the criteria for evaluating those alternatives.

These informal decision-making procedures strongly influence the way a firm perceives and responds to regulatory initiatives by the agency and carries out its environmental compliance obligations. Coping with the complexity of regulatory issues

requires a set of stable decision-making routines that determine, first, the priority attached to compliance, and second, the propensity of the firm to neglect, actively resist, or voluntarily comply (Scholz, 1984:208). Thus, existing decision-making routines can undermine agency efforts to use the threat of sanctions to build a cooperative approach to compliance.

A rather common decision routine is the "solution-driven" compliance strategy. In this situation the search for solutions to problems depends less on a sense of the importance of those problems and more on whether or not they accomplish the short-term objective or fit a pre-existing solution or procedure. In theoretical terms, this phenomenon is defined as a situation where: "... the level of discovery through search depends not only on the activity of problems but also on solutions looking for problems. This can be very important when the technological linkage between a specific solution and specific problem is ambiguous" (March, 1981: 213). The solution driven strategy is not conducive to either the development of appropriate management systems or the firm's capacity to respond flexibly to the regulatory enforcement process. For example, in one case of negotiation over compliance, a firm resisted a settlement because doing so would have meant an admission that a senior official had imposed his own solution with little analysis of its relevance to the problem at hand (Boyer and Meidinger, 1986: 892).

Deterrence theory presumes that the firm will obtain and analyze information in order to make objective decisions about the costs and benefits of compliance and non-compliance. This presumption may not be accurate if the firm has implicitly adopted decision-making routines whose real goal is to convey a sense of legitimacy for its actions. In this case, information is used superficially and may have no direct bearing on actual compliance problems. The firm may, for example, monitor performance, but have no intention of using this data to make a decision about needed changes. This standard operating procedure has been defined in terms

of its impact on the use of information. "Organizational participants seem to find value in information that has no great decision relevance. They gather information and do not use it. They ask for reports and do not read them. They act first and receive requested information later." (Feldman and March, 1981: 182).

B. CHANGING CORPORATE CULTURE

Although the concept of corporate culture is complex, there are various approaches to changing culture that should be considered. These approaches reflect the idea that culture is embedded in the values of line management and the basic mission of the firm. Thus, culture may be transformed by changing key personnel, through training and education directed at managerial values and beliefs, and through changes in an organization's structure which affect patterns of interaction among functional areas.

1. The Role of Environmental Management

A corporation wishing to change its culture might focus on organizational structure of environmental management. It might, for example, create a new department of environmental compliance, with staff in each plant who report to top management. Conversely, the environmental staff might be required to report directly to plant managers, who would then be responsible for both production and compliance performance. Many other types of structural changes are possible. A new formal structure by itself, however, will not guarantee improved compliance. To be effective, the change must be based on a detailed knowledge of existing personnel, their responsibilities and decision-making procedures. Moreover, it should be based upon a careful assessment of the organizational role assumed by corporate environmental staff.

The roles of corporate officers responsible for interpreting environmental regulations and interacting with line managers and regulatory officials are crucial determinants of compliance (Hawkins, 1984). The type and extent of authority delegated to environmental staff and other departments, such as: legal, public affairs, production, finance, and marketing, play a major role in how regulations are interpreted, capital expenditures allocated, control technologies selected, and how short and long term compliance goals are met (Roberts and Bluhm, 1981). Environmental compliance staff must be able to influence the major business decisions that affect environmental compliance on a routine basis, and they must be able to mediate the demands of regulatory officials and the economic goals and condition of the firm. This role of the staff will depend less on a particular structural arrangement and more on the legitimacy accorded to environmental management by all parts of the organization. The legitimacy in turn may depend on the culture of the company. Thus, voluntary compliance depends upon the extent to which the environmental functions become part of the overall business strategy of the firm.

2. The Role of Top Management

Significant changes in compliance ideologies and procedures will not occur without the active participation and commitment of the top management of the firm (Roberts and Bluhm, 1981; Stone, 1985). This group is ultimately responsible for legitimating the mediating role of environmental managers and for institutionalizing a strategy of "positive responsiveness" (to environmental obligations). However, in order to institute necessary changes, the top management must be convinced that it is in its best interest to comply with environmental regulations. The management incentives to comply include: greater profit over the long run, corporate social responsibility, enhanced corporate image, greater personal prestige, and greater business opportunities.

In certain instances the top management can change corporate culture by restating the basic mission of the firm and implementing the associated changes. When high level managers of the Tennessee Valley Authority decided to improve its performance in air pollution control, they were able to redefine what had become its central mission as an economic development agency. Ultimately, a new mission prevailed which incorporated the agency's long standing commitment to resource conservation. Air quality was defined as one of the key resources in need of conservation, and an intensive transformation of the corporate culture to reflect this mission ensued (Roberts and Bluhm, 1981). This example reinforces the significance of the values of top management in defining a corporate culture. Top management must find ways to incorporate the goals of environmental compliance into a clear mission statement. This requires an effort to convince various constituents, such as shareholders and customers, that the objectives of the firm will be furthered by a focus on environmental concerns.

3. The Role of Line Management

Corporate culture can be changed by changing the people in the corporation. The most familiar means to accomplish the cultural change is to change the top management, to bring in a "new team" with new attitudes and new methods. Similarly, an organization can stress hiring certain types of individuals over others regardless of level. For example, when the U.S. Forest Service, once the exclusive domain of foresters, hired large numbers of biologists, landscape architects, and social scientists, its pattern of resource management decisions changed perceptibly (Shannon, 1985). Finally, the firm can be encouraged to develop training programs that focus on ideologies relevant to compliance. In this way, managers can be encouraged to increase their level of identification with professional values that reflect environmental compliance.

4. Performance Criteria and Rewards

Perhaps the most critical aspect of changing culture involves developing a reward and incentive system that clearly accords legitimacy to environmental compliance. Without such a system the firm is likely to follow a path of least resistance, one which at best creates only an image of compliance. Without a deep commitment to rewarding efforts at compliance throughout the hierarchy, the monitoring of compliance problems becomes superficial; the firm follows a strategy of "giving the agency something" and fails to develop a real strategy of voluntary compliance.

An incentive system can reveal the importance the firm attaches to compliance goals. Significant problems or resistance to change may cause the firm to fire or demote key managers (Trice and Beyer, 1985). The firing of a manager does more than remove an executive from the organization. It can signify that there were problems with the established way of doing things, that management made a decision to change the process, and that resistance to the change may be sanctioned. Indeed, these messages can be manufactured and communicated even when it is not clear that the individual who was punished was responsible for the discredited practices (Pfeffer, 1981). Similarly, promotions and other rewards can be used to encourage certain practices as solutions to corporate problems. How people and their actions are treated and, therefore, indicate the importance of certain values and ideas in organizational culture.

III. EXTERNAL INFLUENCES ON CORPORATE BEHAVIOR

A. INTRODUCTION

Some external forces compel compliance by changing the economic conditions of the firm. Fines and penalties, private suits for "toxic torts" or nuisance, rising insurance rates, and the cost and aggravation associated with increasing government enforcement activities can create powerful incentives to comply in two related ways. Most obviously, they affect rational "bottom line" calculation: as the estimated cost of violations rises, compliance becomes economically more attractive. Equally important, these external incentives can alter the culture of the firm, by changing norms or authority relationships. The environmental manager, for example, may be given review authority over capital budgeting decisions, or new training programs may be instituted to make workers aware of the costs of noncompliance. Over time, these changes may become part of the firm's standard operating procedures, and internalized in its culture and ideology. They may become "... the way we do business."

External economic incentives are, however, a relatively crude tool for changing the culture of the firm. If they are set too low, they may simply be ignored: the firm's culture will not change because external conditions have not really changed. On the other hand, if penalties are set too high they may incite the firm's leadership to adopt a strategy of fight-to-the-last-breath resistance to regulation - the opposite of the intended effect. And even if the penalties are set at an appropriate level, responsible people within the firm may regard them as arbitrary or irrational, because they do not understand or accept the basis for the regulations. In these situations, corporate culture is not likely to shift toward greater compliance.

Three promising frameworks for attaining a more compliant corporate culture are social networks, expectation and labeling theory, and the cultural norms defining reasonable behavior among organizations.

B. SOCIAL NETWORKS

Everyone involved in determining environmental compliance - employees and managers within the firm, regulators, political officials, environmental and community organizations, and interested private citizens - operates within a variety of personal and organizational networks. These networks serve as arenas where values are created and reinforced, where various kinds of rewards and punishments are dispensed, and where the meaning of events is socially negotiated (Burt, 1982; Lauman, et al., 1977:594-631). In short, they constitute cultures, and these social networks can be as influential in determining compliance behavior as is the internal culture of the firm.

Three kinds of social networks are especially relevant to the issue of environmental compliance: Community elites, corporate elites, and regulatory networks. Community elites may place a high value on certain types of public-spirited activities, and managers living in the community may engage in those activities in order to gain recognition, esteem, and status among the elite. In studies of corporate charitable giving, for example, it has been found that some communities generate extraordinarily high levels of corporate contributions because local business leaders have embraced philanthropy as a major value of their network, and have made it clear through a variety of methods that those who do not give generously "will always be on the outside looking in" (Galaskiewicz, 1985:74). Because corporate managers are generally ambitious and want to be regarded as leaders in their communities, membership in the elite network can be a powerful inducement.

A second elite network that can influence compliance behavior is the corporate elite. Corporate elites can be confined to a particular region, but they may also be national or even international in scope. They may be part of a formal organization like a trade association, or they may simply have informal contacts with one another. And they may be organized around professional or disciplinary lines (for example, engineers or environmental managers) or industry groups (for example, the chemical industry or steel producers).

Regardless of the form they take, these corporate networks often have a distinct hierarchy and a distinct set of values and incentives. Frequently, certain firms and individuals are looked up to as leaders in the field, and those of lower status seek to emulate them and gain their approval. Leaders, in turn, try to recruit other members of the network to share their vision of the group's enlightened self-interest, and to work toward achievement of those goals. Within these corporate networks, a variety of values and agendas can be established, including some issues relevant to environmental compliance. In the field of hazardous waste management, for example, the Clean Sites organization was created and funded from corporate contributions because executives of a number of major corporations became convinced that they needed to develop an alternative to the slow, legalistic processes of the Superfund program.

A third set of relationships that may be relevant to compliance behavior are regulatory networks. Relationships arise around a particular field of regulation (such as air quality or municipal sewage treatment) in several different ways. Common occupational interests often lead to social interaction, and the various actors - regulators, regulatees, interest group representatives - may come to know each other through meetings, conferences, keeping up with the literature, or mutual friends. Many of them will have regular dealings as part of the enforcement process, as well, and thus

develop ongoing relationships. Finally, many of the long-time members of these networks will have played different occupational roles at different points in their careers. A technical specialist in environmental compliance, for example, may move from a position with the enforcement agency to a consulting firm, and from there to a trade association or a position as an environmental manager in a regulated firm. Through these moves, the person develops friends and contacts, and helps create shared understandings of the underlying environmental problems in which they are all interested.

There are several characteristics of regulatory issues that are likely to make these social networks influential in determining compliance behavior. In many areas, the underlying environmental problems are highly uncertain with respect to basic facts such as the nature and magnitude of risks presented, the preferred alternatives for reducing those risks, and the costs of compliance. Few, if any, individuals have the full range of technical skills needed to interpret and evaluate all of the relevant data. The motivations of other actors and the capacities of other organizations may remain obscure. As a result, there is ample occasion for negotiation and debate over the nature of the underlying problems, and the interests that different parties may have in resolving them. To a considerable extent, the reality of regulatory enforcement is socially constructed. If the agency can influence this process of socially constructing reality, it may be able to increase significantly the likelihood of compliance.

C. SOCIAL EXPECTATIONS AND LABELING

Inasmuch as regulatory compliance and enforcement activities often involve high levels of uncertainty, social science research on labeling or expectancy theory may have some relevance. The central concept of expectancy and labeling theory is the notion of the self-fulfilling prophecy. We all tend to interpret other people's behavior in terms of our expectations. Thus, if a teacher is told

that tests indicate a particular child is a "slow learner" or a "late bloomer," she will tend to evaluate the child's performance to fit that label. Moreover, in time the child will also begin to act in ways that fit the label: he will respond to the teacher's unthinking communication of what is expected by performing up (or down) to those expectations (see generally Rosenthal and Jacobson, 1968; Jones, 1986:41-46).

Similar results have been reported with respect to criminal deviance. If a person is labeled a "delinquent" or a "criminal type," he may become socialized to that identity and act accordingly (H. Becker, 1963). As soon as these labels become attached to a person, they are extremely difficult to change because of the inherent subjectivity of social interaction. It is difficult to "prove" that a particular interpretive framework we are using is wrong. Even if it is possible to show that a particular label is misleading, it may be costly to one or more of the parties to the relationship to admit that they have been acting on erroneous assumptions (Miller and Trumbull, 1986:233-256). Moreover, we are often unaware that we are engaging in an act of interpretation when we use labels; we simply assume that the child actually is a slow learner, or a deviant, or whatever other label has been attached to him.

These studies of individual character formation are not directly relevant to the interactions that take place in a field like environmental enforcement, but there is some underlying similarity. Like teachers or administrators of the criminal justice system, regulatory enforcers need to have a manageable framework for categorizing those within their jurisdiction and for interpreting their actions. In practice, moreover, many enforcement officials do divide the firms that they regulate into "gold citizens," "bad actors," "incompetents," and similar categories. These labels are communicated within the bureaucracy - most regional office staff could probably produce highly similar lists of the bad actors in

their area - and perhaps across bureaucracies as well (from a state to a federal environmental agency, for example). It is probable that these labels affect the choice of enforcement response when the agency encounters evidence of noncompliance.

In the regulatory arena there is also a reciprocal aspect of labeling. Different agencies, different offices within agencies, and even different agency personnel are labeled by the regulated community with respect to characteristics such as technical competence, reasonableness, diligence, and responsiveness. These labels, too, may affect the firms' response to agency demands for compliance, and they may prove equally difficult to live down. In general, labeling and expectancy theory have both a negative and a positive implication for regulatory compliance. On the negative side, erroneous labels may produce improper responses on both sides - a kind of "noise in the system" that prevents the parties in the enforcement transaction from understanding what their counterparts are actually doing. As a result, labels can greatly increase the costs of compliance and enforcement, for both regulator and regulated. If regulatory labels are as difficult to change as the labels we apply to individuals, these costly errors can persist over long periods of time.

"Targeting" systems, in which enforcement priorities are set on the basis of some clear standard like lost workday injuries or "significant noncompliance," can be viewed as a simple and explicit form of labeling, insofar as the firms labeled as significant noncompliers are targeted for aggressive enforcement. Efforts to reward exemplary voluntary compliance, as in OSHA's STAR, TRY, AND PRAISE programs, may also be viewed as a kind of labeling activity. On the whole, however, labeling theory has neither been studied nor used extensively in the administrative process.

D. CULTURAL EXPECTATIONS OF REGULATORY REASONABLENESS

Because regulatory agencies exercise the coercive powers of government, they are subject to special cultural, legal, and political constraints. Their actions must appear to be reasonable and legitimate, both with respect to their goals and the means they are using to achieve them. Like other aspects of the enforcement transaction, "the definitions of 'reasonable' and 'unreasonable' are socially negotiated" (Snider, 1987:50).

To establish their reasonableness and legitimacy in securing compliance, agencies must try to accommodate two potentially conflicting goals. First, they must observe the Rule of Law ideal that like cases should be treated alike, favoritism should be avoided, and violators who are equally deserving of punishment should receive similar sanctions (Davis, 1969; Stewart, 1975). At the same time, however, they must avoid becoming so mechanical or legalistic in enforcement that they ignore differences in the blameworthiness of different violators, or in the cost and effectiveness of compliance for particular firms (Bardach and Kagan, 1982; DiMento, 1986; see also Hawkins, 1984; Kagan and Scholz, 1984). To avoid either extreme in their dealings with the regulated, agencies need to focus on the nature of the harm, the nature of the violator, and the status and competence of the enforcer. They should also consider the reasonableness of the process by which enforcement decisions are made.

1. Nature of the Harm

In the early days of environmental enforcement, sanctions usually were directed at substantial, obvious harms: fish kills, choking smog, or raw sewage dumped into streams and lakes. As the law and technology of pollution control have developed, however, the focus has shifted in several ways: from well-known conventional pollutants to poorly understood toxic chemicals; from high levels to

low levels of exposure; and from immediate, acute threats to life or property to more long term, chronic risks. As a result of this shift, the reasons behind a particular set of regulatory requirements may be obscure, or they may be the subject of hot debate among experts. In this situation, where the benefits of regulatory enforcement are not always clear, the reasonableness of enforcement activity may be more open to question, and the legitimacy of government coercion more subject to challenge.

The costs of compliance may also be increasing as regulations and permits mandate lower and lower levels of a wider range of more exotic substances. Regardless of any actual changes in the costs of compliance, however, legal and political developments during the 1980s have made it clear that there are social limits on the acceptability of those costs. Claims that enforcement is unreasonable and that it is causing competitive harm, are taken more seriously today than they were a decade ago (DiMento 1986). In this economic and political climate, agencies naturally feel greater pressure to demonstrate that their compliance and enforcement activities are cost-justified because compliance will prevent real social harms.

2. Nature of the Violator

Some enforcers, such as consumer protection agencies, usually direct their efforts toward deviant or marginal firms - those which operate at the fringes of the market, and intentionally violate accepted norms of business conduct. Because environmental laws often try to change accepted practices across an entire industry or sector of the economy, EPA's enforcement personnel may encounter substantial number of relatively large and influential firms that are not in compliance with regulatory requirements. Often it will be difficult to determine whether this non-compliance is a result of calculated decisions to maximize profits by evading regulatory requirements, or as a result of some technical difficulty that is beyond the firm's

capacity to correct (Kagan and Scholz 1984 and Hawkins 1984). Thus, noncompliers may be in a strong position to challenge the legitimacy of enforcement in both legal and political forums.

A distinct set of problems arises when a violator is a public entity rather than a profit-seeking firm. It may be politically difficult for the Federal government to compel action by state or local officials when compliance entails significant taxing and spending, as in the case of municipal waste water treatment requirements. In other situations, such a regulation of water authorities under the Safe Drinking Water Act punitive enforcement may be resisted because it would undermine the regulators' status as protector of public health. Whenever it is difficult for the agency to establish that the violator is a deviant who deserves punishment, the legitimacy of enforcement may be undermined.

3. Nature of the Enforcers

Finally, the enforcement officials themselves may have to overcome questionable legitimacy. Regulatory enforcers may be viewed as meddling, incompetent bureaucrats because of the American popular culture's strong distrust of bureaucracy. The technical competence and professionalism of field personnel like inspectors who have frequent contacts with regulated firms may be particularly important in countering this negative assumption.

Enforcement personnel may also have to operate "in a fishbowl" as a result of legal structures designed to assure their accountability, such as public information laws and judicial review. Public constituencies may also try to increase the visibility of the enforcement process in pursuit of their own objectives. At Love Canal, for example, the local residents relied heavily on media pressure to force the government to respond to their plight (Levine, 1984), and other organizations seem to be copying their use of publicity as a way to mobilize government enforcement activity.

Intensive public scrutiny of a particular regulatory program or controversy may increase the pressure for inspectors to "go by the book" and mechanically cite all violations, rather than trying to distinguish the significant violations from trivial ones. Leniency may prove more difficult to defend in public than harshness (Clune, 1983). The result may be inappropriate or unreasonable penalties, and this also can contribute to the perception that enforcement personnel neither know nor care about the reasons for noncompliance, nor about what can be done to improve performance. Some of this pressure may be deflected by having rules and practices in place to deal with enforcement controversies, rather than simply responding to them on an ad hoc basis.

4. Nature of Enforcement Procedures

An important part of the perceived reasonableness of enforcement activities is the procedure used to impose sanctions. Regulatory enforcement has traditionally relied on judicial procedures similar to criminal trials to impose sanctions (Boyer, 1983a). In recent years, however, judicialization has been criticized not only for being too slow and costly (Boyer, 1983b), but also for exacerbating the adversarial relationships among regulators and regulated. Alternative dispute resolution (ADR) procedures like environmental mediation offer some promise of avoiding the unreasonable features of formal legal proceedings (Bingham, 1986; USEPA, 1987).

The nonjudicialized forms of ADR, such as environmental mediation, have two general advantages over trial-like procedures. First, mediation creates a structure in which the participants are not so narrowly confined to the law and facts surrounding a particular violation. Instead, they can explore all relevant factors, including the subtle social factors that may really explain why noncompliance has occurred. Second, ADR can help expand the range of remedies used to correct and avoid violations. If there are

keys to altering corporate culture, or to increasing the influence of environmental managers, these measures should be easier to apply in an informal, negotiated process like mediation.

However, informal processes like AADR may have their own legitimacy problems. Procedures became formalized initially because it was believed that judicialized procedures would make government bureaucrats accountable. Thus it is not surprising to see consensual approaches criticized for failing to provide the necessary checks and balances on administration (Edwards, 1986:677; Susskind, 1981). Others have argued that mediation can only succeed when it produces solutions that are consistent with shared ideas about what is substantively reasonable (Garth, 1982:198), or when it is based on established community structures and relationships (Merry, 1982). If these critics are correct, then ADR may work best - or perhaps can only work - in enforcement setting where the parties have already established an ongoing relationship, and have similar understandings of reasonable compliance practices.

IV. CONCLUSION: IMPLICATIONS FOR COMPLIANCE AND ENFORCEMENT

The cultural perspective may be novel theory in the field of regulatory enforcement, but it has substantial roots in the current practices of EPA and other agencies. Compliance promotion, application of ADR to enforcement, refinement of penalty policies, and moving to incentive-based regulation instead of command-and-control all fit very well into a cultural approach to regulatory compliance. What is still needed, however, is a theoretical framework that will permit EPA to develop these initiatives into more coherent programs, to assess their efficacy more accurately, and to generate ideas for refining and improving them. The various branches of the cultural perspective outlined in this paper could provide a first step toward developing that theoretical framework.

A significant implication of the concept of corporate culture concerns the mission of an organization which defines compliance goals and procedures. It is important for the organization to develop and implement a formal statement of the firm's goals and policies about environmental regulation, compliance and enforcement. Implementation of an environmental policy usually involves creation of an appropriate environmental management unit, assignment of environmental responsibilities, development of management systems (that help a company comply with regulations voluntarily), and involvement of environmental managers in routine business decisions (Roberts and Bluhm, 1981: 363). For these reasons the EPA should promote the development and use of sound environmental policies.

It has been argued in this paper, however, that the effective use of such formal statements of policy and procedure depends upon the organizational culture within which they are implemented. If that culture does not emphasize and promote a shared set of values focused

on the goal of voluntary compliance, then such statements will not become part of the basic incentive system of the firm. The EPA should, therefore, develop ways to change internal culture by some of the factors discussed in Chapter II.

The aspects of the external corporate environment described in Chapter III also have the following implications for the design of agency programs.

1. In assessing the efficacy of past penalties and orders, EPA could focus not only on whether the sanction has produced compliance, but also on how and why it has succeeded or failed. Cultural analysis should be a useful way of organizing and interpreting such data.

2. Environmental auditing provides an opportunity to examine the ways in which structural and procedural changes within the firm affect compliance behavior. To the extent feasible, environmental auditing provisions should be designed and evaluated with regard to their impact on the culture and values of the firm.

3. Compliance promotion activities could be expanded to incorporate consideration of the role of social networks in encouraging compliance, through the following kinds of activities.

- Regional office personnel could be encouraged to consider the ways in which local elite networks can be utilized to encourage compliance. This could include identification of influential persons in the local community, public information activities designed to apprise them of the ways in which environmental compliance can benefit the community, and cooperation in designing programs to make environmental issues visible and important to managers of regulated firms operating within the local community.
- EPA could attempt to identify and strengthen compliance-reinforcing networks like private standards and insurance organizations, trade and

professional associations, and specialized groups for environmental professionals in industry and other sectors.

- EPA could explore methods of giving recognition and status to individuals and firms that have achieved exemplary compliance records.
- EPA should seek to make greater use of regulatory communities - groups of individuals and organizational representatives who share a common interest in a particular regulatory problem or field of regulation - to develop, test, and publicize new initiatives in compliance and enforcement policy.

4. To avoid initiating or perpetuating misleading labeling of noncompliers, EPA could, to the extent feasible, develop policies and guidelines that select enforcement targets and prescribe enforcement responses on the basis of objective factors rather than on the reputation of the violator.

5. Agency penalty policy could give priority to having a flexible sanctioning process in each major program area, with wide gradations of punishment and a clearly defined, publicly accessible set of guidelines relating the sanctions to the severity of the offense. In addition, compliance promotion and public information programs could be designed to communicate not only what is required by regulations but also why it is required, in order to support the perception that the punishment is suited to the violation, and is fairly applied.

6. Field inspectors and other agency employees who have frequent contact with regulated firms can play an important role in spanning the boundaries between regulators and regulated. If they are perceived as competent, professional, reasonable, and interested in helping find solutions to environmental problems, the legitimacy of agency compliance and enforcement activities will be enhanced. Recruitment, training, and promotion of field staff could be designed with the objective of increasing their professionalism and responsibility.

In one respect, the cultural perspective does require the agency to make significant changes in its approach to compliance and enforcement. Traditional deterrence theory relegates the social context of regulation to the background, and treats it anecdotally when it considers it at all. The cultural theory, by contrast, puts the relationships and understandings of the relevant actors at the forefront of concern, making them a primary focus of the agency's efforts to change the behavior of regulated firms. It also attempts to describe and analyze relationships rigorously and accurately, so that over time a body of reliable empirical knowledge about regulatory relationships can be developed. Because much of this theory is relatively new, or has not previously been applied to administrative regulation, it is a challenging task to translate it into workable programs. Meeting that challenge may, however, make it possible to achieve real gains in compliance and enforcement.

V. REFERENCES

- Arrow, (1974) "The Limits of Organization." New York: W.W. Norton Press.
- Bardach, Eugene & Robert Kagan (1982) Going by the Book: The Problem of Regulatory Unreasonableness. Philadelphia: Temple University Press.
- Beckenstein, A. and Gabel H. (1980) "Organizational Compliance Processes and the Efficacy of Antitrust Enforcement", paper presented at the meetings of the Law and Society Association.
- Becker, Gary S. (1968) "Crime and Punishment: An Economic Approach", Journal of Political Economy 76:169.
- Becker, Howard S. (1963) Outsiders: Studies in the Sociology of Deviance. New York: Free Press.
- Becker, Howard S. (1982) "Culture: A Sociological View", The Yale Review 71:513-27.
- Bingham, Gail (1986) Resolving Environmental Disputes. New York: Plenum Press.
- Boyer, Barry and Errol Meidinger (1986) "Privatizing Regulatory Enforcement: A Preliminary Assessment of Citizen Suits Under Federal Environmental Law," 34 Buffalo Law Review 833 (1987).
- Boyer, Barry (1983a) "Fifty Years of Regulatory Reform in the United States." (Paper presented at the Conference on Regulation in Britain, Trinity College, Oxford, Sept. 12-14).
- Boyer, Barry (1983b) "Too Many Lawyers, Not Enough Practical People," 5 Law & Policy Quarterly 9.
- Burt, Ronald S. (1982) Toward a Structural Theory of Action: Network Models of Social Structure, Perceptions and Action. New York: Academic Press.
- Clune, William H., III (1983) "Rationalistic and Political Interpretations of Legalism: A Review Essay on Bardach & Kagan's Going By The Book" (Paper presented at Law and Society Meetings, April 22, 1983).
- Davis, Kenneth Culp (1969) Discretionary Justice: A Preliminary Inquiry. Urbana: University of Illinois Press.
- DiMento, Joseph F. (1986) Environmental Law and American Business: Dilemmas of Compliance. New York: Plenum Press.
- Drayton, (1980) "Economic Law Enforcement." Harvard Environmental Law Review, Vol. 4:1-40.

- Edwards, Harry (1986) "Alternative Dispute Resolution: Panacea or Anathema," 99 Harvard Law Review. 668:677.
- Feldman, M. and J. March (1981) "Information in Organizations as Signal and Symbol", Administrative Science Quarterly.
- Galaskiewicz, Joseph (1985) Social Organization of an Urban Grants Economy: A Study of Business Philanthropy and Nonprofit Organizations. Orlando, FL: Academic Press.
- Garth, Bryant (1982) "The Movement Toward Procedural Informalism in North America and Western Europe: A Critical Survey," in R. Abel, ed., The Politics of Informal Justice, VOL. 2, p. 183. New York: Academic Press.
- Hawkins, Keith (1984) Environment and Enforcement: Regulation and the Social Definition of Pollution. Oxford: Clarendon Press.
- Jones, Edward E. (1986) "Interpreting Interpersonal Behavior: The Effects of Expectancies", Science 234:41-46.
- Kagan, Robert A. & John T. Scholz (1984) "The 'Criminology of the Corporation' and Regulatory Enforcement Strategies," in K. Hawkins & J. Thomas, eds., Enforcing Regulation. Boston: Kluwer Nijoff Pub. Co.
- Lauman, Edward O., Peter V. Marsden, and Joseph Galaskiewicz (1977) "Community Influence Structures: Replication and Extension of a Network Approach". American Journal of Sociology 85:594-631.
- Levine, (1984) Love Canal: Science, Politics and People. Lexington Mass., Lexington Books.
- March, James (1981) "Decision-Making Perspective", in A. Van de Ven and W.F. Joyce, Perspectives on Organization Design and Behavior. New York: John Wiley.
- Marcus, A. and R.S. Goodman (1986) "Compliance and Performance: Toward a Contingency Theory" in Research in Corporate Social Performance and Policy 7:168-182.
- Meidinger, Errol (1987) "Regulatory Culture: A Theoretical Outline," Law and Policy 9:
- Merry, Sally Engle (1982) "The Social Organization of Mediation in Nonindustrial Societies: Implications for Informal Community Justice in America," in R. Abel, ed., The Politics of Informal Justice, Vol. 2, p. 17. New York: Academic Press.
- Miller, Dale T. and William Trumbull (1986) "Expectancies and Interpersonal Processes", Annual Review of Psychology 37:233-256.

Pfeffer, Jeffrey (1981) "Management as Symbolic Action: The Creation and Maintenance of Organizational Paradigms", in L.L. Cummings and B.M. Staw, eds., Research in Organizational Behavior. Greenwich, Connecticut: JAI Press.

Pfeffer, Jeffrey (1982) Organizations and Organization Theory, Pitman Co. :228.

Roberts, Marc and J. Bluhm (1981) Choices of Power, Cambridge, MA: Harvard University Press.

Rosenthal, R. and L. Jacobson (1968) Pygmalion in the Classroom. New York: Holt, Rinehart and Winston.

Russell, Harrington and Vaughan (1986) Controlling Pollution. Baltimore: John Hopkins University Press.

Scholz, John (1984) "Cooperation, Deterrence, and the Ecology of Regulatory Enforcement," Law and Society Review 18 (2):179-223.

Shannon, Margaret A. (1985) Assessing the Communication Effectiveness of Forest Plans and EIS Documents. Report to the Director, Land Management Planning, U.S. Forest Service. Washington, D.C.

Snider, Laureen (1987) "Towards a Political Economy of Reform, Regulation, and Corporate Crime," 9 Law & Policy 37:50.

Stewart, Richard B. (1975) "The Reformation of American Administrative Law," 88 Harvard Law Review 1667.

Stone, Christopher D. (1986) "Corporate Social Responsibility: What it Might Mean, If It Were Really to Matter." Iowa Law Review 71:557-575.

Susskind, Lawrence (1981) "Environmental Mediation and the Accountability Problem," 6 Vermont Law Review 1.

Trice, Harrison M. and Janice M. Beyer (1985) "Using Six Organizational Rites to Change Culture", in Kilmann, et al., eds., Gaining Control of the Corporate Culture. San Francisco: Jossey Bass.

USEPA (1987) "Guidance on the Use of Alternative Dispute Resolution in EPA Enforcement Cases," in Sourcebook: Federal Agency Use of Alternative Means of Dispute Resolution (Administrative Conference of the U.S., Office of the Chairman, 1987).

Van de Ven, and Joyce Astley (1981) Perspectives on Organizational Design and Behavior. John Wiley, N.Y.:449

Van Maanen, John and Stephen R. Barley (1985) "Cultural Organization: Fragments of a Theory", in Peter J. Frost et al., eds., Organizational Culture. Beverly Hills, CA: Sage Publications.