

2. THE BASIS FOR COMPLIANCE AND ENFORCEMENT

INTRODUCTION

One of the primary goals of an environmental enforcement program is to change human behavior so that environmental requirements are complied with¹. Achieving this goal involves motivating the regulated community to comply, removing barriers that prevent compliance, and overcoming existing factors that encourage noncompliance.

Many factors, listed in Table 2-1 and described below, affect compliance. Which factors are operating in any particular regulatory situation will vary substantially depending on the economic circumstances of the regulated community, on cultural norms within the community and nation as a whole, and sometimes on the individual personalities and values of managers within the regulated community.

In any environmental situation several of the factors described below will influence the behavior of the regulated community. For this reason, environmental enforcement programs generally will be most effective if they include a range of approaches to changing human behavior. The approaches described in this text fall into two categories: (1) promoting compliance through education and incentives, and (2) identifying and taking action to bring violators into compliance. In some cultures, these two approaches are referred to as "carrot" and "stick." Different programs will place different emphasis on these two approaches depending on the culture and the particular regulatory situation. However, experience with enforcement programs does suggest that some form of enforcement response may ultimately be essential to achieve widespread compliance.

FACTORS AFFECTING COMPLIANCE

Deterrence

In any regulatory situation some people will comply voluntarily, some will not comply, and some will comply only if they see that others receive a sanction² for noncompliance. This phenomenon - that people will change their behavior to avoid a sanction - is called *deterrence*. Enforcement deters detected violators from violating again, and it deters other potential violators by sending a message that they too may experience adverse consequences for noncompliance. This multiplier or leverage effect makes enforcement a powerful tool for achieving widespread compliance. Studies of and experience with enforcement show that four factors are critical to deterrence:

- There is a good chance violations will be detected.
- The response to violations will be swift and predictable.
- The response will include an appropriate sanction.
- Those subject to requirements perceive that the first three factors are present.

These factors are interrelated. For example, to create an appropriate level of deterrence, a more severe sanction may be needed for violations that are unlikely to be detected. Conversely, a less severe sanction may be sufficient if violations are likely to be detected and response can therefore be relatively swift.

Because perception is so important in creating deterrence, *how* enforcement actions are taken is just as important as the fact that they are taken. History has many stories of small armies that successfully beat larger forces by giving the impression that they were a formidable fighting force. Similarly, enforcement actions can have significant effects far beyond bringing a single violator into compliance if they are well placed and well publicized.

Economics

¹Another major goal of an enforcement program is to correct any immediate and serious threat to public health or the environment posed by pollution (e.g., a chemical spill that is contaminating a drinking water supply, discovery of toxic or explosive chemical wastes in an area accessible to the public).

²*Sanction* is used in this text to mean any adverse consequence imposed on a violator.

TABLE 2-1. FACTORS AFFECTING COMPLIANCE

BARRIERS TO COMPLIANCE AND FACTORS ENCOURAGING	
FACTORS MOTIVATING COMPLIANCE	NONCOMPLIANCE
ECONOMIC	
<ul style="list-style-type: none"> ■ Desire to avoid a penalty. ■ Desire to avoid future liability. ■ Desire to save money by using more cost-efficient and environmentally sound practices. 	<ul style="list-style-type: none"> ■ Lack of funds. ■ Greed/desire to achieve competitive advantage. ■ Competing demands for resources.
SOCIAL/MORAL	
<ul style="list-style-type: none"> ■ Moral and social values for environmental quality. ■ Societal respect for the law. ■ Clear government will to enforce environmental laws. 	<ul style="list-style-type: none"> ■ Lack of social respect for the law. ■ Lack of public support for environmental concerns. ■ Lack of government willingness to enforce.
PERSONAL	
<ul style="list-style-type: none"> ■ Positive personal relationships between program personnel and facility managers. ■ Desire, on the part of the facility manager, to avoid legal process. ■ Desire to avoid jail, the stigma of enforcement, and adverse publicity. 	<ul style="list-style-type: none"> ■ Fear of change. ■ Inertia. ■ Ignorance about requirements. ■ Ignorance about how to meet requirements.
MANAGEMENT	
<ul style="list-style-type: none"> ■ Jobs and training dedicated to compliance. ■ Bonuses or salary increases based on environmental compliance. 	<ul style="list-style-type: none"> ■ Lack of internal accountability for compliance. ■ Lack of management systems for compliance. ■ Lack of compliance training for personnel.
TECHNOLOGICAL	
<ul style="list-style-type: none"> ■ Availability of affordable technologies. 	<ul style="list-style-type: none"> ■ Inability to meet requirements due to lack of appropriate technology. ■ Technologies that are unreliable or

Change may also be motivated by economic considerations. The regulated community may be more likely to comply in cases where enforcement officials can demonstrate that compliance will save money (e.g., achieving compliance by recycling valuable materials instead of discharging them to the environment may yield a net profit), or when the government provides some form of subsidy for compliance. Conversely, the higher the cost of compliance, the greater may be the resistance to compliance in the regulated community. Some facility managers that may want to comply might not do so if they feel that the cost of compliance would be an economic burden to their operations. For example, the Netherlands had experienced a relatively high degree of compliance for processing used oil from inland waterway vessels when the processing was offered free; however, compliance decreased as soon as the government levied a charge for this service.

To remove economic incentives to violate the law, the monetary penalty for a violation would, ideally, at least equal the amount a facility would save by not complying. This deters deliberate economic decisions not to comply, and it helps treat compliers and noncompliers equally.

Institutional Credibility

Each country has its own social norms concerning compliance. These norms derive largely from the credibility of the laws and the institutions responsible for implementing those laws. For example, the social norm may be noncompliance in countries where laws have historically not been enforced, either because the law is unenforceable or because the institutions responsible for enforcement have lacked the political power or resources to enforce. There may also be a resistance to enforcement in countries where recent regimes have imposed laws against the will of the citizens. It may take longer for enforcement programs to build credibility in these countries.

Strategies to build credibility will vary. In some cultures, aggressive enforcement will provide credibility. In others, it may be important to have an initial period of promotion and encouragement to create a spirit of cooperation, followed by a well-publicized shift to more aggressive enforcement to signal that there will be consequences for noncompliance. In other cultures, a mixed approach at the outset may be most successful.

The government's will to enforce environmental laws - that is, to affirmatively promote voluntary compliance and identify and impose legal consequences on those who do not comply voluntarily - indicates and influences social values. Not enforcing a law tends to express a value that compliance is not important. A goal on the part of the government to bring a majority of the regulated community into compliance sends a message that compliance is important and helps build a social norm of compliance.

Social Factors

Personal and social relationships also influence behavior. Moral and social values may inspire or inhibit compliance. For example, in some situations, facilities may voluntarily comply with requirements out of a genuine desire to improve environmental quality. They may also comply out of a desire to be a "good citizen" and maintain the good will of their local communities or their clients. Facility managers may also fear a loss of prestige that can result if information about noncompliance is made public. Conversely, compliance will likely be low in countries where there has been little or no social disapproval associated with breaking laws and/or damaging the environment.

Successful personal relationships between enforcement program personnel and managers of regulated facilities may also provide an incentive to comply. On the other hand, a desire to avoid confrontation may prevent program personnel from pursuing the full range of enforcement actions they may need to take to ensure compliance. Also, an enforcement official's objectivity may be compromised if he or she becomes too familiar with the facility's personnel and operations. Oversight visits by an independent enforcement official can help monitor for and prevent this potential problem. The relationship factor can be incorporated into a compliance strategy through such means as providing technical support to regulated groups and enhancing the interpersonal skills of compliance personnel. Social respect for environmental requirements can be improved by finding industry leaders who agree to set a well-publicized example of compliance, and by firm and visible enforcement of environmental requirements (particularly if the initial focus is to correct noncompliance that is posing significant and clear risks to the environment and/or public health).

Psychological Factors

Several psychological factors, common to human nature, may affect compliance rates. One of these is fear of change - the belief that familiar ways of operating are safe and new ways are risky. Closely related to this is inertia. Many people tend to naturally resist change because of the perceived effort it will require to enact the change. Both promotional efforts to publicize the benefits of compliance and the perception and reality of consequence for noncompliance play an important role in overcoming inertia.

Knowledge and Technical Feasibility

Besides being motivated to comply, regulated groups must have the *ability* to comply. This means they must know they are subject to requirements, they must understand what steps to take to create compliance, they must have access to the necessary technology to prevent, monitor, control, or clean up pollution, and they must know how to operate it correctly. A lack of knowledge or technology can be a significant barrier to compliance. This barrier can be removed by providing education, outreach, and technical assistance.

IMPACT ON PROGRAM DESIGN

As mentioned earlier, which of the factors described above will influence behavior in a particular environmental situation will depend on the culture and situation. An environmental enforcement program will be most effective if its design is based on an understanding of the factors that are operating. Such understanding will enable policymakers to determine the optimal strategy to motivate and enable compliance, and to discourage noncompliance. For example, in cultures where there is a tendency to ignore both requirements and requests for voluntary behavior changes, creating deterrence may be the most important component of program design. Conversely, in countries where there is a social norm of compliance, activities to promote voluntary compliance may be very effective. In situations where financial constraints are the main barrier to compliance, some form of economic support or advantage to the regulated community would likely have great impact.

Whatever factors are influencing behavior, they will almost certainly change over time. Thus, flexibility to review and revise the program design is key to long-term effectiveness.