10. BUILDING AN EFFECTIVE ENFORCEMENT PROGRAM

This chapter discusses issues involved in building and managing enforcement programs. While program structure and resources depend greatly on the roles, responsibilities, and types of authorities available and appropriate in each situation, some steps and decisions are common to the development of most programs.

PERSONNEL

Role of Program Personnel

Usually enforcement programs draw upon a mix of skills and expertise, including engineering, scientific, legal, and administrative. These individuals will need to work together effectively to identify and respond to violations.

One key decision in assigning roles to program personnel is the degree to which inspectors will become involved in following up on violations they have detected. In some programs, inspectors focus on inspections, while other technical and legal staff are responsible for taking action against violators. In other programs, inspectors play a major role in enforcement response. Clearly defining the roles of the individuals involved in enforcement provides a basis for efficiency and cooperation. In many countries, technical and legal personnel work hand in hand to develop enforcement cases. Table 10-1 shows some of the responsibilities typically undertaken by technical and legal staff as they work to identify a violator and develop a case.

Staffing Level

Ideally, an enforcement program will have sufficient staff to meet program objectives. In reality, program objectives may be based, in part, on the staffing level that can be achieved with available program resources. Thus, staffing and program strategies are often interrelated.

The program strategy will define the frequency of inspections and the amount of personnel time required to conduct them. Inspection time includes time for the inspection itself, as well as time to plan the inspection and follow it up with written reports and other actions. The time required before and after the inspection may be twice as long as the inspection itself.

Policymakers will also need to ensure a balance of staffing among the various program functions, to avoid creating bottlenecks due to inadequate staff in a particular area. For example, too much emphasis on identifying violations could mean that many identified violations are not addressed and, as a result, the program loses credibility and operates inefficiently.

Training

Developing the breadth and depth of expertise needed to run a enforcement program is challenging. There are no easy answers to obtaining the right skill mix. Enforcement is such a highly specialized area that some training must occur on the job, either formally, through training programs, or informally, e.g., by pairing a new employee with a more experienced employee performing the same function.

Integrated training (i.e., training designed to develop basic skills in a variety of expertise areas) is valuable to develop the interdisciplinary skills essential to enforcement, and also to build team spirit and a basis of mutual understanding and knowledge essential for future cooperation. The U.S. Environmental Protection Agency, for example, is developing a national training institute that could provide an integrated training opportunity for inspectors, lawyers, and other program staff at all levels of government.

Environmental requirements are changing and complex. Specialized training is often also needed to build a depth of expertise in various program areas and to retrain staff as requirements change or as program strategy is modified.

Fairness and equity are important elements of an effective enforcement program. Training program staff in professional standards of conduct provides an important basis for program credibility.

TABLE 10-1. TYPICAL RESPONSIBILITIES OF TECHNICAL AND LEGAL STAFF IN ENVIRONMENTAL ENFORCEMENT

Stage in Enforcement Response		Typical Technical Staff Responsibilities	Typical Legal Staff Responsibilities	Joint Responsibilities
1.	Determine whether facility is in compliance.	Gather information about the nature and cause of the violation, and what the violator could have done to prevent it.	Obtain access to facility via search warrant.	
2.	Determine enforcement response to a violation.	Assess seriousness of violation. Prepare formal response.	Assess whether the source has violated the law. Determine what legal action is possible. Review formal response.	Determine enforcement action.
3.	Attempt to negotiate settlement out of court.			Negotiate settlement with violating facility.
4.	Develop a civil or criminal case.			Discuss and gather evidence needed for a civil or criminal action. Negotiate with facility. Prepare for hearings.
5.	Present the case in court.	Appear in court to defend technical judgments about a case.	Appear in court to present and argue the case.	

Use of Third Parties

Some enforcement programs use contractors or other third parties to perform certain program functions, e.g., inspections. Third parties can be particularly useful:

- To compensate for shortages of government personnel.
- To ensure adequate staffing during stages of a program (e.g., the first round of inspections) that require more personnel than usual.
- To work through backlogs.
- To provide specialized expertise that is not readily available within the government agency. Use of third parties raises several issues:
 - Qualifications. There may need to be some means to ensure that these third parties are suitably qualified and knowledgeable to perform inspections using the procedures established by the program. For example, third parties can be required to complete a particular training course, or to acquire a particular type of certification.
 - <u>Confidentiality</u>. Information acquired during an inspection is generally confidential. Some
 mechanism will be needed to ensure that the information gathered by third parties remains
 confidential.
 - Fairness and Consistency. Information gathered during an inspection forms the basis for a decision that a violation has occurred and an enforcement action should be taken. Use of third party inspectors may raise concerns about whether decisions made based on the results of third party inspections are consistent with decisions made based on information gathered by program inspectors.

INFORMATION MANAGEMENT SYSTEMS

As discussed in earlier chapters, information on the regulated community, on violations, and on program activities is important to program management. Such information is used to develop priorities and strategies to most effectively use program resources (Chapter 4); to monitor compliance (Chapter 6); to evaluate progress in meeting program objectives (Chapter 9).

An enforcement program will benefit by having some system for information management. Systems vary in different environmental programs and different countries, depending on the amount of information to be managed and on the resources available for management. Where possible, computerized systems are valuable because they allow rapid and sophisticated information storage, retrieval, and analysis.

Regardless of the kind of system, information management planning is important to program effectiveness. Basic issues to address in planning include:

- What information should be obtained?
- Who is responsible for obtaining it?
- Who is responsible for recording it?
- How long should the information be maintained in the files?
- What types of information analysis will be performed?
- Who will perform these analyses and how frequently?
- What, if any, information is confidential?
- What, if any, information should be released to the public?

In the Netherlands, the government has embarked on a two-year program to inventory the compliance status of the 900 companies that hold permits for processing hazardous waste. Inspectors complete a checklist for each company and transmit the results to a central computer. The information system is set up to generate sector-specific reports on compliance behavior, permit quality, and environmental impacts. The inspectors have received intensive training, supported by written materials, about how to obtain, record, and transmit data. The results are being used to support policy development for hazardous waste processing.

Funding is clearly an important issue in establishing an enforcement program. Enforcement programs in different countries use a variety of funding sources. These include:

- <u>General Revenues</u>. Many countries fund environmental programs, including enforcement programs, by allocating funds from general revenues, e.g., income or sales taxes on industry and/or private citizens.
- <u>Pollution Taxes or Fees</u>. Enforcement programs can be funded by taxes levied on or fees charged to facilities based on the amount and/or toxicity of their pollution.
- <u>Inspection Charge</u>. Some programs obtain income by charging facilities for inspections. This is the approach taken in Sweden.
- <u>Permit or License Charge</u>. Program income can be obtained by charging facilities for obtaining a permit or license.
- Monetary Penalties. Policymakers will need to decide what will be done with monetary penalties collected under the program. These can either be deposited in a general government or environmental program fund, or used directly to pay for enforcement program expenses. Using monetary penalties to pay program expenses is an approach widely used by states in the United States but not as yet by the national government. One concern with this funding source is that it may cause the program to lose credibility if it appears that enforcement actions are being taken to increase revenue. If the program is funded through penalties, certain processes must be defined in regulations and procedures to ensure equity, i.e., that the program penalty does not specifically target facilities for enforcement because of the potential penalty revenue.

EVOLUTION OF ENFORCEMENT PROGRAMS

All enforcement programs evolve over time. This section gives examples of how some established programs have evolved. These examples are not intended as models for evolution. Rather they demonstrate that enforcement can be successful in the early stages of program development. They also illustrate how enforcement programs do typically pass through many different stages in evolution in response to lessons learned and changing conditions.

Enforcement as a Priority

The priority given to enforcement by the government is an important factor contributing to the success of an environmental program. Both the United States and the Netherlands have experienced periods where enforcement was not a priority and, consequently, the overall environmental goals were not being met effectively. In both cases, these deficiencies catalyzed a new emphasis on enforcement, with substantial improvements in environmental quality.

In the United States during the late 1970s, the U.S. Environmental Protection Agency conducted a major enforcement effort to bring the most significant violators into compliance. This effort was highly successful. After 1980, however, there was a precipitous decline in the number of federal civil suits and other enforcement activities due to a reorganization of the program and a widely shared perception that enforcement was no longer emphasized by senior Agency officials.

In a much-publicized turnaround, a new management team was brought to head the U.S. EPA in the early 1980s. Enforcement strategies were reconstructed in 1984, and enforcement was emphasized repeatedly by the new Administrator and his Deputy. However, this was not sufficient. So, a new management apparatus was put in place to revitalize the enforcement effort, and to systematize and restructure enforcement so that it would no longer be subject to the whims of management. The U.S. EPA now has well-defined strategies, measures, and systems to manage enforcement to an unprecedented degree. Enforcement continues to be a priority for the U.S. EPA. This management emphasis on enforcement has provided an important foundation for the program to evolve during the 1980s and early 1990s in response to the new challenges and changing conditions.

In the Netherlands, many environmental scandals involving hazardous waste came to light in the late 1970s and early 1980s. The nation's laws regarding hazardous waste were not being complied with because there was no enforcement program. To improve this situation, the Dutch government made enforcement a

priority in 1984 by establishing an extensive Multiyear Intensification Program (MIP). The program's main objectives were:

- Significantly improve the quality of enforcement at the national level by improving the expertise and skills of MIP personnel, allocating more manpower and resources to enforcement, improving the internal organization of enforcement resources, and fostering cooperation among the different groups that would be involved in enforcement.
- Involve officials at the provincial and local levels by developing their skills and expertise, and by strengthening the Public Prosecutor, and increasing the availability of the police force for enforcement.
- Construct a network of cooperation among all the agencies involved.

The program was implemented over a 6-year period and was instrumental in stimulating enforcement at both the national and local levels. During this period, the national government also developed a total environmental program, the National Environmental Policy Plan. This Plan further strengthens enforcement by providing financial resources to the provinces and municipalities to enable them to bring their permitting and enforcement activities up to an adequate level over a 4-year period. Financial resources have also been made available to the Public Prosecutor and the police to enable them to devote more attention to enforcement (under criminal law) of environmental legislation.

Evolution of Authorities

Table 7-1 lists many authorities that may be of value to an enforcement program. Enforcement programs typically begin with a much smaller number of authorities. Additional authorities are added gradually by revising laws after the need for new authorities becomes apparent from unsuccessful efforts to address problems. New authorities are sometimes added based on creative interpretation of existing laws. Even the more mature programs such as those in the United States continue to add authorities as previously unnoticed gaps are discovered and as changes in environmental problems create a need for new authorities that were not previously needed.

In Canada, for example, criminal enforcement has been the predominant enforcement mechanism at the national level. Canadian laws have evolved to provide some very creative criminal enforcement sentencing conditions. However, Canadian officials are now actively considering the need for a complementary civil enforcement program. There is some discussion about whether existing Canadian laws provide sufficient authority to develop a civil enforcement program.

Until recently in the United States, national enforcement programs were predominantly civil in nature, even though certain general authorities could have been used for criminal enforcement of environmental requirements (e.g., a general prohibition on defrauding the government). Over time, the amount of criminal enforcement has increased as criminal authorities have explicitly been strengthened in each of the U.S. environmental laws. New authorities also have been added so that monetary penalties can now be imposed administratively as well as through the courts in virtually all U.S. programs. Consequently, civil administrative programs have significantly increased in importance.

Several U.S. environmental programs began with insufficient authorities to accomplish their goals. For example, the first U.S. laws concerning hazardous waste did not provide authority to correct past environmental damage at ongoing hazardous waste operations. This authority was subsequently added. The original Clean Air Act did not provide the federal government with any authority to seek or impose monetary penalties. Consequently, program officials could only seek court-ordered compliance schedules. An authority to impose monetary penalties was added several years later.

Identifying the Regulated Community and Establishing Priorities

Enforcement programs with limited resources and information often begin by focussing on the few sources that are causing the most severe environmental or public health problems. In the United States, for example, national enforcement programs concentrated first on a relatively small group of major sources to ensure that basic pollution controls were in place. Early enforcement efforts also focussed on particular industries, such as the power and steel industries, so that enforcement officials could build expertise and precedents for these key pollution sources. Priorities became more sophisticated as the programs evolved. More recently, priorities are set based on goals of reducing environmental and health risk and creating

deterrence. In U.S. programs, the need to strike a balance between establishing a broad enforcement presence in the regulated community and targeting the most serious violators has been handled differently at different times. Simple formulas, such as "inspect all major sources of air or water pollution at least once a year," are being replaced by more tailored approaches that are responsive to local priorities and needs.

Compliance Promotion

A fundamental issue in structuring an enforcement program is how much emphasis should be placed on compliance promotion versus enforcement. The resolution of this issue depends greatly on the culture and particular regulatory situation. The U.S. water discharge program provides one example where compliance promotion alone was not as successful at achieving compliance as compliance promotion combined with enforcement. Early efforts promoted compliance by providing municipalities with subsidies to construct sewage treatment systems in conformance with standards specified by law. Nevertheless, compliance rates were relatively low. Major results were achieved in a short time period once significant enforcement actions and accompanying monetary penalties were imposed (see last section of Chapter 7).

Compliance Monitoring

A major issue for enforcement programs is training inspectors. Many enforcement programs rely onthe-job training, with junior staff learning in the field from senior inspectors. For completely new programs, many inspectors learn by experience with each inspection. As experience is gained, inspection guidelines and checklists can be developed.

The development of reliable self-reporting and self-monitoring systems also takes time. This generally proceeds in several steps. For example, a first step can be to ensure that any equipment needed for self-monitoring is in fact installed and operating. A next step can be comparing results across sources to help target inspections. Another step is often development of a system to manage the information so that it can be more easily accessed and used by program personnel.

Enforcement Response

Policies for enforcement response evolve over time as experience is gained and new authorities are added. In the United States, some enforcement policies are tested before being made final. Some enforcement programs purposefully delay developing enforcement response and penalty policies until they have some experience with the actual types of violations that are emerging and with the best approaches for bringing sources into compliance.

Roles and Responsibilities

Several decisions will need to be made in structuring and implementing an enforcement program: the degree of centralization versus decentralization; the role of technical staff versus engineers; whether an enforcement program should cover several environmental media or focus on one medium. Whatever decisions are made, program responsibilities often shift as a program matures. For example, some centralized programs are eventually decentralized to take advantage of expanded resources at the local level. Also, it may be appropriate to decentralize when experience gained at the national level can be effectively transferred to the local level. Some decentralized programs are centralized when differences among decentralized programs cause problems in transboundary pollution or when some local programs may be limiting enforcement to attract industry to the area.

The role of legal staff may diminish as programs evolve and clear tested legal language and procedures have been developed and can be made routine. In the United States, for example, administrative enforcement of many routine violations can now be implemented with established policies and procedures and little attorney involvement.

Historically, U.S. federal enforcement programs have been structured along separate program lines. Now there is greater emphasis on multimedia enforcement. Many U.S. state programs, however, have always had multimedia programs. The United Nations Environment Programme strongly advocates a multimedia approach to inspection.

Evaluation and Accountability

Many enforcement programs rely on anecdotal information to evaluate success both internally and externally. Evaluating program success may not be a focus in new programs, particularly if resources are limited and there is no public demand for information on enforcement actions. U.S. enforcement programs now have a fairly complex system for accountability and evaluation. This system evolved over time in response to the need to effectively manage a decentralized program that retains centralized responsibility for oversight, and also because of the highly public nature of this oversight process. Also, as resources for enforcement have almost doubled from 14% of federal environmental personnel in the early 1980s to 25% in the early 1990s, more attention is being paid to how well those resources are achieving results.