

## Principles of Environmental Compliance and Enforcement Handbook

### Chapter 4: Selecting a Management Approach

International Network for  
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## **4. SELECTING A MANAGEMENT APPROACH**

### **4.1 Introduction**

Three different overlapping management approaches -- voluntary, market-based, and mandatory -- make up the framework underlying most environmental programs. Mandatory and many market-based approaches require effective environmental compliance and enforcement programs to ensure that the underlying rules are understood and followed by the regulated community. Voluntary approaches provide important tools to educate, inform, and motivate polluters about the need to reduce their environmental impacts despite the lack of legal requirements.

All three approaches can be designed to target activities posing the greatest risk to human health and the environment, reduce pollution, and create incentives for individuals, businesses, and governments to find new, more cost effective solutions to environmental problems. What makes mandatory approaches different is that they usually work to establish a base-line of what is required from individuals, companies, and governments in terms of environmental performance.

This chapter begins by examining the three different management approaches. It then examines the general function of laws, regulations, permits, and guidance. It ends by providing an overview of the types of environmental requirements that are codified in laws and regulations and that have served as the foundation of many of the environmental improvements made over the past several decades.

### **4.2 Approaches to Environmental Management**

Most environmental programs today contain a mixture of voluntary, mandatory, and market-based approaches.

#### 4.2.1 Voluntary Approaches

Voluntary approaches encourage or assist the regulated community to take action to ensure its behavior is compliant, but do not require it to take these actions. Voluntary approaches include public education, technical assistance, and the promotion of environmental leadership by industry and non-governmental organizations. Voluntary approaches can be established by governmental or non-governmental organizations. Examples of programs that use voluntary approaches include:

- Most environmental management system programs such as the International Standards Organization's (ISO) 1400 certification.<sup>7</sup>

- The Chemical Industry's Responsible Care® Program.<sup>8</sup>
- The U.S. Department of Energy's Climate Challenge Program.<sup>9</sup>
- Industrial research into process changes that prevent pollution.

#### 4.2.2 Market-Based Approaches

Market-based approaches use the market to achieve desired behavioral changes. These approaches can occur without regulation or build upon mandatory approaches. Introducing market forces into a mandatory approach can encourage greater pollution prevention and more economic solutions to problems. Market-based approaches include:

- Fee systems that tax emissions, effluents, and other releases into the environment.
- Emissions trading programs that allow companies to trade permitted emission rights with other companies.
- Offset approaches that allow a facility to propose various approaches to meeting an environmental goal, for example, by allowing a facility to emit greater quantities of a substance from one of its operations if the facility offsets this increase by reducing emissions at another one of its operations.
- Auctions whereby the government auctions limited rights to produce or release pollutants.
- Environmental labeling/public disclosure, whereby manufacturers are required to label products in a way that informs consumers about certain environmental benefits or public health or environmental risks, allowing the consumer to make informed choices.

#### 4.2.3 Mandatory Approaches

Mandatory approaches require that regulated entities conform to specific requirements. The government then promotes and enforces compliance with these requirements. These approaches include:

- Banning activities or products outright.
- Permitting or licensing certain activities.
- Creating an obligation to monitor and report certain activities.
- Requiring an entity to clean up or repair environmental damage.

### **4.3 Finding the Right Mix**

A number of factors can be considered in determining the right mix of voluntary, mandatory, and market-based approaches to a particular environmental problem in a particular jurisdiction. These factors include:

- Whether overall program goals are to require certain behavior.
- An understanding of what drives environmental performance of different sectors of the economy.
- An understanding of what drives non-compliant behavior of entities on both a sectoral basis and jurisdictional basis.
- The political, legislative, economic, and cultural realities of the society in question.

#### **4.3.1 Overall Program Goals**

The overall program goals will affect the types of approaches taken. If the overall program goal is to require certain behavior, then a mandatory approach may be the best approach. If the overall program goal is to encourage certain behavior, then some combination of approaches may be required. Most effective programs will have a mix of mandatory and voluntary approaches.

Each approach has different strengths and weaknesses that may vary from jurisdiction to jurisdiction. Well-designed and properly implemented mandatory requirements will provide greater certainty than voluntary approaches when accompanied by effective enforcement and compliance programs. Voluntary programs can effectively educate and motivate participants, but generally will not affect the overall economic drivers behind a company's environmental performance goals. Market approaches will allow organizations greater flexibility to adapt to changing science and technological capabilities, but they do not generally mandate fixed pollution targets. This can make it difficult to ensure that specific environmental goals will be met.

#### **4.3.2 Understanding What Drives Performance**

A number of factors -- or drivers -- can help change an organization's environmental performance. The drivers often cited for improving environmental performance include:

- Enhanced efficiency and lower costs through reduced resource use, waste and emissions.
- The desire to create a positive public image and improved relationship with customers.

- Business requirements, such as those created within a supply chain, by business contracts, or through industrial associations.
- The desire for regulatory compliance, which can have additional benefits such as the increased likelihood of fewer inspections and less scrutiny.
- The desire to improve the relationship with government agencies, which can lead to faster approval of projects.

Understanding how these drivers will influence different sectors of the economy and types of organizations will help government agencies tailor policies and target resources, particularly as they relate to voluntary and market-based programs.

#### 4.3.3 Understanding What Drives Non-compliance

Similarly, a number of factors can drive non-compliance. The reasons listed in Box 4-1 are those used by the Netherlands Ministry of Housing, Spatial Planning and the Environment as a way of classifying reasons for non-compliance. Many of these factors, plus others, will be applicable in many jurisdictions throughout the world. Understanding these factors will help program planners predict the likelihood of success of new mandatory programs and decide where to target enforcement and compliance resources.

#### **BOX 4-1: ELEVEN REASONS FOR NON-COMPLIANCE**

Reasons for non-compliance may include:

##### **Aspects of spontaneous compliance**

1. Knowledge of the regulations.
2. Cost/benefit ratio.
3. Degree of acceptance.
4. Loyalty and obedience of the target group.
5. Informal monitoring.

##### **Aspects of monitoring**

6. Informal report probability.
7. Monitoring probability.
8. Detection probability.
9. Selectivity of the inspector.

##### **Aspects of sanctions**

10. Probability of sanctions.
11. Severity of sanctions.
12. Political, legislative, economic, and cultural realities.

Each country will consider what management approach to take based on its political, legislative, economic and cultural situation. Existing laws, regulations, and policies, as well as cultural and societal norms, and those businesses, industries, and organizations with political and economic influence will all greatly affect the environmental management approaches of a particular country.

Compliance officials can influence overall program direction by understanding society's overall environmental goals, the factors driving environmental performance, and the factors affecting non-compliance. With this understanding, they can operate more effectively within the political, legislative, economic, and cultural norms of their jurisdiction.

#### **4.4 Making the Mandatory Approach Enforceable**

Ultimately, the laws underlying mandatory approaches to environmental management must be enforceable. Laws and regulations may ban certain activities or products outright, require permits or licenses for other activities, impose information collection and reporting requirements, define and prohibit violations and provide environmental penalties and remedies for violations. (See Box 4-2).

Market-based approaches also depend on enforceable laws to define the property being traded and to provide incentives to use in the market. The system of labeling to enhance consumer choice, for example, may require enforcement to avoid inaccurate or misleading labeling.

An emissions trading system has elements of both mandatory and market-based management approaches. The first step in a typical trading system is that an environmental authority decides upon an acceptable level of overall emissions. The authority then issues permits consistent with the mandatory targets whereby each firm is allowed to release a certain amount of pollution. Firms are then free to emit that amount or sell all or part of their emissions permit to another firm who may have exceeded their target, providing market incentives for firms to pollute less than their permits allow.

The remaining portion of this handbook focuses on environmental management approaches that are based on enforceable laws, regulations, and other requirements. This is not to say that voluntary or market-based systems are not effective in achieving environmental protection; they should be considered as an integral part of an overall approach. However, there is less societal oversight, control and enforcement involved. This handbook focuses on the design and implementation of compliance and enforcement programs, which are, by

definition, not part of an approach designed to motivate voluntary changes in behavior, but instead attempt to compel compliance with legal mandates.

#### **BOX 4-2: TYPES OF REQUIREMENTS**

##### **Constitution**

Some nations' constitutions guarantee their citizens a clean and healthy environment, giving those governments and others the responsibility to protect that right.

##### **Laws**

Laws provide the vision, scope, and authority for environmental protection and restoration. In some countries, laws also encompass the types of general requirements that other countries describe in regulations.

##### **Regulations**

Regulations establish the details of a law, e.g., criteria for issuing permits and licenses, how and when to test for harmful substances, how the government will conduct itself in an enforcement action, etc. Regulations are most often developed by the implementing agency that is charged with compliance and enforcement under the law.

##### **Permits and Licenses**

The terms permits and licenses are usually used interchangeably. Permits typically control activities related to construction or operation of facilities that generate pollutants. Permit requirements are often based on specific criteria established in laws or regulations.

*General permits* specify exactly what a class of facilities (e.g., gasoline stations) is required to do. General permits and licenses are used when it is impractical or unnecessary to issue a specific permit for each similar, small facility. *Facility-specific permits* specify exactly what a particular facility is required to do. Facility-specific permits often take into account the particular conditions at the specific facility.

*Licenses* are similar to permits. Licenses are authorizations to manufacture, test, sell, or distribute a product, such as a pesticide, that may pose an environmental or public health risk if improperly used. Licenses may be general or facility-specific.

Both licenses and permits are usually issued by the implementing agency.

##### **Guidance and Policies**

Guidance and policies are tools for government regulators to interpret regulatory requirements and/or provide a formal statement regarding a particular issue or problem. These can be directed toward the regulated community or toward the government, prescribing its actions in particular situations. They are frequently used to help ensure fairness and consistency in the application of laws and regulations. In most countries, guidance and policy are not considered legally binding.

The next chapter discusses important considerations when developing environmental laws, including issues of legal authority, institutional framework, and the need for effective and enforceable requirements.