
SUMMARY OF WORKSHOP: COMPLIANCE MONITORING

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GOALS

The discussion was designed to address the following issues:

- Goals for compliance monitoring and country examples of decisions about use of one or more of the following approaches:
 - Inspections.
 - Source self-compliance monitoring, record keeping and/or reporting.
 - Citizen complaints, monitoring.
 - Supplemental information.
 - Ambient monitoring.
 - Aerial reconnaissance.
- Decisions on the structure of an inspection program:
 - Whether to separate permitting and compliance monitoring responsibilities.
 - Use of dedicated environmental compliance inspectors and/or part time duties for environmental or non-environmental professionals such as police or other staff.
 - Single versus multi-media or integrated inspections.
 - Use of governmental personnel or third parties or a combination.
 - Balancing inspections for routine, for cause, for follow up and for case development.
- Overview of compliance monitoring technology:
 - What is the state-of-the-art, what is particularly cost-effective.
 - By medium (air, water, groundwater, soils); whether point or non-point fugitive releases.
 - Daytime or nighttime surveillance (e.g. lidar technology for nighttime distanced observation and measurement of air releases).
- Management of compliance monitoring data, quality control programs for sampling.

1 INTRODUCTION

Many nations face similar problems in developing compliance monitoring programs and decisions about the use of one or more of the following approaches: inspections, source self-compliance monitoring, record keeping and/or reporting, citizen complaints and monitoring, supplemental information, ambient monitoring, and aerial reconnaissance. The discussion focused on examples of special problems and special approaches to compliance monitoring in a variety of countries.

2 PAPERS

A paper on random and risk-based inspection to increase enforcement effectiveness was prepared by Ivan Rajniak of the Slovak Inspectorate of the Environment. The document discusses ways to use these tools to increase the agency's efficiency at detecting companies operating outside the legal framework.

Also, a paper on liquid waste management in western Australia was prepared by Adam J. Parker, et al which describes a system for collecting waste disposal information using electronic data exchange and tracking of truck movements. This paper points to the successful use of global positioning systems to improve compliance and increase the viability of the hazardous waste industry.

In addition, a paper on understanding compliance through root cause analysis was prepared by Joanne Berman and Tracy Back of US EPA which offers a research-oriented approach to identifying sources of noncompliance and trends in targeted industry sectors. This information is then used to refine strategies for compliance promotion, monitoring and enforcement for those sectors.

3 DISCUSSION SUMMARY

3.1 Enforcement Programs

The Rotterdam region is the most densely populated area in the Netherlands. More than 1 million people live within an area slightly under 700 km². A large industrial complex which includes petrochemical companies and refineries is located in the same area. Major environmental problems include air pollution, industrial and residential waste, soil contamination, noise and safety concerns. The DCMR Environmental Protection Agency represents both the provincial government and the local government to speak with one voice in addressing these issues.

Enforcement is seen not as an end in itself but as an instrument to promote compliance with environmental rules. Effective enforcement makes maximum use of enforcement options to achieve environmental objectives. These options include: periodic inspections, communication with companies and residents, and the use of administrative and criminal enforcement actions.

In order to achieve a sustainable society, DCMR supports a "tailor-made" enforcement approach for those enterprises that distinguish themselves in environmental behavior. This differentiation is based on an evaluation of the environmental risk, the environmental impact and the environmental performance of each enterprise. Enterprises

are categorized as “frontrunner” companies which implement a wide range of environmental measures, “middle runner” companies which implement limited measures, and “straggler” companies which either do not comply or comply inadequately.

Egypt and Slovakia use a “tiered” approach to conducting inspections at industrial facilities. In Egypt, a general visit is conducted at all facilities. A second visit is conducted at those facilities who have not complied. A third visit involves detailed scrutiny of the operation. In Slovakia, for larger plants, a multimedia effort involving air, water and waste inspectors is utilized. At smaller facilities, media specific inspections allow for more specialization. In both Egypt and Slovakia, the inspections are targeted based on industry sectors.

Sweden places strong reliance on self-monitoring. A surveillance program is jointly funded by operators and the government. Ghana places strong reliance on investigating complaints from the public. Resulting actions include permit withdrawal, remediation, relocation, plant closure, administrative orders, and prosecution.

3.2 Sustainability

The Inter-American Development Bank is taking a strong role in ensuring that every project is being done in a sustainable manner. Proposals for dams, highways, mining and irrigation projects are being evaluated to ensure that they meet not only the environmental needs of today but of the future as well. The Inter-American Development Bank is working with other banks in joint ventures around the world to achieve these goals.

Nigeria has developed a requirement that each company conduct an environmental audit every five years. Approved consultants conduct the audits and inspectors review facilities for compliance. The national government is planning to publish a report on the status of these companies.

3.3 Public Participation

In some countries citizen participation in environmental issues takes many forms and presents many problems. For example, in Ecuador, local residents took matters into their own hands and shut down an oil pump which local residents felt was polluting the water. The government is interested in promoting media coverage of these kinds of events but is unsure of the proper approach. In St. Lucia, the government has a good deal of environmental information and data since it licenses all industries. However, it is uncertain as to how to develop its messages and to which audiences. In Slovakia plants are required to display emissions data in the front hall of the facility. So far the public isn't paying much attention. Cambodia promotes public participation in its one, very broad environmental law. However, since the environment is a new issue, environmental offices share overlapping responsibilities and no standards exist for water quality, air or effluent discharge.

In other countries a variety of approaches are being tested to actively promote citizen involvement. Jamaica has developed a method to distribute permit and licensing information to the public. Information regarding conditions of approval is made available through the parish wardens and local planning authorities. In addition, a national environmental education program for schools, police and the judiciary has just been launched. Bulgaria is designing a program to employ public/citizen inspectors to augment the state inspection effort. The program allows citizens to accompany state inspectors on certain site monitoring activities. Sweden publishes all industry data including production data and all emissions data are publicly available.

4 CONCLUSION

While no single approach emerged to resolve the common goals of strengthening enforcement programs, improving enforcement capacity and enhancing public participation, there was agreement that many tools can be used to achieve these goals. While these tools may be used differently at different times in different countries, there was agreement that effective enforcement makes maximum use of diverse compliance tools in order to achieve maximum environmental benefit.