
CLOSING REMARKS

HERMAN, STEVEN A.¹ AND VERKERK, PIETER J.²

¹ Assistant Administrator, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, 401 M Street, SW MC 2211 A, Washington, D.C. 20460

² Inspector General, Inspectorate for the Environment, Ministry of Housing, Spatial Planning and the Environment, IPC 680, P.O. Box 30945, 2500 GX The Hague, The Netherlands

Dear participants, on behalf of the Executive Planning Committee for the Fifth International Conference on Environmental Compliance and Enforcement, we bring this conference to a close. We want to thank the speakers, the moderators, the facilitators, rapporteurs and of course you as participants for your excellent contributions in the plenary sessions, the workshops, the regional meetings, the exhibit materials, demonstrations and also the clinics. We may conclude from your enthusiasm, without having seen your evaluation forms, that we had a very successful conference. We have a final count of 245 participants from 101 countries and international organizations.

We realize you had to work very hard during this conference. Not only the plenary but also in all the workshops you participated in. You were a perfect audience for our speakers and you did a very good job in the workshops. Let us always keep in mind what that hard work is for our personal and professional commitment to protect the health and environment of our citizens. We opened the conference with a vision and direction for our international networking and for environmental compliance and enforcement. With the discussions and active participation of each of you over the past five days we are well on our way to realizing that vision. We hear comments from all quarters about how important the conference has been, but it will be like unenforced laws and just a nice memory of Monterey unless you take what you have gained from this Conference and put it to work for you and for all of us.

We were inspired by speeches of U.S. EPA Administrator Carol Browner who described environmental enforcement as an essential pre-condition to realizing environmental gains under most regimes in environmental law. She made it clear that the business of environmental protection is one we must do and do well for ourselves and our future generations, particularly for the health of our children who are disproportionately affected by pollution. Her very strong message was echoed by the words of Mr. William Nitze, Assistant Administrator for International Activities, of USEPA and Mrs. Lois Schiffer, Assistant Attorney General of the United States Department of Justice emphasizing the importance of cooperation and exchange of approaches, information and effective communications and training whether it is at the international level or at the national level to make environmental compliance and enforcement happen.

In our opening remarks, Pieter Verkerk emphasized the international nature of environmental problems and environmental enforcement. He called for greater attention to environmental concerns in international and domestic political policy agendas to create the necessary conditions for establishing an adequate environmental compliance and enforcement program in each country. He pointed to a recent study which showed pollution levels were 30% higher than they should have been with full compliance which challenged all of us to communicate better with the politicians about the environmental results of enforcement rather than just the principles of law and order.

Steve Herman stressed the underlying importance of environmental compliance and enforcement to:

- Punish those who do not comply with the law.
- Require cleanup of polluted resources and ensure repair of the damage caused by pollution.
- Deter those who may be thinking of breaking the law or cutting corners.
- Ensure that those industries and businesses who obey the law are not put at a competitive disadvantage to those who violate the law.
- Prevent the creation of pollution havens.
- Protect human health and the environment.
- Encourage healthy and sustainable national and international economies.
- Encourage and strengthen voluntary and incentive programs.

He also laid out several directions that environmental compliance and enforcement are taking:

- Networking at all levels, from in-country networks to regional and global networks.
- Ensuring public accountability and public participation in enforcement.
- Taking firm, fair and visible enforcement.
- Finding the right balance of “carrots and sticks.”
- Harnessing new technologies and approaches to detect violations and monitor compliance.
- Achieving the potential of environmental management systems.
- Creating a seamless web to stop environmental crime.

Throughout the excellent panel discussions during our plenary sessions we heard example after example of ways that each of us, working together, is making enforcement happen. What will be needed in the future to realize the promise of enforcement and overcome its setbacks? We learned about the importance of an educated and supportive judiciary; of a pragmatic scheme to recognize the realities of coming into compliance while holding the line against violations of the law; of true public access to justice and information; and of in-country networks. We learned of a national inspection initiative to launch a program and of finding ways to confront the sometimes outrageous behavior of environmental criminals. We learned of new ways to link environmental compliance and enforcement to pollution prevention approaches with market forces, permits, and public disclosure. We heard about colleagues overcoming disappointments in applying citizen rights granted in the constitution and of cleaning up shellfish beds after the public was mobilized following years of lax enforcement. We saw examples of creating incentives for compliance and improved environmental management and of finding efficient ways of training our personnel and using communications about performance and enforcement policies to leverage greater compliance. Finally we saw the value of cooperation in international policing and cooperative relationships needed to prevent and remedy illegal shipments of hazardous waste and chemical substances.

We are unable to summarize here the work of all the workshops, but we have highlighted the workshop results in the Addendum to these remarks. This is only to say that much work was done and some new ideas and approaches have emerged.

FUTURE OF INECE

After this successful conference, what is our vision of the future of INECE? The members of the Executive Planning Committee of INECE had two meetings during the conference to discuss its future reflecting the comments we heard from you, the participants at the Fifth Conference, during the Conference, and also reinforced by the outcomes of the regional meetings. In short, we are committed to both maintaining a strong global network which offers a unique focus on environmental compliance and enforcement and we are committed to concerted efforts to foster regional networks. The regional networks are important for several reasons not the least of which is to broaden the breadth and depth of our contacts, to deliver training and to meet other capacity building needs through regional cooperation and to link with natural trading partners in their efforts to ensure a level playing field. Regional networks and meetings can also better address particular environmental problems and needs of specific areas of the world and use common language. For all these reasons, we will do more to strengthen the regional networks and in doing this we will make use of existing regional organizations and ties where appropriate. But this does not mean that we will only rely on regional meetings and networks. Our conference in Monterey has again shown that we need international conferences in which you as participants have the possibilities of meeting, networking, exchanging information and learning from each other regardless of where we come from around the globe.

Enforcement must be made more prominent on the international political policy agenda to support adequate enforcement and inspection structures in each country. With this conference we made an important step in the right direction but we will do our part at the global level to partner INECE with UNEP Secretariats and our own country officials to achieve this linkage before and hopefully not after international agreements are completed. You as participants know how important enforcement of environmental legislation is at both the domestic and international levels and you surely will be able to bring this to the agenda of your politicians. Our NGO network continues to be an important driver of compliance and effective government programs. You as participants know how important enforcement of environmental legislation is at both the domestic and international levels. You surely will be able to bring this to the national agenda.

We will do more to strengthen the regional networks, which should not only provide structure but should focus on content and the way we will get to a better environment. Regional meetings may provide a foundation for exchange possibilities on which we can build and serve as a feeder of information and as a backbone for the participants all over the world. In the regional enforcement networks countries within a given region have the possibility of determining the actual content of enforcement of environmental legislation. Our conference in Monterey with participants from 86 countries and 15 international organizations proves that we still need global networking. That is the reason we started the International Network on Environmental Compliance and Enforcement, INECE. You have clearly told us only again that we need these conferences in which you as participants have the possibilities of meeting, networking, exchanging information and talking about actual enforcement activities.

Both the INECE network and the regional enforcement networks require backing in the form of a Secretariat capable of providing assistance and support to participants and act as a focal point within the region and the other regional INECE secretariats.

In addition to its general duties, the INECE secretariat will assist regional secretariats, maintain contacts and provide support where requested and will also promote development and progress within the networks. We will discuss progress with the Executive Planning Committee together with key representatives from the countries participating in the regional enforcement networks.

The international enforcement conferences—which have been held every two years—might take a year or two longer and perhaps be on a smaller scale than the current ones if it is advantageous to be coordinated and combined with—a regional conference. We will be reviewing the frequency and the needs for the next international conference with the EPC and will likely schedule one at least every three years, based upon the need.

We, with support from the Executive Planning Committee staff, will be working on these issues and for ongoing networking we will advance our Internet homepage and the INECE Newsletter as well as ongoing workgroups on selected topics. We of course solicit your contributions to the newsletter and additional papers for publication.

As you have heard our vision is a very positive one but it stands or falls by your participation in its most active form at the regional and global levels. We are convinced that together we can further shape our vision of the INECE's future during the next years. We count on the existing and future regional and subregional networks.

The Executive Planning Committee had very good discussions on future developments; we promised to discuss these further and present results in due time.

You have the full commitment of the INECE partnership, including the NGOs present at the conference and its members of the EPC to support you in building capacity for environmental compliance and enforcement through ongoing networks and through channels and projects to cooperate on environmental enforcement. We will continue to expand the resources available through our internet website, create global workgroups on special topics, issue a periodic newsletter, and publish additional papers. Environment Canada will complete work they started on the directory of enforcement officials engaged in hazardous waste transport.

We are embarking on a concerted effort to find stable sources of funding for the INECE Secretariat.

We will end then where we began, challenging each of you to leave here with several commitments first, to make the environment a matter which should come first; and second, to work toward in-country, regional and global networks. These networks should serve you well and help you to reach your goals for developing and improving environmental compliance and enforcement programs and to solve specific environmental problems. Without clear goals for improving our institutional capacity or for addressing environmental problems improvements are unlikely to take place. Where international cooperation can help to meet these goals, that too needs definition of specific projects or tasks and make your job more effective.

We wish you all a very good journey home and a very successful enforcement network going.

ADDENDUM TO THE CLOSING REMARKS: WORKSHOP HIGHLIGHTS**THEME #2: COMMUNICATIONS, PUBLIC ROLE AND COMPLIANCE MONITORING**

Workshop 2A Communications and Enforcement

Communications and Enforcement linkage helps to address one of the main problems for environmental enforcement given the imbalance between the huge number of companies under regulation and limited enforcement capacity. Through communication the effectiveness of the enforcement can be improved. Integration of enforcement and communication demands a strategic approach, based on a thorough analysis of the present situation and the environmental problem at hand, the relevant target groups and the means of enforcement.

Workshop 2B Public Role in Compliance Monitoring and Enforcement

Public Role in Compliance Monitoring and Enforcement is an increasingly strong role. Smart government administrators are seeking strategic partnerships with environmental organizations, community groups, unions and business trade organizations. As a political force, citizen interest can provide important support for environmental programs, even when citizens have few resources. Citizens can push government to inspect and enforce; help to monitor compliance; participate in government - industry negotiations; and directly enforce requirements if the legal framework allows. Barriers still exist to effective participation including bureaucratic resistance and resulting public discouragement. In particular, there is a need to promote and critically examine the AARHUS Convention. The abstract "three pillars" provided by the Convention — public participation in decision making, public access to information and public access to justice — are a problem in every country. There are questions of the legitimacy of stakeholder processes in terms of who represents the public, how representative the NGOs are, and a lack of tolerance of discord. Overcoming these may require cultural change. Support needed for public participation includes: environmental laws must include provision for real participation; citizen access to and requirements for environmental discharge and monitoring information; training; technical and legal assistance and funding.

Workshop 2C Compliance Monitoring

Compliance Monitoring poses similar problems to many nations in developing compliance monitoring programs and in making decisions about their use. Many interesting approaches were discussed offering diverse solutions including the use of risk based inspections in the Slovak Republic; global positioning systems in Australia; environmental audits in Nigeria; citizen inspectors in Bulgaria; and tiered enforcement based on environmental performance in The Netherlands.

Workshop 2D Multimedia (Integrated) Inspections and Permitting

Multimedia (Integrated) Inspections and Permitting enables the regulator to evaluate a single facility's processes and technology on a holistic basis and, balancing various considerations and inputs, to design the best regulatory strategy for the facility and the

environment. However, the advantages of multimedia permitting and inspections do come at a cost. Most governments do not currently have personnel with multimedia experience, and it is feared that where regulatory staff operate across all media, there is an accompanying loss of expertise to each individual medium. There also may be a need for substantial reorganization of regulatory agencies in order to achieve true integration across programs.

Workshop 2E Source Self-Compliance Monitoring

Source Self-Compliance Monitoring contributes to the overall efficiency of a compliance and enforcement program and part of good business practice, important for both the regulator and operator. Participants agreed that the current trends toward delegation of many government functions and satisfaction of international standards like ISO 14000 had to clearly respect the role of government to continue to evaluate monitoring results.

Workshop 2F Detecting Hidden Operations

Detecting Hidden Operations continues to pose a problem in knowing where to look, lack of adequate cooperation and information exchange among agencies, and lack of training of police officers to detect hidden illegally operating facilities. Innovative techniques can be promising including mapping sensitive sites with aerial photography to develop a data base and baseline to monitor changes; use of environmental criminal intelligence and analysis; comparative data from similar time or events overtime such as composite samplers hidden in manholes; looking at chemical signatures including oil from ships; blending traditional criminal investigative techniques with regulatory inspection techniques; using microtaggants and DNA analyses of selected endangered species to develop a database; use of global positioning systems to monitor barge and ship channels; and use of tips from networks established with other government agencies and citizen volunteers. The most promising actions seemed to be training of law enforcement authorities to recognize environmental violations and provide initial response.

THEME #3: "CARROTS AND STICKS"

Workshop 3A Structuring Incentives for Private Sector Compliance

Structuring Incentives for Private Sector Compliance are widely used throughout the world. There are many different sorts of incentive: economic incentives such as tax breaks for investments in environmental technologies; legal incentives, for example, restraint from criminal prosecution to encourage disclosure; regulatory incentives such as fewer inspections for industry with a good compliance record; and public relations incentives such as award schemes. Success or failure of these schemes depends on them being carefully crafted to meet the needs and aspirations of the regulated community. To make incentives successful, it is important for regulators to provide technical assistance, while at the same time, continuing to monitor the state of compliance through inspections and other means. However, the use of incentives must be backed up by a clear understanding on the part of the regulator and the regulated that non-compliance may lead to strict and punitive enforcement. Although, in some countries, regulators are considering whether it would be sensible to adopt

different enforcement strategies for companies using environmental management systems, to date, regulators have not done so because such systems do not provide a guarantee that accredited companies are not polluting the environment.

Workshop 3B Environmental Crime

Environmental Crime was difficult for the group to define. It was apparent that different legal systems in the different countries treated violation of environmental legal requirements in different ways. It was, however, agreed that one had to look at whom or what was intended to be protected (human health/environment), the seriousness of the damage/risk, the size of the geographical area or population affected and any financial gain accruing to the violator as a result of his action. In some countries there had to be a criminal intention for negligence, in others a strict liability approach was adopted. Not all countries recognized the concept of corporate criminal liability which made it difficult to obtain judgements against companies. Some countries had a very clear list of what was regarded as “environmental crime.”

It was generally agreed that the following points should be addressed in all countries if enforcement of environmental law was to be effective:

- Education: the general public and “regulated” community should be well informed as to environmental law requirements and the benefits flowing from compliance with such requirements.
- Training: judges, police and prosecutors should be trained to enable them to properly assist the environmental agencies.
- Speeding up of the judicial process: delays in court proceedings are not conducive to deterrence.
- Politicians had to be convinced of the long term benefits of environmental protection rather than giving priority to economic development, particularly in developing countries.
- Flexibility: legal and administrative systems should be flexible enough to give the appropriate response in each case.

Workshop 3C Citizen Enforcement

Citizen Enforcement is an important aspect of an overall enforcement strategy. It helps strengthen and support government efforts and the overall achievement of common citizen and government goals of environmental protection.

Although standing to go to court to enforce the law is an important tool for citizens, it is also important for them to have the ability to use other tools, such as direct action, lobbying, negotiation, training, and public opinion.

In fact, citizens and government can cooperate directly through formation of coalitions, open citizen access to information, citizen-government-industry negotiations, direct lines of communication, and citizen delegation of monitoring and inspection tasks.

Although citizens face many common obstacles in seeking an effective role in enforcement, citizen enforcers are looking ahead to concrete solutions to these obstacles, such as:

- Improved public access to information.

- Clear environmental standards, to ease the burden of proving harm and causation.
- Quicker judicial processes, including a judiciary well-informed about environmental law.
- Broad standing for citizens to go to court to enforce the law.

It is important for non-UNECE countries to consider acceding to the new Public Participation Convention (AARHUS) and UNECE countries should proceed with implementation as rapidly as possible.

Workshop 3D Structuring Financial Consequences in Enforcement: Penalty Policies, Recovery of Damages, Recovery of Economic Benefit of Non Compliance

Structuring Financial Consequences in Enforcement: Penalty Policies, Recovery of Damages, Recovery of Economic Benefit of Non Compliance was structured around key questions to address the concept of "polluter pays," and how monetary fines can be effective in recovering damages and deterring environmental violations. All countries are grappling with the issue of what responses to use when companies are found violating environmental conditions. The strategy of using monetary fines is not well-developed or widespread as an effective tool in many countries. This is because countries have a range of historical or cultural responses including the belief that more useful tools are negotiation and cooperation, public embarrassment, the need for quick action, shutdowns, the inability to levy fines on small operations and a society's general tolerance for a widespread and diffuse environmental problem.

Without a culture's embracement of the use of fines as a deterrent or punishment, establishing such financial consequences are difficult and may be even more difficult to collect if imposed. For countries with authority to use financial penalties, the structuring of appropriate penalties may be the role of the judiciary. The participants agreed in those situations that the ability to "recommend" an appropriate penalty is useful especially the ability to analyze the economics of the pollution damage. This type of analysis and economic information is not generally well-utilized or available.

Workshop 3E Role of Negotiations in Enforcement

Role of Negotiations in Enforcement is appropriate at various stages of compliance and enforcement, even in countries that do not provide a role for negotiation in adversarial circumstances. Although the use of negotiation between government and regulated entities varied considerably among countries, all countries acknowledged some use of negotiation with regulated entities and all countries acknowledged the use of negotiation among governmental colleagues and jurisdictions.

Workshop 3F Administrative Enforcement: Getting Authority and Making it Work

Administrative Enforcement: Getting authority and making it work is important given the consensus that it is preferable to have available administrative, civil judicial and criminal enforcement tools for an effective environmental enforcement program. Although the environmental law systems of many developing countries have not yet matured to the point

where they can evaluate the effectiveness of administrative enforcement tools, representatives of these countries recognize the advantages provided by having the discretion to act administratively.

Workshop 3G Compliance Schedules and Action Plans

The use of compliance schedules and actions plans, particularly in conjunction with sanctions, is a pragmatic way of recognizing the realities of what it takes to correct a problem once government has gotten the source's commitment to do so. Workgroup participants were given a model agreement to control environmental pollution whose parts included identifying parties, providing background and indicated authority under which agreement is undertaken, definitions, describe actions government agencies will take, specifically describe measures enterprise will implement to reduce pollution, establish time schedule for implementing the measures, provide for monitoring of performance under the agreement, specify funding commitments, identify responsible individuals who will act for the parties to implement the agreement, provide for penalties and identify mechanisms for resolution of disputes about the agreement.

THEME #4: CAPACITY BUILDING

Workshop 4A Managing Centralized and Decentralized Programs

Managing Centralized and Decentralized Programs is difficult either way given that none of these systems work smoothly. There is a diversity of different arrangements for decentralizing some or all environmental regulation. There is a need for certain issues to be addressed centrally, for example: ambient standards, basic legislation, test methods. There were some issues where opinions varied as to whether they should be addressed centrally, for example:

- Procedural requirements for application and determination of permits; emission standards.
- Best available control techniques. National guidance / rules / standards need to include an explanation of the circumstances in which discretion can be applied locally and the scope of any such discretion. Human interaction between different levels is essential to make any system work. This works best when mutual understanding, trust and respect is established.

Compartmentalization of environmental issues is artificial. Recognizing the holistic continuum of environmental issues is essential for successful environmental protection. Whatever the administrative arrangements, a mutual focus on achieving specific environmental goals, will greatly assist the smooth working and success of different levels of organizations, and the people within them.

Workshop 4B Budgeting and Financing Environmental Compliance and Enforcement Programs

Building effective environmental programs requires a solid core funding mechanism to succeed. Innovative financing schemes along with clear priority setting mechanism are essential to the success of the program. The principle that the polluter pays is an accepted

basis for developing a sustainable funding mechanism for funding environmental programs. However, in difficult financial times, these sources of revenue for environmental programs diminish along with the rest of the economy. Even designated revenue streams such as permit fees can be diverted to non-environmental programs.

Workshop 4C Training Programs for Compliance Inspector, Investigator and Legal Personnel

Training for inspectors is considered to be the weakest link in an effective environmental enforcement program. It lags behind demand for many reasons, mostly insufficient resources to provide it to enforcement personnel. Training needs vary depending upon the size of the country, the size of the enforcement program, the expertise of the staff, and the cultural and language considerations within the country. Training is not only needed for enforcement personnel; i.e., inspectors, staff lawyers and investigators. It is also needed for judges, magistrates, prosecutors, NGOs, the regulated community, and of course, the general public.

Although training needs are frequently not being satisfied, several approaches are available and others suggested in order to bridge the gap. These proposals include new technology like satellite links and CD ROM, teaching methodologies like train-the-trainer programs, and exploring sources for funding and training. In this last regard, it is believed that INECE could play a vital role in establishing a link with regional networks to assist in locating training programs and funding.

Workshop 4D Setting Up Compliance Assistance Centers

Around the world national, state and local environmental authorities are striving to balance the responsibility for aggressive environmental enforcement with the equally imperative need to provide assistance to the business community in the areas of knowledge of the requirements of environmental law, and resources available to business to aid in establishing and maintaining compliance. Attempts to integrate compliance assistance activities into the enforcement role that must be played by the environmental inspector has led to debate as to whether the inspector can be both effective enforcer and at the same time provide assistance to a business in meeting the requirements of the law. The type of assistance which can be provided has also been the subject of discussion. Certainly, an inspector must be expected to provide a business with a clear understanding of the requirements of the law and a knowledge of which agency's and which agency personnel are assigned to monitor that business. The provision of technical advice on subjects such as waste treatment technologies or choice of treatment systems however take the inspector into uncharted waters.

Workshop 4E Science of Enforcement

All nations and organizations recognized the need for sound scientific and laboratory support to measure ambient environmental conditions, develop meaningful standards, analyze impacts to water, land and air, monitor compliance with environmental requirements, and to enable successful prosecution of environmental law under the legal standards that apply for admission of evidence. The discussion centered on exchanging information on existing laboratory capacity, good practices for sampling and analysis to be admissible as evidence, and developing regional approaches to share capacity where it is lacking. The workshop identified existing electronic networks which provide access to laboratory and

information resources, including those set up by NGOs and other international organizations. The participants explored financing options for enhancing scientific and laboratory support and agreed to set up an Internet network among the participants, INECE, and others, with E-Law on Science in Enforcement, which was on line by the end of the conference in Monterey.

Workshop 4F Government/Municipal/Military Compliance and Enforcement Strategies

Participants were unanimous that Government/Municipal and Military installations should comply first with environmental legislation to set an example for the private sector. The approach to compliance and enforcement should not differ very much from private owned installations. Countries must create the legal possibilities to demand and enforce the environmental requirements for these installations; political will and motivation through efforts to make environmental problems visible and by supporting NGOs as a catalyst to mobilize the environmental; education and training; environmental care systems.

Workshop 4G Small and Medium Enterprises Compliance and Enforcement Strategies

It was generally agreed that the problem of compliance and enforcement for small and medium businesses is not simply an environmental problem. It is a political and economic problem as well. Because the problem of compliance is an "integrated one," the solution must be integrated as well. It must involve environmental, political, cultural, economic, social, governmental, societal, private sector and NGO input.

There is no way to reduce the number of such businesses, and in fact the numbers are growing in most countries. Enforcement solutions seemed to focus on responding through organizations of several varieties:

- Encouraging "clustering" to provide for shared treatment systems.
- Utilizing associations to communicate with, influence and provide improvements or assistance.
- Utilizing social systems to influence behavior.
- Using "economies of scale" to make improvements and development affordable.
- Developing laws to get companies to enforce against other businesses.

In the end, it appeared to the participants that the most viable approaches appeared to involve some means of *avoiding* dealing with large numbers of enterprises on an individual basis to achieve compliance. This "theme" developed from the very rich experiences of the participants, many of whom had been using thoughtful and creative means to make the best use of limited governmental resources in the environmental enforcement field.

Workshop 4H/4I Mobile Source Compliance Strategies and Enforcement/Non-point Source Compliance

Non-point Source Compliance is difficult to address since most countries are at beginning stages of trying to create enforceable mechanisms in the area of non-point source compliance. Participants agreed that pollution from many, diffuse sources takes creativity and political will to prevent and reduce. The group identified solutions such as economic incentives, partnership and voluntary programs and training as the core of addressing non-

point source pollution from forestry, agriculture, construction, mining, etc. However, the group also felt that where large industries were concerned, stronger enforcement mechanisms were necessary building on raised public awareness and cooperation among agencies.

Workshop 4J Geographic or Resource Based Compliance and Enforcement Strategies

Geographic or Resource Based Compliance and Enforcement Strategies are needed by the nations represented at the workshop particularly for watersheds. There was recognition that an ecological approach must be employed when protecting drinking water sources due to the downstream impacts of upstream activities. Often, watercourses cross international or internal administrative boundaries, requiring complex and cooperative approaches to problem solving.

Protection of resources in remote areas sometimes requires specialized enforcement responses such as covert investigations. Implementation of a system of protected areas can ensure that nature is protected while economic development continues on the remainder of the land base.

Industrial globalization has resulted in the presence of multinational industries in developing nations that may not yet have the legislative or technical capacity to prevent pollution of formerly pristine areas. International assistance in development of training systems and also provision of direct training in the developed world can be used to overcome these issues.

THEME #5 INTERNATIONAL COOPERATION AND TRANSBOUNDARY

Workshop 5A Illegal Transboundary Shipment of (Hazardous) Waste

Illegal Transboundary Shipment of (Hazardous) Waste is caused by many different ways that violators circumvent provisions of Basel Convention and other laws on shipment of waste including: mislabeling of hazardous waste; hazardous waste hidden in legal shipments; unidentified hazardous waste imported and abandoned; fraudulent recycling; imported hazardous materials that are imported, become or create hazardous waste, and then are abandoned; hazardous waste imported negligently or because of lack of knowledge; use of transshipment centers, e.g. Hong Kong and Singapore, to launder waste; and smuggling of hazardous waste for abandonment. Types of and successes in bilateral and multilateral international cooperation and information sharing, include improved procedures and other requirements and improved detection of violators. The group reported a number of success including:

- Tracking of shipments: Australia reported a sophisticated electronic tracking system for shipments using Global Positioning System that allows real time tracking of every registered hazardous waste shipment. The U.S. reported a cooperative tracking system, HAXTRAKS, that combines information from the U.S. and Mexico to track waste transferred across their common border. The ability to identify the export of waste may depend upon the power of domestic tracking systems. The group recognized a need for a closed loop system that would require or provide for reporting from the point of ultimate use, treatment or disposal of waste to the country of origin.

- Cooperation with customs agencies: Many countries acknowledged the need for and reported success in working with their customs agencies. Typically, customs agencies have not been interested in hazardous waste until driven by concerns of safety for their agency. Good cooperation with customs agencies is enhanced by frequent meetings, joint operations, and provision of training and resources.

Workshop 5B Compliance With International Agreements

Participants discussed priority issues related to compliance with and enforcement of all international Conventions instead of focusing on specific conventions at the local and international level, and centered their discussion on identified obstacles in the local implementation of these instruments and possible solutions. The major issues addressed were:

- How to communicate for effective compliance and enforcement at the national level;
- What different legislative and practical approaches to enforcement for range of violations have been effectively used, and types of enforcement responses;
- What types of financial resources are required for consistent enforcement and capacity building, and available sources of financial assistance;
- Obstacles to international cooperation presented by disparities among sanctions for same violations;
- How to raise broad awareness of the importance of issues addressed in Conventions; and overcome the differences in perception at the international and local levels.

The group gave examples of in-country obstacles and mechanisms to resolve them mentioning specific legislative and enforcement tools. The session served as a valuable comparative research tool and provided the participants and the facilitator with a rich spectrum of compliance and enforcement tools, from training of trainers, building institutional memory, simplifying the “language” of the Conventions, among others.

Workshop 5C Illegal Shipments of Dangerous Chemicals

Much attention has been paid to enforcement of international environmental agreements and related domestic requirements governing the shipment of hazardous waste. Less attention has been paid to issues related to enforcement of requirements related to import and export of dangerous chemicals, including pesticides, that may not qualify as hazardous waste under international conventions or perhaps are mischaracterized so as not covered by those conventions. Overall, the existing laws and regulations do not provide an adequate foundation for enforcement. The overriding concern of workshop participants was how to obtain information, overcome political obstacles and develop laws and regulations which will protect the health and safety of their citizens. Enforcement cannot be a concern until appropriate laws are in place to enforce.

Workshop 5D *International Enforcement Cooperation*

The primary purpose and major goal of the discussions was how to actually make international compliance and enforcement cooperation happen in practice. A general agreement was reached that the major objective should be the exchange of information which can be made available at all levels, and especially at the working level, to improve front-line performance. Systems which facilitate establishing personal contacts and channels of communications were viewed as critical. Both formal and informal cooperation methods were discussed. The regional networks which were discussed at the conference were seen as a key next step.

There was a long list of specific environmental problems that could benefit from increased cooperation as well as some examples of where cooperation is currently working, although the latter were mostly bilateral. There was general support for the concept of INECE as an umbrella organization which would attempt to pull the regional networks along and serve as a central information repository and communications resource on a wide range of issues. INECE was seen as a repository of information which, given the increasing electronic capabilities in many countries, could be made broadly available.

At the same time there was a note of reality in the discussions of resources, political and staff changes and the relatively low rank, in many countries, of the environment ministry. International Conventions and Treaties were viewed as valuable but there was much opinion that they were unknown to or ignored by, in many instances, the very people who should have a role in implementing them. As a general conclusion, the participants felt that international cooperation is essential and must be accomplished, whatever the obstacles may be, if the global nature of many of our environmental problems is to be successfully addressed. The issue of bilateral and subregional cooperation was raised several times as it was seen as easier to accomplish and less expensive to implement. Specific problems which would particularly benefit from multi-national cooperation were discussed. The role of countries whose own cooperative structures were more advanced was noted. The thinking in general was that they could be excellent models for newer cooperative groupings and could serve as sources of information and provide other kinds of support.

Workshop 5E *Collaborative Targeting*

Many countries share concerns regarding the consistency of the operations of multi-national companies and problems associated with transboundary pollution. Questions exist concerning the capacity of countries to enforce, minimum standards to follow, companies setting their own standards, availability of data and international cooperation. Collaboration is essential to solve these problems. Solutions include working with multi-nationals to seek their cooperation in operating consistently around the world; asking those companies to produce world wide reports on environmental efforts; linking international performance with incentive awards; developing a ranking guide on multi-national performance; providing company information over the Internet; sharing each country's regulations over the internet; developing a list/registry of companies and how much pollution they produce,; and incorporating environmental concerns into international investment agreements. Most important is developing a "rapid response system" or informal person-to-person network, to resolve problems. All agreed that this could be a primary role for INECE and for the Regional networks and meetings of the future.