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Effective Environmental Enforcement: The Missing Link to Achieving Sustainable Development

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Effective Environmental Enforcement: The Missing Link to Achieving Sustainable Development

by

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DEDICATION

This thesis is dedicated to the world's environmental investigators, inspectors and conservation officers for their perseverance, dedication and courage as the unsung heroes in the conspiracy to protect the planet.

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ABSTRACT

In response to the emergence of sustainable development as the dominant environmental and economic paradigm, a number of mechanisms have been developed to assist in the implementation of these principles. Examples of these "super" instruments abound - market measures, eco-covenants, joint implementation and voluntary compliance. Appreciably less enthusiasm has been dedicated to capacity building for other more traditional tools prescribed by international laws. Counted among the disregarded tools is the widely maligned and misunderstood role of enforcement.

This thesis argues that the potential for effecting innovative reforms may be significantly threatened by an underlying misunderstanding and failed appreciation of the critical role that enforcement can and must play in achieving sustainable development. All too often arguments for alternative tools are premised on such unfounded and unsupported arguments as "since enforcement doesn't work", "enforcement is too costly" or "enforcement is too rigid". In the vast majority of cases these arguments mask an underlying lack of commitment to actual implementation of established standards or processes. In others it reflects a basic ignorance of the enforcement process itself and the wide array of alternative measures available to achieve compliance as well as an overall lack of understanding of the role enforcement plays in the implementation of alternative strategies for protecting the environment.

Without a better understanding of the potential contribution of enforcement and the minimum framework necessary to ensure compliance, it will be difficult to fully comprehend the underlying barriers to implementing sustainable development. A lack of political will coupled with an under-commitment of resources, will inevitably result in failed capacity to achieve any measurable results.

This thesis presents a comprehensive examination of the role of effective enforcement in achieving specific compliance and a more general adherence to the idea of the "rule of

law". It provides a detailed strategy for the effective enforcement of domestic environmental laws. Based on the author's and others' experiences in lesser developed economies, the thesis then considers particular constraints which may be faced by lesser developed nations in their efforts to implement an effective enforcement regime and to ultimately achieve sustainable development.

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I. INTRODUCTION

A. *ENFORCEMENT AND SUSTAINABLE DEVELOPMENT*

A concerted effort has been witnessed at the international level to translate such widely eschewed principles as sustainable development, intergenerational equity, the precautionary principle, "polluter pays" and participatory democracy from international obligations into domestic law and practice. These principles are now well articulated in the *Rio Declaration*[1] and *Agenda 21*[2], international documents understood to reflect a commitment (at least by their signatories) to a global agenda for change. In still other instances, this bundle of principles has been further translated into regional and presumably by virtue of their signators, domestic commitments to reform, for example the North American Agreement for Environmental Cooperation (NAAEC).[3]

The substance of these principles continues to be the focus in a plethora of fora among Environmental Non-governmental Organization (ENGOS), governments, industry and other "experts" in the ongoing dissection of treaty obligations, and in rarer instances, their domestic implementation. Similar fervour can be evidenced in the debate over perhaps

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[1] Rio Declaration on Environment and Development, 13 June 1992, 31 I.L.M. 874.

[2] United Nations Conference on Environment and Development, Agenda 21, U.N. Doc. A/Conf.151/26/Rev.1 (1993).

[3] Sept. 14, 1993, U.S.-Can.-Mex., 32 I.L.M. 1480 (entered into force on January 1, 1994).

more substantively related subjects as exploitation of dwindling resources, desertification, global warming and the search for clean technologies. The concerted lobby for these reforms has triggered exploration of more efficient, less intrusive instruments in response to pressure for significant environmental improvements. Examples of these "super" instruments abound - market measures, eco-covenants, joint implementation and voluntary compliance. Appreciably less enthusiasm appears to have been dedicated to capacity building for other more traditional tools prescribed by international laws. Counted among the disregarded tools is the widely maligned and misunderstood role of enforcement.[4]

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[4] By way of example the Parties to the Convention on International Trade in Endangered Species (CITES) have yet to agree to establish a subcommittee on enforcement. More encouraging progress in support for enforcement include the dialogues amongst domestic environmental enforcement agencies, the proceedings of which are documented in the *Proceedings of the International Enforcement Workshop*, Volume I and II, May 8-10, 1990, Utrecht, The Netherlands, United States Environmental Protection Agency and Ministry of Housing, Physical Planning and the Environment (VROM), The Netherlands; *Proceedings of the International Conference on Environmental Enforcement*, Volume I and II, September 22-25, 1992, Budapest Hungary, United States Environmental Protection Agency, Commission of the European Communities, Ministry of Housing, Physical Planning and the Environment (VROM) The Netherlands; *Proceedings of the Third International Conference on Environmental Enforcement*, Volume I and II, April 25-28, 1994, Oaxaca Mexico, United States Environmental Protection Agency, World Wildlife Fund, United Nations Environmental Program, Secretaria de Desarrollo Social (Sedosol) Mexico, Ministry of Housing, Spatial Planning and the Environment (VROM) The Netherlands; *Proceedings of the Fourth International Conference on Environmental Compliance and Enforcement*, Volumes 1 and 2, April 22-26, 1996, Chaing Mai, Thailand, United States Environmental Protection Agency, United Nations Environmental Program, Ministry of Housing, Spatial Planning and the Environment (VROM) The Netherlands, Environmental Law Institute, European Commission, Environment Canada, Pollution Control Department of Thailand; the creation in 1996 of the International Network of Environmental Enforcement Agencies (INECE); and, the North American Working Group on Environmental Enforcement and Compliance Cooperation established by the Council of Ministers for the North American Commission for Environmental Cooperation (Resolution #96-06).

It is my thesis that the potential for effecting innovative reforms may be significantly threatened by an underlying misunderstanding and failed appreciation of the critical role that enforcement can and must play in achieving sustainable development.[5] All too often arguments for alternative tools are premised on such unfounded and unsupported arguments as "since enforcement doesn't work", "enforcement is too costly" or "enforcement is too rigid".[6] In the vast majority of cases these arguments mask an underlying lack of commitment to actual implementation of established standards or processes. In others it reflects a basic ignorance of the enforcement process itself and the wide array of alternative measures available to achieve compliance as well as an overall lack of understanding of the role enforcement plays in the implementation of alternative strategies for protecting the environment.

Without a better understanding of the potential contribution of enforcement and the minimum framework necessary to ensure compliance, it will be difficult to fully comprehend the underlying barriers to implementing sustainable development. A lack of

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[5] A prime example is the recent realization by the Parties to the *Montreal Protocol* of the need to consider enforcement measures who during the COP-8 in November 1996, being confronted with the spectrum of losing gains made in further restricting the use of ozone-depleting substances (ODS) through illegal trade in chlorofluorcarbons, issued a decision urging industrialized nations to install verification programs to curb illegal trade in ODS. As summed up by Under Secretary for the Montreal Protocol Secretariat Elizabeth Dowdeswell, *International Environmental Reporter*, 0149-8738/96 at p. 1087 "illegal trade in ODS and lack of enforcement would lead to an increase in their consumption and the nullification of the entire global endeavour to phase out the ODS quantities in recent years".

[6] There have been few empirical studies on environmental enforcement, inclusive of the effects of newly touted voluntary approaches.

political will coupled with an under-commitment of resources, will inevitably result in failed capacity to achieve any measurable results.

It may be trite to acknowledge that those most concerned with enforcement are the enforcers and those directly affected by the acts of enforcement (violators) and non enforcement (adjacent communities and competitors). It is not surprising that few people share the field inspectors' enthusiasm for exchanging pointers on effluent sampling, assessing exigent circumstances or the technical drafting of a control order. Such is the case with the technical aspects of almost every field.

Minimal attention has been given to official or scholarly empirical work to analyze environmental enforcement.[7] But perhaps most troubling is the lack of attention to and awareness of broader enforcement issues such as environmental justice in enforcement policies, the direct financial costs of non enforcement[8], inclusive of crown (government) liability for non enforcement. It is similarly noteworthy that while industry has expressed broad support for more non-coercive means of ensuring compliance, few companies actually seize opportunities for implementing "voluntary compliance" strategies even

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[7] Supported by D. Saxe in *Environmental Offenses, Corporate Responsibilities and Executive Liability* (Ontario: Canada Law Book Inc., 1990) at p. 45-55 in which she reports the results of her empirical study conducted to identify the factors triggering corporations directors to comply with environmental laws.

[8] For example, the direct emergency-response, evacuation and clean up costs and potential related health costs arising from the 1997 fire at the Ontario Plastimet Inc. recycling facility. It has been suggested that the incident and associated costs could have been avoided by enforcement of existing laws.

where governments have expressed openness to alternatives to traditional enforcement responses.[9]

Environmental enforcement involves these and many more similarly complex issues. How do we judge whether a nation state is abiding by the "rule of law" in the management and exploitation of its natural resources if no laws are enacted or any process instituted to verify compliance? What are the implications of failing to effectively enforce environmental laws, permits or processes? What are the implications for the "rule of law" and public accountability with the adoption of private or "voluntary" compliance approaches ? What are the underlying reasons for the failure to achieve compliance with protection standards? The answers to these questions lie in fully understanding the factors that motivate compliance and the pragmatics of implementing an effective enforcement regime. As stated by a former Canadian Minister of the Environment in tabling his new federal law, "A good law, however, is not enough. It must be enforced - ruthlessly if need be.[10]

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[9] A 1996 report documenting North American experience with voluntary compliance found that while a wide array of "voluntary" mechanisms have been introduced to allow regulated parties to either opt out of enforceable standards or to renegotiate binding conditions surprisingly few companies have actually taken advantage of these alternate routes. *Voluntary Compliance: A Survey of North American Experience* (Montreal: Commission for Environmental Cooperation, 1997) [unpublished draft].

[10] Tom McMillan, then federal Minister of the Environment, in his speech to the Canadian Parliament during the tabling of the *Canadian Environmental Protection Act*. Notes for a Statement, December 18, 1986, Ottawa, as cited in D. Chappell, *From Sawdust to Toxic Blobs: A Consideration of Sanctioning Strategies to Combat Pollution in Canada, Studies in Regulation and Compliance* (Ottawa: Justice Canada, 1989) at p. 24.

It is my intention in this thesis to debunk the myth that environmental enforcement is outdated by presenting detailed arguments for the role enforcement plays in achieving and maintaining a goal of sustainable development. A basic framework is then presented to indicate how an effective enforcement regime may be instituted. The thesis concludes with an examination of particular barriers or constraints which may be faced by lesser developed countries(LDCs) in their attempts to successfully implement effective environmental enforcement and compliance regimes, and examples of assistance provided to address these obstacles.

B. *PROVIDING A CONTEXT*

It is generally the case that debates over the merits of the "command and control" system rest on highly polarized opinions about what enforcement is and where it fits in the overall environmental management or regulatory regime. All too often debates about enforcement stem from basic confusion (perhaps intentional) between the role of regulation in setting standards and the role of enforcement in ensuring compliance with the standard.

All too frequently, arguments against enforcement revert to criticisms about the merits of the regulatory approach to environmental protection. For example, some argue that regulations are too inflexible and consequently the system of setting standards by statute, regulation and or even license is best replaced by a non-regulatory, possibly negotiable, voluntary code of practice. When there is grudging acceptance of the possible beneficial

role of regulation, complaints are made about the heavy-handed nature of the usual responses, such as prosecution.

To be able to deliberate on a more effective regime for improving environmental performance with operating standards, it is therefore important to distinguish these two processes of standard setting and enforcement. A plethora of alternatives are evolving to replace or supplement regulation, and debate abounds on the merits of these purported miracle instruments. But useful analysis of these innovations requires that the two processes be differentiated. In other words, regardless of the ultimate mechanism chosen to control or direct environmental performance, a separate, equally necessary process must be undertaken. That process is a determination of how best to effect compliance and the appropriate response to free-riders (those who do not comply with minimum standards particularly in the context of voluntary compliance). This is the dialogue on enforcement.

In setting a context for this thesis about the inherent value of effective environmental enforcement it is important to begin with an understanding of enforcement terminology and presumptions. Definitions are put forward for essential concepts and terminology including environmental law, enforcement and compliance. As the thesis makes a case for the inextricable role of enforcement in achieving sustainable development, I begin with a definition of that concept.

1. WHAT IS SUSTAINABLE DEVELOPMENT ?

Sustainable development has been widely understood to mean " development that meets the needs of the present without compromising the ability of future generations to meet their own needs".[11] Obviously consistent with this recognition of the inappropriateness of deflecting costs and impacts to later generations is the need for timely response to prevent unnecessary harm from known sources or actions. That is the essence of enforcement. Sustainable development is also recognized to represent more than an end objective. The concept has evolved to embody certain basic process principles including the precautionary principle, polluter pays principle, participatory democracy (including access to information, due process and access to administrative processes and courts) and the principle of intergenerational equity.[12]

It similarly follows that these principles should be incorporated into the environmental decision-making processes inclusive of policy making, project approval and assessment,

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[11] World Commission on Environment and Development, *Our Common Future*, (Oxford: Oxford University Press, 1987) at p. 43.

[12] For a more detailed reiteration of these concepts see "Sustainable Development: The Challenge to International Law" (Report of a Consultation convened by Foundation for International Environmental Law and Development, (FIELD; Windsor, 1993). See also IUCN/UNEP/WWF, *Caring for the Earth: A Strategy for Sustainable Living* (Gland, Switzerland, 1991). In this report the authors present an agenda for implementation of sustainable development which includes the establishment of a comprehensive system of environmental law and its implementation and effective enforcement at p. 68-69. See also D. Vanderzwaag, *CEPA and the Precautionary Principle Approach* (Reviewing CEPA: the Issues #18) (Ottawa: Environment Canada, 1994) and T. O'Riordan and J. Cameron, *Interpreting the Precautionary Principle* (London: Cameron May, 1994).

standard setting and enforcement.[13] From this perspective, enforcement and compliance strategies may be seen as an integral part of the process of reforming institutions to achieve sustainable development. The first step is understanding the full scope and context of enforcement and the role it plays in the broader equation.

2. DEFINITION OF ENVIRONMENTAL LAW

Environmental law is generally understood to constitute the wide array of legal instruments enacted by governments to regulate behavior or activities affecting the environment. Legal mechanisms are chosen with the intent and effect of imposing the "Rule of Law" on decision making. These mechanisms commonly include statutes, regulations, licenses and permits, contracts, agreements and other related means. Less frequently recognized mechanisms include legally binding procedures for project review and assessment, approvals and rules for the creation and management of emissions trading systems and negotiated settlements. Environmental law also includes legislation according rights of participation in decision-making processes, granting legal standing before courts and tribunals, and ensuring access to information and to due process. Substantive environmental law includes actual performance standards prescribed for pollution control, allocation and management of resources, protection of species and

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[13] FIELD, *ibid.* at p. 8-11. Reforms to the development review and regulatory processes reflects this call for more multidiscliplinary and transparent processes, for example requirements for socio-economic analysis of draft regulations, public hearings and dispute resolution in environmental assessment, negotiated rule-making for standard setting and regulation drafting.

safeguarding human health. References to environmental law as one of the cornerstones of environmental protection are common in most international agreements relating to environment or sustainable development.[14]

For the purposes of this thesis the discussion of environmental enforcement will focus on pollution control laws, although the arguments made regarding the inherent value of a basic framework for effective enforcement apply equally to all environmental laws. The ultimate effectiveness of laws in effecting sustainable development is both a question of their design and the commitment of resources to ensure their observance. As will be posited, it is necessary in developing effective environmental laws to consider both the substantive environmental objectives and the strategies to ensure their implementation or enforcement.

3. DIFFERENTIATING ENFORCEMENT FROM COMPLIANCE

It is critical to start with a clear understanding of the terms "enforcement " and "compliance" and their proper usage. Enforcement is all to frequently equated with one available response to non-compliance, namely the prosecution and incarceration of

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[14] It may be worth noting that all of these latter categories of environmental law are recognized under both *Agenda 21* and the NAAEC among other international laws. The NAAEC provides that "...each Party shall ensure that its laws and regulations provide for high levels of environmental protection and shall strive to continue to improve those laws and regulations" and makes specific reference to the Parties "tradition of environmental cooperation" and "desire to support and build on international environmental agreements and existing policies and laws...", *supra*, note 3, Preamble and article 3.

offenders. However this is a false and extremely dated view of the breadth and variety of now commonly available and exercised enforcement responses. It is this extremely narrow characterization of enforcement, and its purported limitations, which is popularly referenced to support claims for the need for alternatives to traditional enforcement, derogatorily dubbed the "command and control" system. Consequently, a definition of enforcement is later provided more reflective of its full scope and purport.

The term "compliance" has similarly been abused and misconstrued. Both regulators and regulated industry alike share the blame for the confusion. Many environmental agencies have adopted a practice of measuring and reporting environmental compliance using vague guidelines outside the constructs of the law.[15] This practice has been fomented by wide-spread acceptance of the argument that most non-compliance is a mere technical blip and theregore more appropriately addressed through technical adjustments that the intrusive acts of enforcement. Acquiescence by government to this interpretation, and deferral or waiver of enforcement actions has contributed to the blurring of the terms.[16] The effect is viewed

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[15] For example, prior to the adoption by Environment Canada of the *Canadian Environmental Protection Act (CEPA) Enforcement and Compliance Policy;* see also B. Smart, *Beyond Compliance: A New Industry View of the Environment* (Washington; World Resources Institute, 1992).

[16] See for example, E. Kupchanko, " A Case for Compliance through Administration of Licenses and Permits", in *Environmental Enforcement, Proceedings of the National Conference on the Enforcement of Environmental Law,* ed. L. Duncan (Edmonton: Environmental Law Center, 1985). For example, pursuant to Part Five of the NAAEC, any party thereto may initiate consultations and ultimately formal arbitration and imposition of monetary penalties on trade sanctions against other parties and the agreement where there has been a persistent pattern of failure to effectively enforce its environmental law, *supra,* note 3; Clifford Lincoln, "The Lie of Compliance: Environmental Bill is Better", (*Montreal Gazette*, Feb. 19, 1996).

by some as constructive deregulation by virtue of a persistent pattern of non-enforcement.

Of late the definition of environmental compliance had been further muddied by the introduction of private, non-regulatory systems for establishing and verifying "standards" of practice.[17] Of particular interest and import is the ISO 14000 environmental management system which introduces a global system of industry-negotiated, self-imposed, non-binding guidelines for industry management under the shroud of regulatory terminology ("standards", "certification", "compliance").[18] These private systems may import enforcement regimes where governments choose to retract from enforcement responses or strategies as a direct result of a policy shift towards reliance on these non-regulatory processes.

Interestingly it is these actual and contemplated shifts away from traditional regulation and enforcement which are fostering increased appreciation both for the need for a more consistent, structured approach to measuring and ensuring compliance with environmental

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[17] For example, Responsible Care, ARET. See Commission for Environmental Cooperation, *supra,* note 7; *Fourth Progress Report from the Task Force on the Canadian Automotive Manufacturing Pollution Prevention Project: MVMA Project*, Environment Canada, Chrysler Canada, Ford, General Motors, Motors, Motor Vehicle Manufacturing Association and Government of Ontario (June 1996); B. Smart, *supra,* note 15.

[18] *Benchmark Environmental Convention ISO 14001: An Uncommon Perspective*, Five Public Policy Questions for Proponents of the ISO 1400 Series (The European Environmental Bureau, Revised November 1995); Darlene Pearson, "ISO 1400: Opportunities and Programs", a background paper prepared for the August 22-23, 1996 meeting of North American Environment Enforcement Officials, Mexico City, sponsored by the Commission for Environmental Cooperation (unpublished); Pierre Hauselmann, "ISO Inside Out: ISO and Environmental Management", A World Wide Fund for Nature (WWf), International Discussion Paper, Lausanne, August 1996.

standards and the need to institute a wider array of enforcement tools. The following definitions are reflective of the intensive discourse, in particular amongst environmental enforcement agencies, on alternative, more effective environmental enforcement regimes.[19] Among the most common issues identified in these discussions is the need to clarify the terms enforcement and compliance. The definitions drawn from this discourse are intended to provide a context for the thesis.

a) ENFORCEMENT

Enforcement is any action or intervention[20] taken to determine or respond to non-compliance. While enforcement is commonly equated with criminal prosecution, this is neither an accurate nor complete portrayal of environmental law enforcement. For many jurisdictions, environmental enforcement now characteristically involves a wide array of administrative, criminal and mediative tools to effect compliance, and to mitigate or prevent environmental damage.

For example, enforcement includes procedures to screen new or existing laws or permits to ensure compliance in the most cost efficient manner. Enforcement includes policies and

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[19] See for example, the Proceedings of the 1990, 1992, 1994 and 1996 *International Conferences on Environmental Law Enforcement*, *supra*, note 4; Chapter 8 of *Agenda 21*, *supra*, note 2. See also *Technical Report No. 36, Industry Environmental Compliance Training Manual*, United Nations Environment Programme, Industry and Environment (Paris: UNEP, 1996) at p. 0.6.

[20] This include actions or interventions by government or private parties.

programs to encourage or recognize voluntary efforts towards compliance (e.g., audit privilege, self-reporting), government surveillance and private enforcement action. Some have suggested enforcement also includes the means to establish liability or responsibility for harm.[21]

Enforcement is more than punishment after the fact. It includes the process of creating binding standards or imposing liability. It includes accountability for ensuring compliance, inclusive of the obligation to comply, and the duty to enforce. It includes the rights and responsibilities associated with exercising enforcement powers.

b) COMPLIANCE

Compliance is the achievement of a prescribed process or standard. For those governments operating within a system premised on the "Rule of Law", compliance is understood to mean observation of the law.[22] Some enforcement and compliance policies have specifically endorsed this direct connection to adherence to law. For example, the *Canadian Environmental Protection Act Enforcement and Compliance Policy* states that

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[21] C. Wasserman, Proceedings of the *Third International Conference on Environmental Enforcement, supra,* note 4 at p. 16.

[22] Those who decry the inflexibility of law enforcers fail to comprehend that the time for negotiation is during the setting of standards through regulatory review processes or project assessments. Once the standards are agreed to and imposed it is only logical within a system structured on the "Rule of Law" to expect that those standards will be observed, and where violations occur that those persons be made accountable.

"[c]ompliance means a state of conforming with the law".[23]

While such statements may appear axiomatic, stating the obvious may indeed be necessary to reverse any history of basing compliance ratings on imprecise guidelines or shifting technical objectives.[24] It is now widely accepted that a more accurate and consistent measurement of compliance is adherence to a legally imposed and consistent standard.[25] Compliance objectives may be made binding through statute, regulation, license or permit, compliance agreement (where provided for by law) or through administrative or court directives or orders. The various alternatives are reviewed in greater detail in chapter 3.

A determination of compliance is also not limited to the measurement of adherence to specified pollution standards. It is equally significant to regulations which implement alternative implementation strategies such as economic or market instruments.[26] For

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[23] *Supra*, note 15 at p. 5.

[24] For example, prior to introduction of the *CEPA Enforcement and Compliance Policy* Environment Canada published compliance reports using technical guidelines for the purpose of measuring compliance.

[25] See L.F. Duncan, "The Rule of Law and Sustainable Development" in *Sustainable Development in Canada : Options for Law Reform* (Ottawa: The Canadian Bar Association, 1990) at p. 285; L.F. Duncan, "Trends in Enforcement: Is Environment Canada Serious About Enforcing its Laws?", ed. D. Tingley, *Into the Future: Environmental Law and Policy for the 1990s* (Edmonton: Alberta Environmental Law Centre, 1990); CEPA *Enforcement and Compliance* Policy, *supra*, note 15. Note that the development of an enforcement and compliance policy is not sufficient if there is no commitment to implementing and observing. The USEPA adopts a similarly narrow or law-based definition of compliance. See USEPA *Principles of Enforcement* (USEPA, Office of Enforcement, February 1992).

[26] L.F. Duncan, "Why You Can't Take the Regulation out of Pollution Control or the Necessary (albeit) Uncomfortable Interplay between Lawyers and Economists in the Quest for Sustainable Development", Dalhousie Law School, December 1990 [unpublished]. See also discussion in Chapter III on Market Measures.

example, when implementing a system of pollution control through trading effluent rights or opportunities, government must first establish minimum effluent standards and then establish a system for trading permits or marketing surplus, and maintain a monitoring system for both the pollution levels and an audit of the trading. There is a growing appreciation for the complexity of compliance assessments for market approaches.[27]

Compliance also relates to procedural rules. By way of example, compliance is achieved if a government agency responsible for overseeing the conduct of an environmental assessment of a proposed project ensures that the procedures dictated by law are observed, such as appointment of an unbiased and qualified panel, opportunities accorded to affected public to participate and recommended conditions are implemented.[28]

Accountability for compliance with prescribed codes of conduct is also recognised as a critical determinant for liability and compensation. Clear evidence of this can be found in

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[27] "Workshop on Economic Instruments" (Report), *Third International Conference on Environmental Enforcement, supra,* note 4 at p. 193

[28] See for example the decisions of the Canadian Federal Court and Supreme Court and Indonesian courts and the Secretariat of the Commission for Environmental Cooperation regarding failure of respective government agencies to ensure environmental assessment laws were complied with in the process of approving major developments. *Friends of the Old Man River v. Canada (Min. of Transport)* [1992] 1 S.C.R. 3; The *Indonesian Environmental Forum (WALHI) v. the State of the Republic of Indonesia* (q.q.). The Central Investment Coordination Board and The Department of Internal Affairs, The Ministry of Industry, The Minister of Population and Environment, The Minister of Forestry and P.T. Inti Indorayon Utama, Central Jakarta District Court, December 30, 1988, No. 820/PDT.G/1988 PN.JKT.PST; *Final Factual Record of the Cruise Ship Pier Project in Cozumel, Quintana Roo*, prepared in accordance with Article 15, NAAEC, Secretariat of the Commission for Environmental Cooperation (Montreal: CEC, 1997) http://www.cec.org.

judicial decisions on director liability for environmental damages including determinations on such factors as due diligence.[29] Similarly, the courts have held that with the decision to impose standards comes the duty to ensure compliance, that is to inspect and enforce.[30]

It is similarly important to understand that the measurement of an effective enforcement response or compliance strategy reflects more than the tally of enforcement actions or compliance statistics (commonly referred to as "bean counting"). It also includes less tangible and more complex concepts such as environmental results and deterrence. As noted by one experienced United States Environmental Protection Agency enforcement official:

> The primary goal of environmental enforcement is to ensure compliance in order to protect the environment and public health. However, despite the central importance of compliance rates and the aggregate level of enforcement activity, they are not, by themselves, the only indicators of a healthy enforcement program. Other measures may indicate whether or not the overall environmental benefits of laws and regulations are being achieved. While a lot has been analyzed and written about the US environmental protection effort, we are still learning about the efficacy of our programs and our concept of environmental "success" continues to be both dynamic and evolving. As EPA's environmental enforcement program has matured, the concept of "success" itself has become more complex and multi-faceted. It encompasses not only the concept of high rates of compliance and aggregate numbers of enforcement actions, but also the important, albeit more difficult to measure, concept of environmental results and deterrence.[31]

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[29] See for example *R. v. Bata Industries* (1992) 70 C.C.C (3d) 394 (Ont. Prov. Ct.).

[30] See for example *Swanson Estate v. Canada* (1990), 19 A.C.W.S. (3d) 810 (F.CT.D.); *Kamloops (Municipality) v. Nielson* [1984] 2 S.C.R. 2; *Tock V. St. John's Metropolitan Area Board* [1989] 2 S.C.R. 1181; It may be noted that further support for this connection is evidenced in the NAAEC which imposes the obligation on its Parties to effectively enforce their respective environmental laws (article 5), *supra*, note 3.

[31] R. van Heuvelen "Successful Compliance and Enforcement Approaches", Proceedings of the *Third International Conference on Environmental Enforcement, supra*, note 4 at p. 163.

Enforcement, then, is a means to achieve that end. Compliance is the end objective or result. The process of putting in place the various components of the enforcement regime must be recognized as one of the steps to actualizing sustainable development. Failure to understand the significance of enforcement in the environment and development equation will, it is argued, relegate sustainable development to a theoretical construct.

In Chapter II concrete arguments are presented for the indispensable role of enforcement to implementing the previously mentioned principles intrinsic to sustainable development. Chapter III then makes the case for establishing a consistent framework for effective enforcement, and provides a detailed analysis of the components of the framework drawn from the direct experience of the writer and research conducted. Chapter IV surveys support expressed for the posited framework for effective environmental enforcement and provides elaboration of particular constraints which may be faced by lesser developed nations in their effort to implement an enforcement regime. Chapter IV provides conclusions and some final observations.

II. WHY ENFORCEMENT IS NECESSARY TO IMPLEMENT SUSTAINABLE DEVELOPMENT

While considerable energy continues to be directed to achieving sustainable development through the processes of developing indicators, assessing potential impacts and establishing standards to mitigate environmental impacts of development, far less attention has been given to the other side of the equation, that is, preventing or deterring impacts through effective enforcement.[32]

Yet while there appears to be growing recognition of the value of incorporating environmental objectives into binding law and more generally to the application of "rule of law" to environmental protection, what is too often forgotten in the process of enacting the standards is the importance of addressing the means of achieving compliance. While much

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[32] In his analysis of the barriers to sustainable development Barry B. Boyer, "Building Legal and Institutional Frameworks for Sustainability", *(1993) 63 Buffalo Env. Law Journal 71* appears to share this concern with the proclivity to stall at the front end of the process, "Experience provides some grounds for skepticism that these reforms, if enacted. would accomplish the desired results. Zero discharge of persistent toxic chemicals and universal achievement of fishable, swimmable waters have been goals of the U.S. *Clean Water Act* since 1972. Authority to ban or require pre-market testing of dangerous chemicals has been in place nearly as long, but only a handful of substances have been regulated under the American *Toxic Substances Control Act.* Thus, statutory regulation of harmful substances has developed far ahead of the political will for enforcement. In this field of pollution control, there is a need for a workable theory explaining the relationship between the law on the books and the law's inaction. C.S. Diver "A Theory of Regulatory Enforcement", *(1980) 28 Public Policy 257* reiterates this concern that critics of regulation have tended to dwell on the policy making phase of regulation to the neglect of strategies for enhancing enforcement effectiveness. Another common example of the failure to move beyond the impact assessment or indicators process is the persistence of governments in resourcing environmental assessment processes without simulates attention to institution of mechanisms to make the mitigating provisions binding in regulation or license.

attention has been given to improving adherence to international laws,[33] less support has been given to the importance of domestic enforcement to achieving sustainable development.[34] In this Chapter, a series of arguments are made for recognition of the inherent value and contribution of this process.

A. *ENFORCEMENT IS INTRINSIC TO THE "RULE OF LAW"*

In the process of ensuring sustainable development it will be important to recognize that enforcement is intrinsic to the law. If governments are to actually operate within the "Rule of Law", thereby being made accountable for development decisions and establishing a level playing field, there must be equal recognition of the intrinsic role of

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[33] See for example, L. K. Caldwell, "Law and Environment in an Era of Transition: Reconciling Domestic and International Law", (1991) 2 *Colorado Journal of International Environmental Law and Policy*; P. Birnie, "International Environmental Law: Its Adequacy for Present and Future Needs", *The International Politics of the Environment: Actors, Interests and Institutions*, A. Hurrell and B. Kingsbury eds. (Oxford: Clarendon Press, 1992); S. Bilderbeek, ed. *Biodiversity and International Law: The Effectiveness of Environmental Law*, (Amsterdam: Netherlands Committee for the IUCN, IOS Press, 1992); L. G. Susskind, *Environmental Diplomacy, Negotiating More Effective Global Agreements*, (Oxford: Oxford University Press, 1994).

[34] Included among those few exceptions are for example the report by the Experts Group on Environmental Law of the World Commission on Environment and Development, *Environmental Protection and Sustainable Development: Legal Principles and Recommendations*, (London: Graham & Trotman/Martinus, 1986); Proceedings of the *First, Second, Third and Fourth International Environmental Law Enforcement Conferences*, *supra*, note 4; L. F. Duncan, "The Rule of Law and Sustainable Development", *supra*,, note 25; E. Barr, *Positive Compliance Programs: Their Potential as Instruments for Regulatory Reform*, (Ottawa: Department of Justice, 1991); K. Hawkins, *Environment and Enforcement, Regulation and the Social Definition of Pollution*, (Oxford: Clarendon Press, 1984); UNEP Industry and Environment Programme Activity Center, *From Regulations to Industry Compliance: Building Institutional Capabilities*, Technical Report No. 11 (1992) Paris, France; *supra*, note 5; and, a brief mention in *Agenda 21*, Chapter 8, *supra*, note 2.

enforcement.[35] While most progressive industrializing nations espouse support for the principle of the "Rule of Law", in practice many have failed in their responsibilities to effectively enforce or in other cases, to comply with their own environmental laws. [36]

To fail to understand the significance of enforcement is to fail to understand the essential purpose and workings of the law. The "Rule of Law" includes not only the "black letter law" but also the practise of law. Put simply, it prescribes conducting the affairs of a

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[35] "Rule of Law" is intended here to be defined in a much broader sense than that traditionally posited by Dicey, that is, any rule enforced by the courts. It is suggested that at least for the purposes of environmental regulation the principle should be understood as encompassing the process of enacting standards of conduct in law and the wide array of mechanisms for achieving and imposing compliance inclusive of administrative, criminal and mediative measures. Support for this more expansive approach can be found in H.W. Arthurs, "Rethinking Administrative Law: A Slightly Dicey Business" (1979) 17, *Osgoode Hall Law Journal*, p.1.

[36] The Republic of Indonesia, for example, while making frequent reference to the fact that its founding Constitution espouses this principle, in practice has extended minimal financial support or delegated any substantive powers for the enforcement of its environmental laws. L. F. Duncan and M. A. Santosa, *BAPEDAL Development Plan, Appendix 1-1, Regulatory and Compliance Programs, Book 3*, Government of the Republic of Indonesia, Environmental Impact Control Management Agency (BAPEDAL), prepared under the Japanese Trust Fund of the World Bank, Jakarta, December 1991. Canada while issuing a policy prescribing criteria for enforcement responses and dictating that "environment officials will use rules, sanctions and processes securely founded in law", can similarly be faulted for enacting strong environmental laws, with significant penalties but under resourcing enforcement. See L. Duncan, "The Rule of Law and Sustainable Development", *supra*, note 25; L. F. Duncan, "Trends in Enforcement: Is Environment Canada Serious about Enforcing its Laws?", *supra*, note 25; *Friends of the Old Man River*, *supra*, note 28. In Argentina, one judge became so frustrated by the lack of enforcement activity by government, he intervened to bring environmental cases before his court, "Law is a project of social harmony that does not work automatically. It is necessary to have action by the administrative officer demanding the function of the law... and lately, judicial action, as a suppressive body for punishing the offender and also the indolent functionary who does nor fulfil his/her public obligation and enables the transgression of the law". Judge Daniel Hugo Llermanos, "Environmental Agony: My Experience as an Argentinian Judge", in Proceedings of the *Third International Conference on Environmental Law*, *supra*, note 4 at p. 247.

nation through observation of the law. And yet, when one examines the conduct of nations in making decisions about the balance of development and the environment interests, it is not unusual to observe the practice to be pointedly at variance with the stated policy or legal obligations.[37]

To establish laws without simultaneous attention to the ways and means for seeking or achieving compliance is to create law in a vacuum.[38] Yet this practice continues despite espoused support for enforcement. The later 1980s evidenced some improved political recognition of the need to address this dichotomy. In Canada, the dual tabling in 1988 of an enforcement and compliance policy with a consolidated federal environment act was

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[37] Boyer, *supra*, note 32, at p.74, suggests that one of the reasons for failure to actually effect the "rule of law" may be partly attributed to the propensity of the bureaucracy to impose their own interpretations of the legislator's intent in implementing the provisions. "If these policies and programs [for decontamination of the Great Lakes] have been incorporated into federal statutes for twenty years, why do they remain unfulfilled promises? The short answer is that insiders in the field of pollution control did not support stringent requirements like the zero discharge goal, and did not believe that Congress really meant them to be implemented as written". Yet another example is that while international aid has concentrated on building capacity for environment assessment of proposed developments, minimal attention has been given to the mechanisms necessary to make recommended conditions legally enforceable such as regulations or permits. See L. F. Duncan, "Beyond International Standards for Environmental Impact Assessment: Requiring Legally Enforceable Operating Standards", a paper presented at the *International Conference on Environmental Law*, sponsored by the Asian Environmental Law Association, Bangkok, April 1990.

[38] P. Finkle and D. Cameron, "Equal Protection in Enforcement: Towards More Structured Discretion" (1989) 12 *Dalhousie Law Journal* 34. The authors pinpoint this problem of construing the law as only what is written on the books; The Law Reform Commission of Canada also identified this propensity of administrators to exercise discretion not to enforce the law regardless of prescribed commands and penalties where they "feel that, although transgressions are taking place, private action seems to be improving or coming into compliance, and thus enforcement action is not necessary so far as, in the mind of the administrator, the policy objective is met." Law Reform Commission of Canada, *Policy Implementation, Compliance and Administrative Law*, (Working Paper 51) (Ottawa: LRCC, 1986).

intended to send a message about enhanced political commitment to enforcement :

> A good law, however, is not itself enough. It must be enforced - ruthlessly if need be. Accordingly, the new Environmental Protection Act will be accompanied by a plan to reverse the country's appalling record of enforcement and compliance.[39]

Parallel transformations in attitude where observed in the European Continent[40], for example, and in the United States.[41]

This perspective about the place for enforcement in defining and instituting "rule of law" for environmental protection has been echoed by legal scholars:

> How often has it been said by administrators, politicians and members of the general public that a law is good, the problem is that it is not enforced? The very form of the question expresses the fact that for the general public and politicians alike, not to mention the legal profession, the law is usually thought of as that which is in the books. In reality, however, that written law is only part of a much broader legal process which includes the decisions of those charged with the responsibility of enforcement and, indeed, the activities of judges and juries as well.

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[39] The Honorable Tom McMillan, *supra*, note 10. It may be noted that while the Policy did serve as a catalyst for more active enforcement at the provincial level, actual commitment of resources to federal enforcement agencies was slower in coming.

[40] As observed by Floris Plate, Director of Law Division, Rijkswaterstaat, Ministry of Transport, Public Works and Water Management, The Hague, Netherlands in "Enforcement of the 'Pollution of Surface Water Act' in Netherlands 1970-1994", *Third International Environmental Law Enforcement Conference*, *supra*, note 4 at p. 239, "Around 1980 some critical pollution scandals got nation-wide attention. Suddenly every politician and administrator in the country realized that prohibition and licensing alone could not stop illegal discharges and that enforcement was the indispensable crowning piece of any effective policy. So both money and manpower became available for inspection, and, if necessary, enforcement."

[41] C. Wasserman, Chief of Compliance, Policy and Planning Branch, USEPA Office of Enforcement stated in her address to the *Third International Conference on Environmental Enforcement* : "Growing interest in environmental enforcement stems from a desire to ensure that environmental requirements lead to real improvements in environmental quality. Environmental enforcement-broadly defined as the range of actions government and others may take to encourage and compel compliance with environmental requirements-is critical to achieving this objective.", *supra*, note 4 at p. 3.

> A serious, even critical, problem ensues when the law is considered to be only that which is written in the statutes and case books, and is severed from the enforcement decisions of prosecutors and administrators. The fact is that the decisions made by these individuals breathe life into the law. Whether it is acknowledged or not, the de facto norm is of central concern to those who are subjected to the law. Indeed, it may be argued that the de facto norm is, in fact, the real rule.[42]

These observations illustrate clearly how the law as written ("black letter law") can be significantly altered by the way in which it is enforced, or not, as the case may be.

Throughout the world there has been a history of regulating pollution while turning a blind eye to ongoing violations of those standards, failure to adequately monitor compliance and worse, where violations are known, to re-negotiate compliance outside of the dictates of the prescribed law. In other words, the legislated standards are altered through the act of non-enforcement. [43] Put another way, deregulation can be effected either inadvertently or intentionally through non-enforcement.[44]

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[42] P. Finkle, *supra,* note 38. While the focus of the article is on the *Canadian Charter of Rights and Freedoms* (Part I of the *Constitution Act,* 1982, being schedule B to the *Canada Act* 1982 (U.K.), 1982, c.11) and the implications of unequal legal treatment, it provides a clear articulation of the linkage between the letter of the law and the de facto norm.

[43] See J. Swaigen, *Regulatory Offences in Canada: Liability and Defences* (Scarborough: Carswell, 1992).

[44] B. M. Mitnick, *The Political Economy of Regulation: Creating, Designing and Removing Regulatory Forms*, (New York: Columbia University Press, 1980) at p. 421-422 argues that deregulation may be effected through quite insidious means including cuts to resources, expertise, facilities necessary to monitor and enforce: "A form of deregulation through non-enforcement can occur if a regulatory unit's budgetary or other support is cut, so that the unit is simply unable to enforce the regulation ... such a tactic could successfully elude the difficulties of getting deregulation through the legislative process. Selective cuts in support, with consequently consecutive nonenforcement, or shift in enforcement priority, can therefore be a way to control regulatory performance and, possibly, to avoid major attacks from the

Increasingly more effective lobbies have evolved for legal regimes for sustainable development laws to prohibit the trade in endangered species, to create parks or special protected areas, to prohibit export of toxic wastes or to require environmental assessment of foreign investment or aid. Yet all too often while adequate standards are instituted, no effective process is provided to enforce them. Where the powers and responses are provided there is failure, intentional or not, to exercise those powers, or in the case of government projects, a failure to observe the law. For many emerging nations, environmental law appears well advanced; what they sorely lack is the training and resources to enforce[45]. In short, what is missing is not the law but its enforcement.

Similarly unappreciated is the potential domino effect of non-enforcement of one law on the implementation of other affiliated responsibilities. One obvious example is the immediate negative impact of lax enforcement of laws regulating the front end of the regulatory process, for example environmental impact assessment procedures on later associated processes such as licensing of emissions or mitigation requirements. Where a proponent provides incomplete or falsified information about the environmental impacts

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regulation's supportive clientele."

[45] See for example, L. Maslavova, "Legislative Changes for Improved Compliance and Enforcement: The Case of Bulgaria", *Third International Conference on Environmental Enforcement*, *supra*, note 4 at 97; Z. Kamieñski, "Process of Upgrading the Polish Environmental Enforcement Procedures", Proceedings of The *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 55; G. Bendi, "Some Methodological Aspects of Designing Regulation and Setting Priorities in Economies under Transition, Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 115; L. F. Duncan and M. A. Santosa, *supra*, note 36.

of its project, the result may be technically unsound and ultimately unenforceable standards.

All too often enforcement has been discounted on the basis that "it just doesn't work".[46] Yet there is surprisingly little empirical research or constructive analyses of the success or failure of various enforcement responses or strategies.[47] Some legal thinkers provide a more blunt rationale:

> Theorists of regulatory failure have paid much less attention to the enforcement of regulation than to its promulgation. This relative neglect may reflect an unspoken belief that one cannot construct a theory of regulatory enforcement without first having a theory of regulation. But this argument contains a logical flaw that has not escaped the attention of astute observers: any useful theory of regulation must reflect the realities of partial enforcement. What is needed is a theory of enforcement that explains not simply why enforcement is incomplete, but what, if any, systematic patterns it follows.
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> The real reason for comparative neglect of enforcement may be quite simple: enforcement is difficult to study.[48]

One noteworthy exception is a study conducted on the effects of prosecution or the threat of prosecution on the decisions of corporate directors and officers in complying with pollution control laws.[49] The study results indicate that prosecution has "a strong,

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[46] M. Rankin and R. Brown, "Persuasion, Penalties and Prosecution: Administrative versus Criminal Sanctions", in *Security Compliance: Seven Case Studies*, ed. M.L. Friedland, (Toronto: University of Toronto Press, 1990) at p. 325.

[47] For example D. Saxe, *supra*, note 7. Even in the study by Rankin which identifies certain failings in criminal enforcement, a strong case is made for the value of enforcement, *ibid.*

[48] C. S. Diver, *supra*, note 32 at p. 259. While Diver's analysis is rather dated his premise holds true.

[49] D. Saxe, *supra*, note 7.

statistically significant impact on the environmental behaviour of corporations".[50] The author concludes that regardless of the enforcement measure chosen, prosecution, civil action or market instrument, " there is an indisputable need for enforcement", a view she found, perhaps not surprisingly, supported by the courts:

> If the regulations were not enforced by the use of sanctions, they would come to be perceived not as regulatory requirements but merely as statements of aspiration. [51]

As the popular phrase goes, you simply cannot have one without the other. The development of policy or law without giving equal thought to how you will ensure observance of the policy or compliance with the law is like a carriage without the horse. Who is driving the cart? A law or policy which cannot or will not be implemented (by political or administrative intent) remains hollow or without any real effect.[52]

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[50] *Ibid* at p.46. A good example of this is found in the response of industry and the legal community to the case of *R.* v. *Bata*, *supra*, note 29.

[51] *Ibid* at p. 26 citing *Re Industrial Hygiene Decision* No. 167 (1975), 2 W.C.R. 234 at p. 252.

[52] F. Plate, *supra*, note 40 at p. 241, provides a succinct analysis of this interconnectedness; "to this end it was emphasized that enforcement is no isolated activity, but that instead it is part of a complete regulation chain. This chain has the following elements;
* policy making
* legislation and regulation
* setting of standards
* licensing
* execution
* enforcement
All parts of the chain should be in line with the others ... in other words, each element of the chain depends on the others. Only when all are in accordance with the others satisfactory results may be obtained. If one element fails, the whole chain fails and all efforts must be fruitless. Enforcement is often the last and therefore somewhat neglected part of the chain, but without an effective and tailor-made enforcement no policy can be successful."

As will be outlined in Chapter III the process of law-making must of necessity also consider whether and how the standard can actually be complied with, must incorporate timelines for achieving compliance, specify responsibilities for monitoring compliance and prescribe the result if the law is not observed. How a law will be enforced is intrinsic to its value and ultimate effect. The capacity to enforce is as important as the action taken to make laws in realizing the legislative or policy intent.

B. *EQUITY AND FAIRNESS - ENSURING A LEVEL-PLAYING FIELD*

The enforcement of laws is essential to ensure a level playing field for development. The way in which the law is enforced shapes the reality of the law for those who are both the subject[53] and the intended benefactors (including non-human species). Failure to enforce environmental standards can have the perverse effect of punishing both the victim (polluted environment or resource depletion) and those who have voluntarily complied.

> Where regulatees are allowed to violate agreed standards with no recourse, those who have expended resources on complying with the standards may be prejudicially affected. Those who violate the laws gain an unfair market advantage. The practical effect is subversion of the legal intent.[54]

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[53] P. Finkle, *supra*, note 38 at p. 41.

[54] C. Wasserman, *supra*, note 4, claims a consistent and effective enforcement program helps ensure that companies affected by environmental requirements are treated fairly. Facilities will be more likely to comply if they perceive that they will not be economically disadvantaged by doing so. See also USEPA *Principles of Environmental Enforcement*, *supra*, note 25 at p. 14. See also UNEP, *supra*, note 19 at p. 1.2. As Finkle et al *supra*, note 38 point out:
"[N]ot everyone may be aware that a lesser level of compliance is required, resulting in unequal application of the law. Indeed, the fact that a lesser standard is required is sometimes deliberately concealed from the general public. Hence, the less knowledgeable or more naive

Legal equity then requires not only that the letter of the law apply equally to all parties but that the law be consistently applied or enforced. For example, recognizing that enforcement agencies may be subject to challenges of arbitrary, unjust or inequitable enforcement actions,[55] the Canadian federal government amended environmental statutes to prescribe appropriate and consistent inspection, investigation and enforcement procedures. The government also issued a guide for the preparation of compliance strategies and policies with the suggestion that officials give greater attention to how laws are implemented, [56]

> The government has recognized that it needs to change the way it does business. Its Regulatory Reform Policy calls for departments and agencies that have justified the need for regulation to show that compliance and enforcement policies have been articulated and resources have been approved and are adequate to discharge enforcement responsibilities effectively and to ensure compliance.[57]

Most Canadian regulatory agencies have subsequently revised their enforcement policies and practices to at a minimum reflect these *Charter* requirements.[58] By way of example,

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may adhere to the black letter law with the result that they are penalized compared with those who follow the 'de factor' norm as compliance with the black letter law will require a greater expenditure of effort and resources."

[55] The *Canadian Charter of Rights and Freedoms* guarantees equal protection and treatment before the law (section 7) and fundamental fairness in application of the law (section 15). *Supra*, note 42.

[56] *A Strategic Approach to Developing Compliance Policies: A Guide*, (Regulatory Affairs Series Number 2) (Ottawa: Minister of Supply and Services Canada, 1992).

[57] *Ibid*, at p. 2.

[58] For example the CEPA *Enforcement and Compliance Policy*, *supra*, note 15; *Enforcement and Compliance Policy for the Environment Act*, (Government of the Yukon, 1993); *The Review Panel on Environmental Law Enforcement*, *An Action Plan for Environmental Law Enforcement in Alberta* (Edmonton: Government of Alberta, 1990); *British Columbia Forest Practices Code: Rules*, (Victoria: November 1993).

Environment Canada has issued an enforcement and compliance policy which makes direct reference to the significance fair, consistent enforcement,

> Canadians expect their government to provide good laws and regulations, in order to protect them and their society. Good legislation must be enforced. Enforcement must be fair, nationally consistent and predictable.[59]

Still, the problem remains of ensuring adherence to such policies. Some have suggested the need for judicial intervention to ensure fundamental fairness and equity in the exercise of criminal and administrative powers in applying the law.[60] In the very least, greater transparency in the exercise of administrative discretion by those persons with the power to " breathe life into the law" [61] may be necessary to instil a higher level of accountability for enforcement or more pointedly, non-enforcement.

Further evidence of acceptance of the need to create a more level playing (or trading) field through improved accountability for environment law enforcement is evidenced in recent multilateral and bilateral trade agreements. For example, the NAAEC includes within its objectives the enhancing of compliance with and enforcement of environmental laws and regulations as a means of avoiding trade distortions or barriers.[62] Under the NAAEC, the

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[59] *CEPA Enforcement and Compliance Policy*, *ibid*, p.1.

[60] P. Finkle, *supra*, note 38 at p. 42.

[61] *Ibid* at p. 34. It may be noted that pursuant to NAAEC the Parties commit to the legal enactment of environmental procedures which provide greater transparency and participation in enforcement proceedings, *supra*, note 3, articles 4, 5, 7, 10(5) and 12.

[62] *Ibid*, article 1.

Parties undertake to enforce their domestic environmental laws and to ensure that their respective environmental law enforcement practices are fair, open and equitable.[63] The Agreement further provides for sanctions or punitive measures to be taken against any Party for failure to effectively enforce its own environmental laws.[64] One of the underlying rationales for implementing the NAAEC was to ensure a level playing field for trade by requiring the Parties to effectively enforce their respective environmental laws. Evidence of continued commitment to this principle is the establishment by the CEC Council of the Enforcement Cooperation Program and creation of the North American Working Group on Environmental Enforcement and Compliance Cooperation to guide the Parties towards effective enforcement of the respective environmental laws.[65]

The EEC has adopted similar processes to ensure the accountability of its member states to enact and enforce Community environmental laws.[66]

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[63] *Ibid*, article 7. This provision is intended to give effect to obligations imposed under article 1114 (2) of the NAFTA which prohibits any of the three Parties from waiving or derogating from their respective environmental laws so as to attract or maintain investment. For a more detailed review of the implications of this agreement see H. Mann, "The North American Agreement on Environmental Cooperation: Implications for the Enforcement of Environmental Law", Report submitted to the Office of Enforcement, Environment Canada, 1994.

[64] *Supra*, note 3, Part Five.

[65] See CEC Council Resolution #96-01 and CEC 1995, 1996, and 1997 Workplans and Budgets.

[66] L. Kramer, "The Implementation of Environmental laws by the European Economic Communities" in the Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 183.

C. *EFFECTIVE ENFORCEMENT AS A CATALYST FOR VOLUNTARY COMPLIANCE*

There is support, and some limited empirical evidence,[67] for the position that enforcement provides a significant trigger for voluntary compliance. [68] Enforcement action sends a clear message that environmental standards are to be taken seriously, thereby building credibility for both environmental protection institutions and their requirements,[69]

> Once credibility has been established, continued enforcement is essential to the maintenance of that credibility. Credibility means that society perceives its environmental requirements and the institutions that implement them as strong and effective. Credibility encourages compliance by facilities that will be unlikely to comply if environmental requirements and institutions are perceived as weak. The more credible the law, the greater the likelihood of compliance and the likelihood that other governments efforts to protect the environment will be taken seriously.

In other words, enforcement has a domino effect, lending often under-recognized benefits to less coercive programs. Where the government earns a reputation of taking compliance with its laws seriously, it also attracts greater interest in the process of standard setting and a

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[67] D. Saxe, *supra*, note 7.

[68] C. Wasserman *supra*, note 4, in her address to the *Third International Conference on Environmental Law Enforcement* stated that the USEPA premises its enforcement strategy on the basis that while 20% of regulatees will comply voluntarily, the agency focuses its enforcement strategy on the 75% who are watching what they do to the 5% who never comply. She suggested that an effective enforcement strategy plays on this equation. A 1994 survey of Canadian industry reports that for 95% of respondents, compliance with regulations is the most important motivating factor for instituting effective environmental management practices, followed by 69% due to directors/officer liability. The survey shows minimal effect of voluntary government programs (16%) or trade consideration (10%) as triggers for giving more attention to environmental practices. *Canadian Environmental Management Survey* (Toronto: KPMG, 1994)

[69] UNEP, *Technical Report*, *supra*, note 32 at p. iv.

concomitant commitment to voluntary compliance and technological innovation.[70] Voluntary "standards" (i.e. guidelines) may provide a friendly alternative where everyone abides by the agreed parameters. A problem arises when one or more of the parties fails or refuses to "comply" leaving no recourse for government intervention against these "free riders"[71].

There is similar evidence that certainty of detection and response are equally as important, if not more important, than the severity of the potential penalty. [72] It would be fair to presume that it is the intent of legislators when enacting laws that the law will be obeyed.[73] It then logically follows that the regulatory objective will be best served by ensuring that an effective surveillance and enforcement program is put in place to ensure compliance, if for

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[70] The USEPA in its 1992 Report The Principles of Enforcement, in analyzing the relative impacts of the market and regulatory measures for the lead phase down program discovered that, "Although the emissions reductions from direct enforcement were large, the sharp decline in new violations after 1986 suggests that enforcement had an even larger impact through deterrence." Cited by G. Bendi, *supra*, note 45.

[71] See "Voluntary Compliance", A Background Paper prepared for the Commission for Environmental Cooperation Joint Public Advisory Committee sponsored North American Consultations. Montreal, 1997, *supra*, note 9.

[72] D. Saxe, *supra*, note 7 at p. 45-54; D. Chappell, *supra*, note 10 at p. 24; J. Grusec," Sanctions and Rewards: The Approach of Psychology" in *Sanctions and Rewards in the Legal System: A Multidisciplinary Approach*, ed. M.L. Friedland (Toronto: University of Toronto Press, 1989), at p. 121.

[73] As D. Chappell *supra*, note 10 at p. 23, states : "[A] belief in the effectiveness of deterrence lies at the very core of sanctioning strategies applied to polluting behaviour. This belief is to be found in environmental statutes; in judicial statements when sentencing polluters; in political speeches about the environment; in comments by those involved in regulating pollution; in the outpouring of environmental scholars; in the utterances of individual citizens about pollution; and even in the confessions of polluters themselves."

no other reason than maintaining credibility of the regulatory initiative.[74] Consequently, the need for effective enforcement.

More laws do not automatically necessitate more enforcement. Many agencies have found that they can achieve greater deterrent value from a more strategic use of sanctioning powers. In such cases agencies have refocused their enforcement and compliance strategies to place less emphasis on the number of enforcement actions and more emphasis on targeting enforcement action to gain greater leverage for added deterrence and improved environmental results.[75] In this way enforcement action can be utilised for prevention or deterrence and if strategically directed, as a catalyst for voluntary initiative.[76]

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[74] See C. Diver, *supra*, note 32 at p. 297 where he concludes, "Enforcement, happily, is not the sole means of assuring compliance with regulatory directives. Businesses obey regulations for a host of reasons- moral, intellectual commitment to underlying regulatory objectives, belief in the fairness of the procedures that produced the regulations, pressure from peers, competitors, customers, or employees, conformity with a law-abiding self image- in addition to fear of detection and punishment. It is a common place that no regulatory command will succeed without substantial voluntary compliance. But the distinction can be distracting. Enforcement is necessary not only to control the abhorrent lawbreaker but also to defend the legitimacy of government intervention that sustains voluntary compliance."

[75] R. van Heuvelen, *supra*, note 31 at p. 163; E. Devaney, "The Evolution of Environmental Crimes: Enforcement at the United States Environmental Protection Agency" in the Proceedings of the *Third Conference on Environmental Enforcement*, *supra*, note 4 at p. 457; L. Peterson, "The Great Lakes Enforcement Strategy: Using Enforcement Resources to Maximize Risk Reduction and Environmental Restoration in the Great Lakes Basin", in the Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 181.

[76] North American experience with voluntary compliance suggests that threat of regulatory intervention may be the most significant triggers for "voluntary" action by regulated industry. See Clifford Lincoln, *supra*, note 16.

D. A COUNTERPOISE FOR MARKET MEASURES

As valuable as economic instruments may prove to be in controlling pollution and environmental damage, they will not and cannot operate without regulatory and enforcement measures. Market measures are in fact reliant on a working regulatory and compliance regime for their very implementation and operation.

By way of example, a market regime such as emissions trading is premised on establishment and maintenance of base level standards. In addition, market instruments each require their own specialized systems for monitoring, one system to measure ambient and point source emission levels, and the other, to audit systems of trading or charges.

> Experience to date indicates that some types of economic instruments, especially the more complex ones such as tradable permits, can require at least as much enforcement and monitoring as do the more traditional command and control regulations. Economic approaches in fact require good information and monitoring systems which can also raise costs for regulated entities.[77]

It must be kept in mind that the effectiveness of economic measures as instruments for environmental protection is directly dependent on the maintenance of base pollution control levels. The maintenance of a fair trading system or effective rates for emission charges will require surveillance of the impacts on the environment and an audit of accounts. Regulatory supervision and intervention will be necessary to guarantee fair operation of the market

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[77] S. Herman and P. Verkerk, "Closing Remarks for the *Third International Conference on Environmental Enforcement*", *supra*, note 4 at p. 256.

systems such as penalties for false reporting, for failure to pay discharge fees or to ensure accurate set offs.[78] This view appears to be endorsed by the signatories to *Agenda 21* which provides:

> 8.13 Laws and regulations suited to country-specific conditions are among the most important instruments for transforming environment and development polices into action, not only through 'command and control' methods, but also as a normative framework for economic planning and market measures.[79]

Monitoring systems are also necessary to instil accountability and fairness in government incentive and subsidy programs. Audit provisions, including the right to inspect, must be enacted to monitor compliance with the terms and conditions of grants or subsidies. While some responsibility for reporting on tax relief or subsidy programs can be transferred to the polluter, ultimately the government remains accountable. Consequently systems must be instituted to detect and punish abuses.[80]

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[78] G. Bendi, *supra*, note 45 at p. 117 suggests that while in principle there may be a difference in the regulatory and market approaches, in practice, they cannot be dissociated as "No market economy can live without regulation, and an absolute free market does not exist. The regulatory element is even greater in the field of environmental protection than any other regulatory area. It is obvious that the use of strong market incentives cannot live without an existing enforcement system": See also D. R. Stewart and S. B. Weiner, "Environmental Policy for Eastern Europe: Technology-Based Versus Market-Based Approaches", December 1991 (as cited in Bendi, *supra*, note 45).

[79] As cited in Bendi, *supra* note 45. See also J. Rees "Pollution Control Objectives and the Regulatory Framework", in *Sustainable Environmental Management: Principles and Practice*, R. Kerry Turner ed. (Boulder: Bellhaven Press/Westview Press, 1988).

[80] See K. Webb, "The Legal Framework for Financial Incentives as Regulatory Instruments", background paper prepared for the Symposium on "The Power of the Purse : Financial Incentives as Regulatory Instruments", Administrative Law Project, Law Reform Commission of Canada and Faculty of Law, University of Calgary, (October 1990, Calgary) at p.48; R. Howse, " Shifting to Incentive-oriented Instruments: Myths and Symbols, Dilemmas and Opportunities" , *id.*

It serves no valid purpose to deny the necessity of regulation and compliance. "Smart regulation" does not mean no regulation. This may be all the more important for the process of implementing sustainable development in developing or emerging nations who have not yet had the opportunity to put in place effective regulatory and compliance regimes.[81]

E. *AN INSTRUMENT FOR DOMESTIC IMPLEMENTATION OF INTERNATIONAL OBLIGATIONS*

There are numerous reasons for improving the capacity to implement international laws through domestic regulation and enforcement. One important reason is the challenge of enforcing international law, including the lack of sufficient powers in existing international bodies to secure compliance. [82] Another is the difficulty in instituting consistent compliance measures among parties to bilateral or multilateral agreements due to inherent technical complexities, variances in capacity to monitor and enforce and unreliable country reporting

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[81] R. Howse, *ibid* at p. 36-37; S. Herman et al, *supra*, note 75; J. Rees, *supra*, note 79.

[82] The FIELD Report, for example, points out that the *Rio* principles while laudatory have at most a "mixed legal status" and admits that international standards for sustainable development will ultimately be implemented at the local level. *Supra*, note 12, at p. 11. L. Susskind shares this realization where he points out that while the *Hague Declaration* called for more effective international enforcement mechanisms, it appears to have faded from view and received almost no attention at the Rio Summit (at p. 107). He seriously questions the credibility of the deterrent effect of international sanctions: "Deterrence theory, as explained by Schelling and others, requires that a threat have credibility. Given the experience of the past several decades, especially as it relates to noncompliance with global environmental treaties, such credibility would be hard to muster. So, even if the scope of international law is expanded and nongovernmental organizations are given standing to sue noncompliers in the World Court, it is not clear who would apply the requisite sanctions." (at p. 110) L. Susskind, *Environmental Diplomacy: Negotiating More Effective Global Agreements*, *supra* note 33 at p. 99-121. See also *Law-Making and Law-Enforcement in International Environmental Law after the 1992 Rio Conference*, Research Project no. 10106072, Beyerlin Marauhn. (Heidelberg, Max Planck Institute for Comparative Public Law and International Law) (Berlin: Erich Schmidt Verlag, 1997).

partly due to sovereignty considerations.[83] Consequently, support appears to be mounting for effecting compliance by translation of international obligations for sustainable development into state laws thereby allowing for implementation through domestic enforcement action.[84] A cogent case has been expressed for the expanded use of domestic courts and tribunals to enforce the principles in international environmental laws for, among other reasons, that it is the domestic courts which focus on the major sources of pollution, that is, individuals and corporations, as opposed to the inter-party focus of international treaties, and the limitation of responses to counter measures.

> Domestic courts already enforce a significant portion of international law. The idea of expanding the use of domestic courts for international environmental law enforcement against citizens and governments of other countries is a more recent and interesting concept. ...
>
> The use of domestic courts makes particular sense in the environmental area because domestic courts tend to focus on the more common polluters - individuals and corporations. The courts' clear authority over assets and persons is necessary for successful enforcement. Most courts can issue injunctions which may prevent environmental damage before it occurs.[85]

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[83] L. Susskind shares the view that "[b]ecause international law enshrines the right of sovereignty, all efforts to monitor performance, establish the accuracy of claims or nonperformance, punish proven noncompliers, or impose remedial action must be accepted voluntary by the parties to a treaty. It is little wonder that the global environmental treaties signed thus far have such weak monitoring and enforcement provisions", *supra* note 33 at p. 101; see also M. E. O'Connell, "Enforcement and Success of International Environmental Law" (1995) 3 *Global Legal Studies Journal,* at p. 47.

[84] FIELD, *Supra,* note 12 at p. 13; S. Bilderbeek, *Biodiversity and International Law: The Effectiveness of International Environmental Law, supra* note 33 at p. 96-99; P. Birnie, "International Environmental Law: Its Adequacy for Present and Future Needs", *supra note 33* at p. 70-72. A useful discussion of the interface between obligations for enforcement of international obligations and domestic enforcement regimes is provided in the discussion of the impediments to effective enforcement of the ocean dumping provisions of MARPOL V and relationship to domestic enforcement strategies in "Coast Guard: Enforcement Under MARPOL V: Convention on Pollution Expanded, Although Problems Remain", GAO/RCED-95-143.

[85] M. E. O'Connell, *supra,* note 83 at p. 57.

A second rationale for domestic enforcement of international agreements or obligations is the need to respect the rights of sovereign nations to establish their own timetables and priorities for implementing these common undertakings which best reflect their respective needs and capacity.[86] This is consistent with *Rio* principles supporting increased opportunity for public involvement in the international legal order, including in the development and enforcement of environmental laws. As an adjunct to this local participatory process comes a deeper commitment to ensuring adherence to the enacted laws and the institution of a community based accountability.

If responsibility for ensuring compliance with international obligations is to remain with the sovereign states, then, by necessity, rights and powers must be created at the state level. This includes the bundle of rights necessary to create transparency and public access to justice thereby making governments accountable for implementing these obligations.[87] Similarly it requires an exercise of political will to implement basic framework for enforcement and commitment of the necessary resources .

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[86] For example, the NAAEC while prescribing a common obligation and framework for effective enforcement of the environmental laws of the respective Parties (Article 5), similarly specifically reaffirms the sovereign right of the Parties to enact their own environmental standards and objectives and to enforce those provisions within their own territories (Preamble, Article 37), *supra*, note 3.

[87] See FIELD Report, *supra*, note 12 at p. 11. These rights may be considered to include right of standing for private enforcement and administrative or judicial review; access to information; access to participate or scrutinise administrative bodies in standard setting, project assessment enforcing and the law.

The responsibility then lies within the international community to provide support in financial kind to assist developing or emerging nations to build their capacity for environmental enforcement and compliance.[88] This need identified in the *Rio Declaration* and *Agenda 21* has in part been effected through the recent efforts of governments to exchange expertise and approaches and redirecting of foreign aid.[89]

Clear acknowledgement that political commitment to effective enforcement of environmental laws is critical to sustainable development is found in a number of recent multilateral agreements on the environment, most notably the North American Agreement on Environmental Cooperation.[90] The stated objectives of the NAAEC include both promoting sustainable development based on cooperation and mutually supportive environmental and economic policies and enhancing compliance with and enforcement of, environmental laws, regulations, procedures, policies and practices. [91] Further evidence of the weight placed on political accountability versus effective enforcement are the Parties

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[88] *Ibid*, at p. 13.

[89] For example the support by USEPA, UNEP, the Netherlands, Canada, the European Commission, and other governments to the international conferences on environmental law enforcement; enforcement training and capacity building programs of CIDA, World Bank and UNEP. The North American Commission for Environmental Cooperation has committed substantial resources to building partnerships for more effective domestic enforcement of environmental laws in that region (1995, 1996, 1997 Programs and Budgets: Commission for Environmental Cooperation, Montreal).

[90] *Supra*, note 3; see also the *Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area*, August 14, 1983, U.S.-Mex., T.I.A.S. No. 10, 827 (La Paz Agreement); *Agreement Concerning the Transboundary Movement of Hazardous Waste*, October 28, 1986, U.S.-Can., T.I.A.S. No. 11, 099.

[91] NAAEC, *supra*, note 3, article 1.

obligations to report annually on their environmental enforcement activities; [92] the creation of an independent process for reviewing citizen allegations of a Party's failure to effectively enforce their environmental laws; [93] and, the introduction of an inter-party consultation and dispute resolution process regarding Party complaints of persistent pattern of failure to enforce. [94]

F. *A PRIME INDICATOR OF POLITICAL COMMITMENT TO ENVIRONMENTAL OBLIGATIONS*

Finally, enforcement is necessary to maintain credibility in government policy and initiatives.[95] Before the public will support any shift from "command and control" to voluntary or market measures, governments must first establish credibility for the commitment to an environmental protection regime . This commitment can be readily illustrated by a solid record of enforcement. A reputation of non-enforcement will discredit commitment to the "Rule of Law" and weaken support for other initiatives by environmental agencies.

> Lawyers and economists have both devoted too little attention to the importance of restoring symbolic order and to enforcement techniques required to maintain it... Forgiving non-compliance, employing insignificant sanctions and failing to enforce payment of fines [or levies] are all acts which further undermine order, creating moral outrage and demand for action which will right the moral imbalance.

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[92] NAAEC, *ibid*, article 12 (2) (c).

[93] NAAEC, *ibid*, articles 14 and 15.

[94] NAAEC, *ibid*, Part Five.

[95] See L. F. Duncan, *supra*, note 26.

Regulatory over control is likely to result as the pendulum swings back.[96]

Public skepticism towards innovative initiatives can best be dissipated by first earning credibility through a record of commitment to enforce compliance, regardless of whether the system of control is a regulatory standard or payment of a charge or levy. Regardless of the mechanism, the objective is a balancing of interests which in many instances involves the remedying of potential social harms. The tangible impact of government action or inaction (risk or harm to the environment or human health or life) demands solid commitment.

[96] E. Barr, *supra*, note 34, at p. 187.

III. A FRAMEWORK FOR EFFECTIVE ENVIRONMENTAL ENFORCEMENT

A. *WHY IS A FRAMEWORK NECESSARY?*

In Chapter II arguments were presented for the constructive role enforcement can play in achieving sustainable development. Among the more repeated reasons given for the purported failure of enforcement action is that it simply does not work. The intent in this chapter is to rebuff that misconception by presenting a framework through which enforcement can be (and in many cases has been) made workable and effective.

The framework and illustrative cases are drawn from the writer's twenty plus years of experience advising governments in Canada, the United States, Mexico, Jamaica and Indonesia on the development and delivery of their respective environmental enforcement regimes. The material is also drawn extensively from personal discussions with and written documentation by enforcement officials and thinkers around the globe. Extensive insight was also drawn from participation in international conferences of environmental enforcement officials.

Recognition of the need to enforce the law is not enough. There is a growing consensus that efforts to achieve compliance will fail unless the minimum basic components of an effective enforcement and compliance regime are recognized and implemented within a carefully developed strategy and framework.[97]

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[97] Evidence of broad international commitment to a basic framework of actions for enforcement is made in Chapter 8, *Agenda 21*, " Integrating Environment and Development in Decision Making" (United Nations, 1992). *Agenda 21* specifies that each country should

> [W]hen developing a policy framework for environmental protection, governments have frequently failed to devote sufficient attention to providing practical institutional means of ensuring that its policies and standards are complied with.[98]

> Most countries now have environmental laws and regulations in place to provide at least minimum environmental standards to which industry is expected to adhere... But to ensure the effectiveness and equity of environmental protection laws, governments need to take the necessary institutional measures, consistent with the cultural, social and economic fabric of the country, to realize these standards and verify that all companies equally comply with them... [w]hile there is no one common" recipe for success"... steps can be taken even with minimal personnel and resources when there is sufficient political will.[99]

While recognizing the inherent differences in countries' legal systems, institutional structures and environmental, social, cultural and economic contexts, it is regardless widely accepted that they share the common challenge of achieving compliance with their adopted system.

While there may be no one " right way" to achieve compliance, there is considerable

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develop a strategy for maximizing compliance with laws and regulations relating to sustainable development including enforceable, effective laws, appropriate sanctions, mechanisms to promote compliance, institutional capacity and mechanisms for public involvement in the making and enforcing of laws on environment and development. Canada, Mexico and United States have restated commitment to a basic framework for effective enforcement as Parties to the NAAEC, *supra*, note 3, article 5. For a more detailed review of the perspectives of countries in Eastern and Western Europe, the Americas, Africa, Caribbean and Asia see *Proceedings of the International Enforcement Workshop*, and *Proceedings International Conferences on Environmental Enforcement*, *supra*, note 4; See also IUCN/UNEP/WWF, *Caring for the Earth. A Strategy for Sustainable Living* (Gland: 1991), *supra* note 12 at p. 67-69.

[98] UNEP *From Regulations to Industry Compliance: Building Institutional Capabilities* (Paris: 1992) at p. 15.

[99] UNEP, *id* at p. 7.

agreement on the need to evaluate the effectiveness of a compliance regime against a basic framework, without which enforcement actions will inevitably fail.[100] Enacting laws without simultaneous and equal attention to the process of achieving compliance may be compared to making a declaration of war without first identifying the enemy, developing a strategy, critical targets, strengths or weaknesses of the enemy, or building a complement of adequately armed and trained forces and outfitting command posts.

This is not to suggest that enforcement is equitable only to traditional "command and control" responses. Environmental enforcement involves far more than taking polluters to court or shutting down a facility. The mechanisms for achieving environmental compliance are extremely complex and require thorough understanding and careful consideration early on in the process of developing laws and policies for achieving sustainable development. Incentives and coercive measures are closely linked and to be used effectively must be integrated.[101] Rather than evaluating the relative success of enforcement responses based on the number of coercive actions, agencies are shifting more towards a blending of coercive, preventive and incentive measures.[102] They are similarly exploring mechanisms which provide alternative routes to compliance, focusing on performance or results.

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[100] Even USEPA officials who have expended considerable effort on devising a universally workable framework admit that there is "no single enforcement 'model' or strategy which guarantees success". R. van Heuvelen, *Proceedings of Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 163.

[101] See Section: Enforcement Responses/Sanctions.

[102] R. van Heuvelen, *Proceedings of the Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 163.

Enforcement cannot be effective if it is considered only after the fact. The process of achieving compliance begins with the making of laws. A law developed through a process of broad participation invariably increases the probability of voluntary compliance. Without the commitment of senior policy makers, administrators, and politicians, the will may be lacking for adequate resources and powers for necessary enforcement action. Similarly, front-end consultation with regulatees improves chances of a practicable standard and enhances the commitment to compliance. This is all the more important where a significant role in monitoring and reporting is assigned to the regulatee. Finally, it has been the experience of many agencies that the enforceability of laws can be strengthened by public scrutiny in the development stage.

Equally critical are decisions about the choice of instrument to regulate pollution control. Too often policies for protection of the environment are manifested in very general statements of duty or broadly worded prohibitions.[103] For effective, economical enforcement, compliance objectives must be precisely stated, enabling timely detection and response. Similarly, the definition of compliance must be readily understood by the regulator, regulatee and target community if it is to be measured and reported. While there

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[103] For example the Canadian *Fisheries Act*, RSC 1985, c. F-14 which has attracted controversy because of its broad prohibition against any act which may cause harm to fish or its habitat. Equally troubling for the Republic of Indonesia has been the broad prohibition in their *Law no. 4, 1982, Regarding Basic Provisions for the Management of the Environment*, [Republic of Indonesia] until recently considered unenforceable due to its vagueness. In 1997 Indonesia amended their laws to provide greater clarity. [Interview with Mas Achmad Santosa, S.H., Executive Director, Indonesian Center for Environmental Law (ICEL), October, 1997].

is growing acceptance of the concept of flexibility in imposing standards and compliance schedules, the public expects accountability and measurable results.

An economical compliance regime requires a concerted effort to promote compliance. A direct correlation, it has been suggested, exists between the degree of understanding and awareness of a law and the record of compliance.[104] A compliance strategy must be tailored to fit the special character of each law. The method chosen to promote compliance will depend on the nature of the law, the targeted parties and the beneficiaries of the control. In those instances, for example, where the objective is general protection of public or workers health (i.e. safe use and handling of pesticides), the preferable method of promoting and measuring compliance may be a targeted information program with intermittent spot checks or user surveys to assess compliance. By way of comparison, where the target of the law is a more narrow category of regulated parties and the beneficiary a threatened public resource, a more direct, coercive approach may be more appropriate. In such cases, voluntary compliance may be effected through commitment to standards through consultation, technology transfer, tax incentives to incorporate new technologies, negotiated compliance schedules, and timely enforcement responses, as the ultimate compliance incentive.[105]

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[104] B. Seigal, *A Review of Compliance - Related Issues in Regulatory Program Evaluation*, (a study for the Compliance and Regulatory Remedies Project). (Ottawa: Department of Justice, 1990), Department of Fisheries and Oceans Appendix, at p. 11.

[105] See for example, the proceedings for the four *International Conferences on Environmental Enforcement*, *supra*, note 4; *Agenda 21*, *supra*, note 2; North American Agreement on Environmental Cooperation, *supra*, note 3, article 5.

Decisions must be made about who will be responsible for the various processes of enforcement - setting the standards, monitoring compliance, promoting compliance and taking necessary enforcement action. Similarly the issue will be faced of who will pay - government agencies or the regulated party ? What is the role of the public and how directly should they be involved in the enforcement process? What is the capacity and role of the regulated party in compliance ? An effective enforcement strategy must address all of these issues. The remainder of the chapter presents a framework for effective results.

B. *THE COMPONENTS OF AN EFFECTIVE FRAMEWORK FOR ENFORCEMENT AND COMPLIANCE*

There is broad consensus that any framework for effective enforcement and compliance should address the following minimum components:

1. Political and institutional commitment to enforcement;
2. A compliance strategy;
3. Imposition of legally binding standards providing a clear, consistent definition of compliance;
4. Mechanisms to promote voluntary compliance, to deter violations and to prevent environmental damage;
5. Mechanisms to determine compliance and to detect violations;
6. An alternative array of sanctions and penalties; and,
7. An evaluation process which enables review and revision of compliance strategies premised on compliance and protection objectives.

Each of the components of the framework are mutually interdependent; consequently, failure to give equal attention to each component may have the effect of decreasing the chances of effective enforcement and ultimately compliance.

For example, the enactment of strict legal standards and appointment of a fully qualified inspectorate will not be sufficient to achieve compliance if the officials are not granted the necessary powers to inspect and enforce. Similarly, implementation or endorsement of private voluntary compliance programs without parallel effort to ensure verification and response against violators, will ultimately effect the credibility and success of any voluntary initiatives. Those companies who expend monies on compliance or performance beyond compliance reasonably expect enforcement action will be taken against those who fail to make the effort to comply.[106]

1. POLITICAL WILL AND INSTITUTIONAL COMMITTMENT

First and foremost of the prerequisites is political will and institutional commitment to environmental enforcement. Without political support for environmental enforcement, the

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[106] A Polish enforcement official advises that investors have expressed the need for clear and consistent rules and strong enforcement against these who do not comply. See P. Syryczynski, "Environmental Compliance Issues During the Privatization Process in Poland", Proceedings of the *Third International Conference on Environmental Enforcement, supra,* note 4, at p. 103.

best efforts by agencies to take successful enforcement action will ultimately fail.[107] Before compliance can be anticipated, responsibility for environmental enforcement must be clearly understood. Most importantly, governments must understand and assert their constitutional and legislative mandates for environmental protection.[108]

It makes little sense for national governments to endorse international agreements for sustainable development and protection of the environment unless those same governments are committed to taking the necessary domestic regulatory and enforcement action. To this end, where environmental regulatory powers are shared between national and regional governments, it may be necessary to give prior consideration to how international environmental obligations are going to be delivered (including shared financing, legislating of standards and enforcement) before making political commitments to global initiatives.[109]

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[107] In Poland for example, environmental laws remain unenforced despite the creation of a watch dog agency and enactment of criminal and administrative sanctions. J. Jendroska, "Compliance Monitoring in Poland: Current State and Development", Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 352, of the Research Group on Environmental law, Institute of Law, Polish Academy of Sciences, Wroclaw, advises that "Governors were empowered to halt activity endangering the environment and to impose non-compliance fines. Governors, however being primarily responsible for the economic development of their voivodship, were extremely reluctant to halt any economic activity and limited themselves to imposing fines. Bearing in mind that non-compliance fines were very low and offered a cheaper option than compliance, there is nothing surprising that environmental laws were in practice unenforceable". See also R. Greenspan Bell and S. E. Bromm, "Lessons Learned in the Transfer of U.S. - Generated Environmental Compliance Tools: Compliance Schedules for Poland", E.L.R. News & Analysis, 27 *E.L.R.* 10296-10303, at p.10303.

[108] For a discussion of actions by the Government of Canada to assert its will, see L.F. Duncan, "The Rule of Law and Sustainable Development", *supra* note 25 at p. 286. See also IUCN/UNEP/WWP, *supra*, note 12 at p.67; *Friends of the Old Man River*, *supra*, note 28.

[109] For example Canadian provincial governments concerned about the purported lack of reflection of provincial powers and interests in NAFTA, negotiated provisions in the side agreement (NAAEC) which limit the effect of the obligations on provincial jurisdictions. See

Indicators of political commitment to enforcement are reflected not just in "bean-counting", that is, the number of environmental prosecutions or directives. The measure of a government commitment to effective enforcement lie in the relative priority given to implementing environmental legislative or regulatory agendas, budgetary allotments for enforcement programs[110], support for policy directives which remove the potential for political or senior policy interference in individual enforcement responses as well as specifying circumstances in which Ministerial sanctions should be exercised[111], and the

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the Canadian Intergovernmental Agreement regarding the North American Agreement on Environmental Cooperation, signed by Alberta August 1995, Quebec in December 1996 and Manitoba in December 1996. It is noteworthy that no consideration appears to have been given to the overriding obligations pursuant to multi-lateral agreements such as NAFTA, NAAEC or the Biodiversity Convention during the federal-provincial negotiations on the Harmonization Agreement, regardless of the effect of that agreement which transfers a significant portion of responsibilities for standard setting, environmental impact assessment, inspection and enforcement to the provinces, with no precise mechanism for oversight. See CCME, "Statement of Interjurisdictional Cooperation on Environmental Matters", CCME-1C-26E.

[110] An example of threatened credibility associated with under resourcing is the September 1994 media coverage of "pacific salmon reportedly inadequately monitored because of lack of staff and resources at a critical time in the monitoring program". "Fishery Controls Left Gaping Holes; Fraser River Management Compromised, Report says." *Globe and Mail*, September 20, 1994.

[111] As determined in a Canadian Department of Justice review, B. Siegal, *supra*, note 104 at p. 7, "As some evaluation studies find, the lack of certainty about the balance of the program activities or the priority of enforcement in the regulations often leads to compliance activities which lack direction or are inconsistent. The evidence of this found in evaluation studies is a lack of national policy direction for undertaking inspection, incomplete enforcement manuals, the use of a narrow range of compliance activities, inadequate training for compliance and enforcement staff and, a lack of adequate data for assessing effectiveness. The ultimate evidence is the lack of political commitment to use Ministerial sanctions for non-compliance which are currently available in the legislation. [T]his lack of certainty of role and commitment of program management to enforcement activities is detrimental to the effectiveness of the compliance and enforcement activities, and may undermine their credibility with the regulated public." See also L. Muslavova, "Legislative Changes for Improved Compliance and Enforcement: The Case of Bulgaria, *supra*, note 4 at p. 97-102.

degree of reticence to delegate enforcement powers.[112]

[112] Proposed criteria for the ranking of the relative propensity of nations to accept the concept of delegation of authority is provided by Hofstede, *Culture and Organizations: Software of the Mind* (London: McGraw Hill, 1991) cited in Lewicki and Litterer, et al, "International Negotiation", in *Negotiation*, (2nd ed) (Irwin: 1994) 407 at p. 417.

a) LEGISLATING AN ENFORCEMENT MANDATE

As a precondition to effective enforcement, it has been suggested that it is important that the mandates and powers of individual government departments and agencies and any other relevant parties should be clearly defined in law:

> Without a straight - forward legislative mandate with a solid political base and clear standards for the regulator or administrator, compliance policy is foredoomed. Regulator - client negotiations will falter; political support and ministerial backing will be evanescent. Judicial enforcement will be haphazard, convictions difficult to secure, and penalties seldom serious. Consistent expectations will not be generated, and regulatory failure is the predictable outcome.[113]

This includes determining a policy on centralization and decentralization prescribing in law rights, powers and procedures for inspection, investigation and enforcement actions including powers of inspectors (search, seizure), clarifying roles of senior managers such as the Director of Enforcement, the Regional Director and Ministers (closure or shutting down of a site or plant, cost recovery), the judiciary (sentencing alternatives), and the public (right to compel an investigation, or to litigate). This view is supported by the provisions of the North American Agreement for Environmental Cooperation which in prescribing the obligations of the Parties (Governments of Canada, Mexico and United States) to

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[113] Law Reform Commission of Canada, *Sanctions, Compliance Policy and Administrative Law* (Ottawa, August 1981) at p. 15. As well in its 1988 draft report *Regulatory Compliance: Implementing Policy Objectives Fairly, Effectively and, Efficiently*, (Ottawa: Compliance and Regulation Remedies Project, 1988) at p. 23 the Law Reform Commission reiterated the need for clear reference to an enforcement mandate in law and policy stating that "an effective compliance strategy begins with the regulatory legislation itself" and adding that "an uncertain mandate can lead to imprecise policy objectives and unfocussed compliance strategies". The Law Reform Commission suggested that this lack of clarity often arises because those players making law and policy rarely have direct experience with enforcement or enforcement officials are consulted only late in the process.

effectively enforce their respective environmental laws, also clearly enumerated the necessary associated powers, measures and sanctions, as well as requiring the legislation of private right of access to remedies. [114]

Assuming that legislators enact laws intending that they should be observed, it is important that they be informed of the costs and benefits associated with alternatives modes of achieving compliance including the legal implications of failure to enforce[115]. If effective laws are to be enacted, politicians must be competently briefed not only in the substantive aspects of a proposed law (for example, redressing human health or environmental impacts) but also on the necessary enforcement powers, sanctions and penalties, measures to implement incentive programs, and other alternative pathways to compliance. As has been suggested by one writer, a shift to "more goal-oriented legislation" as opposed to laws which merely reference objectives in a preamble, may be required to improve the record of compliance.[116] Put simply, there is little point in enacting new laws without parallel commitment to ensuring compliance. This includes providing sufficient personnel and financial resources to the enforcement agency or department.

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[114] *Supra*, note 2, article 5, 6 and 7.

[115] There is ample Canadian legal precedent for imposing civil liability on the government for failure to take reasonable action to enforce the law. See *Swanson*, *supra* note 30; *Tock supra*, note 30; J. Z. Swaigen, *supra*, note 43.

[116] Prof. E. Reuben, "Legislating for Compliance: Law and Legislation in the Administrative State" as cited in the Law Reform Commission of Canada Report, *Regulatory Compliance: Implementing Policy Objectives Fairly, Effectively, Efficiently*, *supra*, note 113 at p. 24. Reuben further suggests that the actual organizational structures which facilitate or promote compliance should be legislated.

b) CLARIFIED ROLES AND RESPONSIBILITIES

Before any effective enforcement action can be anticipated, inter-jurisdictional, interagency and infra-agency roles and responsibilities must be clarified. Similarly, where jurisdiction is shared among central, regional and local levels of government and among the various institutions within the respective government bureaucracies it will be important to delineate clear lines of responsibility. Finally, classification of roles may be necessary within agencies to both foster timely enforcement responses and to avoid unnecessary conflicting policies or actions. Where enforcement requires transboundary response, it may be necessary to also clarify the roles and responsibilities among nations.[117]

i) INTERJURISDICTIONAL RESPONSIBILITY - NATIONAL VERSUS LOCAL DELIVERY

A decision to centralize enforcement authority or to delegate it to regional or local authorities is dictated both by constitutional division of powers and prevailing political philosophies. For example, the fact that a constitutional power is vested in a central or national government to regulate the environment, does not automatically mean that in all

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[117] The need for promoting transborder cooperation is clearly recognized in the North American Agreement on Environmental Cooperation, article 10 (10) prescribing that the Council [of North American Environment Ministers] "shall encourage (a) effective enforcement by each Party of its environmental laws and regulations; (b) compliance with those laws and regulations; and (c) technical cooperation between Parties". In furtherance of this obligation the Council in 1996 formally established the North American Working Group on Environmental Enforcement and Compliance Cooperation to advise the Commission on these matters and to serve as the regional forum for exchange of expertise, joint training and cooperation in enforcement action. See *CEC Annual Reports* 1995, 1996, Montreal, Quebec.

cases national agencies will choose to assert those powers. In practice each nation has adopted its own unique political regime for enacting and enforcing to enforce environmental laws. In some instances the powers for environmental regulation are reserved to the national government and in other instances the powers are diverted to other government levels, on in still other instances, shared. Regardless of where the legislative powers is vested, a myriad of alternatives exist for delineating responsibility for enforcement.

As discussed earlier in Chapter II, it is important to clarify responsibility for enforcement to ensure public accountability and to avoid potential liability for failure to initiate timely responses. Any enforcement and compliance strategy must reflect these basic constitutional divisions of powers and political realities. The existence of a power of paramountcy or oversight does not necessarily mean that centralized delivery of an enforcement program is necessary or appropriate. For a variety of reasons, many countries have adopted decentralized or deconcentrated approaches to program delivery. Depending on the constitutional division of powers, the following are some of the choices which may be available:

- national laws and centralized enforcement (centralized);
- centralized legislative enforcement policy with delegated responsibility for enforcement of regional offices of central agencies (deconcentrated);
- centralized legislation and development coupled with delegation of enforcement powers and responsibilities to regional or local governments (decentralized);

- legislation by central and regional or local governments, with or without consistent national policy (shared responsibility).
- state or provincial legislation with local enforcement (local)

In negotiating agreements among government levels for the delivery of enforcement responsibilities, care should be taken to consider ultimate liability. Where the law imposes a duty on government to enforce, some agencies have decided it wise to retain a power of oversight with necessary review and intervention mechanisms, in those instances where enforcement functions have been delegated to other levels of government.[118]

Nonetheless, within the confines of these jurisdictional boundaries governments have found avenues for cooperative resolve of potential overlaps and conflicts and for imposing measures for accountability for enforcement. In the United States, for example, regardless of parallel responsibilities held by national and state governments, the majority of environmental enforcement actions are assigned to and exercised by state agencies.[119] The USEPA has established national implementation standards where responsibility for enforcement of national laws are delegated to the states. The USEPA has additionally retained the power to intervene to enforce where the national standards are not met. Clear

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[118] For a discussion of oversight responsibilities see L.F. Duncan, "Trends in Enforcement: Is Environment Canada Serious about Enforcing its Laws", *supra*, note 25 at p. 54-56; C. Wasserman, "The Principles of Environmental Enforcement", in Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 112.

[119] C. Wasserman, Chief Compliance Policy and Planning, USEPA advises that since 1991 about 70-90% daily inspections and 70% formal enforcements actions were by state agencies, *ibid* at p. 111.

criteria have been established to guide the exercise of the oversight power. In some limited cases the national government has reserved the power to directly implement universal programs with criteria established for dictating these circumstances warranting national intervention, such as cases having national significance, evidence of inadequate state action or impacting multiple states.[120]

In Canada, powers to regulate the environment are divided between federal and provincial governments with potential duplication or conflict in enforcement responses.[121] While no broad power of oversight exists, the federal government does have a paramountcy power where legislative responsibility is shared. For the most part, federal officials have exercised their national mandate through national objectives and through influence.[122] In practice each order of government has developed their own distinct approaches to achieving environmental compliance. This has left both orders of government open to public criticism. Efforts taken to avoid unnecessary conflict or duplication have included development of mirror legislation,[123] consultations towards harmonization of standards,[124] equivalency

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[120] *Ibid* at p. 112. See also Commission for Environmental Cooperation, *supra*, note 9.

[121] A succinct review of Canadian constitutional division of responsibilities over the environment is provided by the Supreme Court of Canada *Friends of the Old Man River Society*, *supra*, note 28. See also A. Lucas "Natural Resource and Environmental Management: A Jurisdictional Primer", *Environmental Protection and the Canadian Constitution, Proceedings of the Canadian Symposium on Jurisdiction and Responsibility for the Environment*, (Edmonton: Environmental Law Center, 1987) at p. 31-43.

[122] For example, to claim equivalency, Canadian provinces must prepare "equivalent" enforcement and compliance policies and enact "equivalent" citizen rights. *Canadian Environmental Protection Act*, R.S.C. (1985) c. A-12.

[123] See discussion in *Environmental Protection and the Canadian Constitution*, *supra*, note 113 at p. 57-70.

agreements where only "equivalent" provincial laws are enforced[125] or administrative agreements for the enforcement of federal laws by provincial agencies [126].

A third approach can be evidenced in the Netherlands. While legislative authority rests with the national government, responsibility for implementation (licensing and enforcement) has, to a large part, been delegated to provincial and municipal authorities. As the regional and municipal roles are significant, inter-municipal cooperative associations and Regional Environmental Forums represent the core of enforcement activity. All three orders of government contribute to the national compliance strategy with financing of

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[124] This initiative by the Canadian Council of Environment Ministers (CCME) is purportedly directed at reducing unnecessary interjurisdictional conflicts through harmonized standards and administrative arrangements by one of the levels to enforce. See report of the CCMT Harmonization Workshop, January 21-22, Toronto 1996, Summary Report prepared for the CCME; "Statement of Interjurisdictional Cooperation on Environmental Matters, CCME. CCME-IC-26E, Winnipeg.

[125] Equivalency agreements may be created pursuant to s. 34 of the *Canadian Environmental Protection Act*, *supra*, note 114; To date no agreement has been signed for among other reasons a reluctance by provinces to recognize federal jurisdiction over environmental impacts of provincial economic development or to subject themselves to federal scrutiny of provincial enforcement actions. For a discussion of this issue see A. Lucas, "Jurisdictional Disputes: Is Equivalency a Workable Solution?", in *Into the Future: Environmental Law and Policy for the 1990's* (Edmonton: Environmental Law Center, 1990).

[126] For example, a number of federal - provincial agreements facilitate provincial administration and enforcement of the federal *Fisheries Act*, *supra* note 103, notably the "Canada-Alberta Deleterious Substances Agreement", in effect since September 1, 1994. For a discussion of the effectiveness of intergovernmental agreements see *Environmental Protection and the Canadian Constitution, Supra*, note 21 at p. 71-98 and A. Lucas, "Federal Concerns and Regional Resources: Harmonization of federal and provincial Environmental Polices: The Changing Legal and Policy Framework", *Canadian Environmental Law*, A. Lucas ed. (Scarborough: Butterworths, 1978); F. Gertler, "Interjurisdictional Processes in Canada: Lost in (Intergovernmental) Space: Cooperative Federalism in Environmental Protection, in *Law and Process in Environmental Management*, (Calgary: Canadian Institute of Resources Law, 1993).

implementation cost-shared by all three orders. Supplemental funds from the national government are contingent on adherence to the national strategy, annual progress reports and on implementation deadlines.[127]

In deciding which order of government will be made accountable for enforcement, consideration should be given to matching a goal of national consistency with assurance of financial and institutional capacity to actually deliver programs. A popular response has been to retain central responsibility for standard setting, development of enforcement and compliance policy and assistance and direction in training and to assign local and regional governments responsibility for permitting, inspection and enforcement action.[128] Experience has shown, however, that delegation of authority may in some cases be more reflective of a desire to download responsibilities without adequate transfer of the necessary resources to enable local enforcement.[129] Any strategy for local delivery must ensure actual empowerment of local officials through adequate training and resources, if enforcement is

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[127] J.A. Peters "The Relationship between Central Government and Provincial/Municipal Authorities with Regard to Enforcement", Proceedings of the Third *International Conference on Environmental Enforcement* Vol 1, *supra*, note 4 at p. 269-275.

[128] For comparisons of approaches taken to resolve interjurisdictional division of powers see A. Adegoroye, "The Challenges of Environmental Enforcement in Africa: The Nigeria Experience", at p. 43 and O. Kaae, "A Decentralized Approach to Inspection and Enforcement Done by Communities and Municipalities in Denmark" in Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 73; C. Wasserman, "Principles of Environmental Enforcement", Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 111-115.

[129] See World Bank, *World Development Report 1992*: *Development and the Environment*, (The World Bank, 1992) at p. 93. The Report provides exceptions to this rule including China and Columbia whose laws assign a portion of hydro power sales to local governments for training and implementation and in some instances an apportionment of emission fees.

to be expected.

In the initial developmental stages of a compliance program some central intervention may also be necessary until local government agencies have time to build skills and experience. In some cases national intervention is made necessary due to the propensity of regional governments to defer environmental objectives to economic development priorities. A second problem is the tendency to sacrifice environmental enforcement obligations to the maintenance of relations between central and regional or local governments. To buttress against such pervasive influences it may be necessary in the early phases of development of an enforcement program to reserve an oversight power to a central government authority clearly mandated and resourced to push the environmental compliance agenda. While ultimately the exercise of enforcement power is subject to the influence of prevailing politics. This pervasive influence can be deflected to an extent through legislation, transparency and accountability mechanisms.[130]

Regardless of the division of powers among orders of government, benefits will come from efforts to reach consensus on the best approach to exercise of their respective powers for enforcement. Mechanisms which have been used to institutionalize this division of powers

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[130] For example the legislative enactment of right of standing for private civil and criminal action, the right to petition on enforcement response, the right to trigger a parliamentary or other public review of enforcement action. Examples of these accountability provisions are found in the *Canadian Environmental Protection Act*, *supra*, note 114, sections 108, 109 and 136; the Yukon Environment Act, S.U. (1991) c.5, Part I; and in the North American Agreement on Environmental Cooperation, *supra*, note 2, articles 6, 7, 14 and 15.

include intergovernmental agreements, cooperative standard setting and review procedures (harmonization), interministerial communications, and interagency consultations.[131]

ii) AVOIDING INTERAGENCY CONFLICTS

Experience has shown that, it is equally important to clarify roles and responsibilities within government bureaucracies. Inevitably the issue will arise whether enforcement programs should be centralized or decentralized. This involves not only division of responsibilities among national, provincial/regional and local governments but also amongst government agencies. In the process of establishing environmental control programs, attention must be given to existing related programs and authorities and the need for redistribution of functions for the most effective and economical delivery. Control through the "Rule of Law" requires close working relationships among legislators, administrative officials and the judiciary.

An important process in developing an environmental compliance regime is the identification and resolution of overlapping mandates and the need to consolidate or coordinate laws and programs to avoid unnecessary conflict or duplication in enforcement action. Mandates impacting the successful delivery of an enforcement program include powers:

- to impose standards by regulation, permit or agreement;

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[131] A. Lucas, *supra*, note 121.

- to regulate activities through incentives, grants or economic measures;
- to monitor and inspect regulated facilities;
- to investigate or otherwise respond to complaints or incidents; and
- to take enforcement sanction non-compliance through administrative or criminal action.

Most agencies have suffered the occasional embarrassment of enforcement action stymied by the contrary actions of their colleagues, resulting in at a minimum regulatory confusion, and at worst, failed enforcement action.[132] The best preventative response, is advance consideration of this potential problem and adoption of institutional mechanisms to avoid unnecessary conflicts.

Once a decision is made on the distribution of enforcement responsibilities, agencies must be granted necessary legal authority. For example, where the decision is made to assign responsibility for inspection and administrative enforcement response to regional agencies, the necessary powers of intervention and the available responses must be similarly specified in law. Where a decision is reached to assign national enforcement policy direction to the central office or headquarters of an environmental agency, laws and policies must be revised to authorize policy preparation and to require observance by implementing officials.

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[132] In Canadian law, evidence of official endorsement of the offending activity has resulted in an acquittal based on the defence of officially induced or government induced error. See, *Regina v. Cancoil Thermal Corporation and Parkinson* (1986), 27 C.C.C. (3d) 295 (Ont. C.A.).

In the absence of consolidation of enforcement responsibilities, measures must be taken to coordinate legislative drafting, hold joint training programs, and build team work to ensure enforcement policies and strategies are fully comprehended by all involved officials.[133] Overlapping responsibilities should be identified and clarified through legislative amendments or administrative arrangements.

Experience has shown that clarification of enforcement roles is also important to ensure public accountability and to facilitate voluntary compliance. Regulated industry is often the first to complain of costs of multiple reporting requirements and can be depended on to raise the issue of conflicting standards of operation when faced with enforcement action. Practically speaking, if the public is to be expected to provide a monitoring and reporting role they need to know who to contact. Nothing can more effectively discourage public involvement than "buck-passing" on responsibility to take enforcement action.

c) AN ENFORCEMENT AND COMPLIANCE POLICY - COMMUNICATION OF INTENT

As with any law, voluntary compliance with environmental laws can be fostered by clear communication of enforcement and compliance objectives and expectations.[134] Among the

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[133] D. Bryson and D.A. Ullrich, "Legal and Technical Cooperation for Effective Environmental Enforcement,", Proceedings of the *International Enforcement Workshop*, *supra*, note 4 at p. 141-149.

[134] For example, the *CEPA Enforcement and Compliance Policy supra*, note 15, states in its introduction that the purpose of the policy is to "let everyone know what to expect from Environment Canada and the officials who enforce the [Act and its regulations]. It also clearly states that " compliance means the state of conformity with the law" and that

more effective and concise instruments found for communicating expectations to all affected parties is an enforcement and compliance policy.[135]

An enforcement and compliance policy sets out the manner in which a government intends to enforce its laws. It provides a useful accountability mechanism for the concerned public to measure political commitment to require compliance with environmental standards. It sends a clear message to regulated sectors about anticipated official responses to a violation. It provides a policy framework for the various departments responsible for enforcement action to ensure fair, consistent and officially sanctioned responses. Enforcement and compliance policies generally tend to include:

- a statement of the intent to enforce;
- clarification of powers to enforce (inspection, search, seizure);
- description of the players and their respective enforcement roles(inspectors, prosecutors, Minister);
- prescribed criteria for exercise of enforcement responses;
- measures taken to promote voluntary compliance.[136]

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compliance is "mandatory".

[135] For a more detailed review of the value of using enforcement and compliance policies and explanation of the different roles of a policy and strategy see, *A Strategic Approach to Developing Compliance Policies: A Guide*, *supra* note 56 at p. 1-3. See also B. Siegal, *supra*, note 104 at p. 18.

[136] Examples of enforcement and compliance policies include the CEPA *Enforcement and Compliance Policy*, *supra* note 15; *British Columbia's Environment, Planning for the Future: Ensuring Effective Enforcement*, B.C. Ministry of the Environment; *British Columbia Forest Practices Code, Changing the Way We Manage Our Forest. Tough Enforcement*, Discussion paper, November 1993, *supra* note 58; *Enforcement Principles*, Alberta Environmental Protection Department, 1994.

Public commitment to an enforcement policy can be further increased by ensuring participation by concerned and affected parties in its development.[137] As stated earlier it may be equally important to confer with responsible officials in parallel agencies, for example justice or customs, to ensure that their respective roles are also agreed to and accurately conveyed.

d) COMMITMENT TO RESOURCING ENFORCEMENT

Political statements of commitment for strict enforcement of environmental laws will have minimum credibility if sufficient resources are not committed and clear direction and support given to officials to enable timely and effective enforcement action. Governments all to frequently enact laws without adequate attention to how they will finance compliance. While potential financial implications for private parties to achieve compliance is usually scrutinized, in the major of cases, minimal attention is given to the net benefits of compliance, government costs in enforcing the law and long term public and environmental cost of non-compliance.[138]

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[137] The federal government and the province of British Columbia government held public consultations on their policies prior to finalization and wide public release.

[138] For example, it has been estimated that the clean up costs for the plastics fire at the Plastimet waste facility in Ontario ranges from $2 to $4 million, excluding health costs. Prior to the fire, the regional budget for the Ministry of Environment and Energy was reduced by more that $1 million coupled with significant reduction in enforcement staff. *The Gallon Environmental Letter*, Canadian Institute for Business and the Environment, Vol. No. 13, October 2, 1997, Montreal.

Full cost accounting for implementation of an environmental standard requires consideration not only of socio-economic costs of implementing or not implementing the proposed control but also the cost of ensuring compliance. This should include costs to government, regulated industry and where appropriate, to the public.[139]

A thorough costing exercise for compliance should consider at a minimum the following issues:

- the costs of ensuring compliance, i.e. permitting, inspection, and surveillance, investigation and enforcement action, education/technology transfer;
- the costs of non compliance or non enforcement, i.e. potential liability for damages;
- who will bear the cost, i.e. government or industry;
- what alternative mechanisms are available for full or partial cost recovery of enforcement, i.e. taxes, fees, charges, penalties, cost recovery proceedings; and
- the most cost effective alternative to achieving compliance and deter violators.

The costing exercise should involve an exhaustive review of government needs and programme costs. These include staffing, training, equipment, supervision, drafting

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[139] The *Canadian Federal Regulatory Plan*, for example, requires completion of a regulatory impact analysis statements (RIAS) for each proposed regulation which is published in the Canada Gazette for public review and comment. The RIAS is supposed to include costs to each of the parties including enforcement costs. For a review of this process see *RIAS: A Writer's Guide*, (Regulatory Affairs Series, Number 1) (Ottawa: Minister of Supply and Services Canada, 1992). In its training programs for enforcement and compliance, UNEP recommends also giving consideration to reserving funds for enforcement and compliance through cost recovery or establishment of trust funds. UNEP, *supra*, note 18 at p. 15.

enforceable permit conditions, screening for enforceability, development and delivery of inspection programs, review of self monitoring reports, spot checks, preparation of compliance data bases, compliance promotion programs, and where appropriate calculation of lost revenues from incentive or grant programs.[140] The importance of technical and legal training to effective enforcement cannot be overstated.[141]

It has also been recommended that in the process of imposing regulatory requirements consideration also be given to the practicality and financial feasibility of enforcement.[142] Failure to adequately consider the costs of enforcement can seriously affect the credibility of the program. Cost saving measures found to be practicable have included targeted inspections and enforcement [143]; interagency agreements to share equipment and facilities

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[140] J. Mayda, "Environmental Legislation in Developing Countries: Some Parameters and Constraints", (1985) 12 *Ecology L.Q.* 997 at p. 1019; L.F. Duncan, "The Rule of Law and Sustainable Development", *supra,* note 25 at p. 292-94; L. F. Duncan and M. A. Santosa, *BAPEDAL Development Plan, Regulatory Compliance Programme* (Jakarta, BAPEDAL: 1991), *supra* note 36.

[141] See Experts Group on Environmental Law of the World Commission on Environment and Development, Environmental Protection and Sustainable Development: *Legal Principles and Recommendations*, *supra* note 34 at p. 21; G. Rodland and A. Miller, "Norway's Experience in Building an Inspector Corps: Education and Financing", Proceedings of the *Third International Conference on Environmental Enforcement*, *supra,* note 4 at p. 66-68.

[142] An example of the need to look ahead to enforcement costs is a lesson shared by the Netherlands where they were required to rescind a waste management law which when implemented was determined to require the hiring of 200-300 additional inspectors to enforce the new requirements. See C. Wasserman, *International Conference on Environmental Law*, *supra,* note 4 at p. 53.

[143] For example Environment Canada prepares annual inspection plans in which priority inspections are identified; The USEPA has adopted a strategy of targeted enforcement actions.

for example laboratories; institution of joint training programs; [144]cross appointment of inspectors. Some jurisdictions finance their enforcement programs from the proceeds of any charge or penalty rather than the common practice of directing those revenues to a consolidated revenue fund.[145]

Decisions about expenditures on enforcement should be premised on an understanding by policy makers and legislators of potential liability for non-enforcement. [146] The cost of enforcement, therefore, must also be weighed against the potential costs (direct and indirect) of non-enforcement. It has been suggested that the act of non-enforcement may itself attract liability.[147]

It will also be important to decide whether to transfer all or part of the costs of enforcement to the regulated party. Where a decision is made to transfer the costs, consideration should

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[144] For example in the United States, four regional associations of state (and in some cases federal) enforcement agencies jointly design and deliver training programs. More recently, Canadian agencies are now also collaborating in these cost shared initiatives.

[145] See for example Gro Rodland, "Compliance Monitoring in Norway", in Vol. I of the Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 319-323; G. Bandi, "Some Methodological Aspects of Designing Regulations and Setting Priorities in Economics Under Transition", in Vol. I of the Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 118; V. Mezricky, "Environmental Inspection in Transition in the Czech Republic", *ibid* at p. 81: G. Rodland and A. Miller, *supra*, note 141, Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 66. E. Barr *supra*, note 34 at p.211 recommends using proceeds of fines to reduce enforcement deficits and to speed action to reduce past harm.

[146] For example Canadian courts have found governments legally liable for damages arising from inadequate inspection or enforcement responses, see comments, *supra*, note 47.

[147] J. Z. Swaigen, *supra* note 43 at p. 181.

be given to relative capacity of large or small entities to bear the costs and ensuring flexibility in the compliance regime to allow for flexibility. In some jurisdictions, specific guidelines have been instituted to guide administrators or courts in making determination about relegating enforcement costs to the regulated facility.[148]

Cost recovery alternatives have included fees and charges, imposition of self monitoring and reporting requirements, administrative or judicial orders for recovery of costs of cleanup, investigation, enforcement, penalties which consider economic gain from non compliance. Prior to implementing any economic incentive or cost recovery initiatives, countries would be wise to consider the experiences of other jurisdictions.[149]

2. AN ENFORCEMENT AND COMPLIANCE STRATEGY

A commonly held but none the less inaccurate presumption is that once environmental

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[148] A study by the Law Reform Commission of Canada recommends that in sentencing environmental offenders, the courts give consideration to among other factors, ability to pay, size and wealth of the corporation, the social utility of the enterprise and tax consequences of the fine. J.Z. Swaigen et al, *Sentencing in Environmental Cases*, Protection of Life Series, a Study Paper prepared for the Law Reform Commission of Canada (Ottawa, 1985). See also *Bata, supra,* note 29 and *R. v. Northern Metallic Sales,* Reasons for Judgement, Judge Barry Stuart, Territorial Court of the Yukon, September 13, 1994.

[149] For a review of experiences with economic or market measures see in Vol. I and II of the Proceedings of the *Third International Conference on Environmental Enforcement, supra,* note 4; Organization of Economic Development, Environment Committee Group of Economic Experts, *Economic Instruments for Environmental Protection in the United States*, (Paris: OECD, 1986); S. Webb, "Managing the Market to Achieve Ecologically Sustainable Development" (Kew: 1991); *The Polluter Pays Principle: Definition, Analysis, Implementation* (Paris: OECD, 1975); "An Assessment of the Implementation of the Polluter Pays Principle", [unpublished] (OECD, 1982).

standards or objectives are imposed, compliance can be automatically anticipated. Experience has shown that this is rarely the case. To enhance rates of compliance in parallel with processes for setting standards, attention should be given to the preparation of a compliance strategy.[150]

As previously outlined, an enforcement and compliance policy is a public affirmation of basic principles underlying the enforcement regime for any law or regulation. It espouses official - either political or administrative - commitment to enforce and often restates the duty to comply. It clarifies roles of government officials, covering the full spectrum of players from Ministers to field inspectors, regulated industry and community. It often specifies policies for responding to government violators. An enforcement policy specifies the criteria for selection of enforcement responses and sanctions. Many policies also state government positions on voluntary compliance initiatives.

An enforcement strategy, on the other hand, represents the internal bureaucratic framework or work plan for implementing an enforcement policy and exercising related enforcement powers and alternative mechanisms for fostering compliance, to respond to violations including the exercise of alternative powers of intervention and sanction. A strategy incorporates decisions about necessary staffing, skills, training, inspection protocols and

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[150] For example, since 1992 the Government of Canada has required preparation and reporting in the Canadian Gazette of a compliance strategy as a component of the regulatory impact assessment of any proposed regulation. See *A Strategic Approach to Developing Compliance Policies: A Guide*, *supra* note 56.

procedures to institute enforcement policies. It reflects decisions to target specified sectors or regulatees. It clarifies mechanisms for evaluating the chosen strategy, inclusive of the various indicators of success or failure. Most importantly, it enables an agency to implement an enforcement program in a thoughtful, consistent manner.

A compliance strategy can be used as both a preemptive and reactive tool. It can be used to assist government agencies in scheduling necessary legislative and regulatory reforms to provide more effective measures to deter offenders or to enable more timely response. It can assist agencies in their reactions to non-compliance by establishing protocols for response to complex interagency or transboundary enforcement problems.[151]

Strategic choices are made by governments in the selection of control instruments (regulation, permit, compliance contract), the scope of powers, the nature of the regulated party, use of incentives, monitoring programs and sanctions and roles assigned to the public.[152]

In designing an enforcement strategy, it has been suggested that it may be important to also recognize barriers, deficiencies and special influences on the potential success of various

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[151] For example, in response to significant transborder illegal trade in hazardous wastes and chloroflurocarbons (CFCs) the enforcement agencies of the United States, Canada and Mexico have been developing and implementing a strategy to improve their capacity to detect and respond to violations.

[152] *Supra*, note 149.

enforcement actions. These can include the capacity of the regulatee to comply; the ready enforceability of the particular law; the capacity of the agency to enforce (training and empowerment); societal and attitudinal influences[153]; and, relative political priorities.[154] Decisions made in each case may be critical to the ultimate success and credibility of an enforcement program. It is therefore critical to the future success of individual enforcement actions that governments give early attention to addressing major policy issues and adopt a specific strategy towards compliance.[155] It must also be recognized that while there may be wide avenue for flexibility in individual enforcement responses, ultimate credibility of the strategy requires that boundaries be placed on exercise of discretion including adherence to statutorily imposed standards and procedures and official compliance policies.[156]

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[153] The attitude of government is as important as the attitudes of the targeted parties. It has been the experience of Dutch officials that the " attitudes of the administration strongly affects the success of enforcement. An administrator with a negative attitude will be unwilling to equip the enforcement department of his organization with the power it requires. He is also likely to impose many administrative sanctions (recognizance, closure). In short, an enforcement official may work as hard as he likes, but without the support of the administration, he will achieve little". J.A.M. Van Ekeren et al, "Information Campaigns Benefit Enforcement of Environmental Laws", Proceedings of the *International Conference on Environmental Law*, *supra*, note 4 at p. 287. See also D. Saxe, *supra*, note 7.

[154] *Supra*, note 142.

[155] The USEPA for example have recently revised their compliance strategy to give priority to pollution prevention, and risk reduction, and to target " significant non-compliers". See R. van Huevelen and P. Rosenburg "Successful Compliance and Enforcement Approaches", Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 163. See also H. Versteeg, *Examining the Current and Proposed of the Canadian Environmental Protection Act to Incorporate Pollution Prevention and Strategies*, Final Report, (Ottawa: Environment Canada, 1993).

[156] As pointed out by Canadian government strategies report, extra-legal responses may ensure a cooperative working relationship between regulator and industry but if premised on turning a blind eye to legally imposed standards they will ultimately harm the credibility of the agency, *supra*, note 142 at p. 9.

A compliance strategy has been found to assist government agencies in determining critical questions about the ultimate delivery of the intended environmental or developmental control.[157] Strategic choices must be made in the selection of control instruments (regulation, permit, compliance, contract), use of incentives, monitoring programs and sanctions. Each decision is critical to the success of a compliance program and each is affected by the other. It is therefore critical to the future success of individual enforcement actions to address major policy issues and to adopt a specific strategy which remains responsive to changing times and priorities.[158] The following are among the critical issues agencies have found useful to consider in formulating an enforcement and compliance strategy.

a) IS THE PROPOSED STANDARD REASONABLE AND CAN COMPLIANCE BE ANTICIPATED?

A determination of the capacity to comply should be based on independent studies of the

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[157] A useful review of the purpose and method of preparing of a compliance strategy is provided, in the report of the Canadian Regulatory Compliance Project, *ibid*; See also C. Wasserman, *supra*, note 4.

[158] The USEPA for example have recently revised their enforcement and compliance strategies to give greater priority to pollution prevention and risk reduction and to target "significant noncompliers". See R. van Huevelen et al "Successful Compliance and Enforcement Approaches", Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 163; USEPA, *Enforcement in the 1990's Project: Recommendations of the Analytical Workgroups* (USEPA: Washington, 1991); In the Netherlands, the National Coordination Committee for Environmental Law Enforcement (LCCM) prepares annual national enforcement programmes. See J. A. Peters, *supra*, note 56, at p. 274.

targeted group, research into the available control technologies and anticipated costs and revenues.[159] Consultations with the regulated industry can improve the probability of realistic controls and timelines in compliance.[160] It can help counter post regulatory arguments by industry regarding the technical or financial viability of the control.

b) WHAT IS THE COST OF COMPLIANCE AND WHO SHOULD BEAR THE COSTS?

Enforcement costs can vary for each particular statute or regulation. A full cost accounting for implementation of an environmental standard or objective requires that consideration be given to all necessary costs, not only those born by the regulated party (i.e. retrofitting, training,). Compliance costs borne by government include personnel, training, equipment, investigations, educational programs and materials as well as lost revenues through grants or tax incentives. Costs of implementing and administering market measures are another frequently forgotten or underestimated cost.[161]

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[159] Pollution control obligations also can be profitable to the regulated industry, for example the sale of sulphur as a by product of sour gas processing. Pollution controls can create an economic opportunity. Legal requirements to properly treat and dispose of toxic wastes support the growth and innovation in the waste management and control technology industries.

[160] *Supra*, note 142 at p. 15.

[161] S. A. Herman and P. Verkirt, "Closing Remarks for the Third International Conference on Environmental Enforcement", Vol. II, Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 256; E. Cowan (Rapporteur) "Enforcement of Economic Instruments", Vol. II, Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 197.

A compliance strategy can clarify who can and should bear the costs of implementation. Where the decision is made to impose all or part of the costs of compliance on the targeted industry, the "polluter pays" principle can be manifested through a variety of mechanisms including pollution fees and charges,[162] requirements, or sentencing powers.[163] The strategy may propose legislative reforms to implement these measures or recommend preferential use.

A compliance strategy ensures that decisions about choice of coercive versus economic measures are premised on full consideration of practical experiences with the alternative instruments and anticipated costs to both government and the regulated parties (large and small industries).[164] In this way care can be take to ensure incentives directed at reducing impacts on one medium (e.g. water) do not result in increased impacts on another (e.g. land or air).[165]

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[162] The Czech government has legislated a fee scale for waste disposition calculated according to risk of harm and individual record of compliance, K. Velek, "Some Information on Enforcement concerning Solid and Hazardous Waste Disposal in Czechoslovakia", Proceedings of *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 517. Norway apparently charges back to regulated industry the costs of its inspection and audit program. See G. Rodland and A. Miller et al, *supra*, note 141, Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 66. See also Peters et al. "The Enforcement of Environmental Charges in the Netherlands", *ibid* at p. 487; Rasnic, "Enforcement of Economic Instruments in The United States", *ibid*, p. 495 for a detailed discussion of problems in effectiveness and costing of economic measures.

[163] For example, the CEPA empowers the court to order an offender to post a bond or pay money into court is an amount necessary to ensure compliance; to compensate the government for remedial or prevention action; to pay monies to research improved disposal methods. *Supra*, note 117.

[164] *Supra*, note 53.

[165] For a discussion of the need for a multi media approach to regulation and enforcement see R.B. Cheatham, J.R. Edward, W.H. Frank, R.J. Satterfield, "Innovative Multi-media

Where a variety of compliance measures are proposed, safeguards should be instituted to prevent or avoid potential impacts on enforcement actions. A compliance strategy can incorporate consultative mechanisms between permitting and enforcement agencies to ensure approaches are integrated and coordinated.

c) *WHO ARE THE TARGETED PARTIES?*

A strategy for enforcement should address whether the targeted parties are public or private, individual or corporate. Similarly it will be important to consider the efficacy of surveillance for all regulated parties or only those with poor compliance records. It has been recommended that these issues be addressed at the developmental stage for any standard or law.[166]

In the standard-setting process a decision must be made about imposition of legal liability, that is, will responsibility for operating standards be imposed on both private and public

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Compliance, Enforcement and Pollution Prevention Approaches to Environmental Compliance at Federal Facilities in the United States of America", Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 341; "Summary of Workshop: Integrated Permitting and Inspection", *ibid*, p. 335.

[166] It should be noted that Parliament can bind the provincial and federal orders of government (e.g. s-4, CEPA, & s.3(2) of the *Fisheries* Act). This means that government departments and agencies can be prosecuted. For example the USEPA focus their enforcement responses on "significant non-compliers". The USEPA have found this targeted approach to be both more cost effective and to yield better results. They advise that the existence of a list of "significant non-compliers" also has encouraged listed parties to be more proactive in compliance. See van Huevelen and P. Rosenburg et al, *supra*, note 154.

facilities.[167] Where public facilities are also subject to the regulations, it will be important to consider the liability implications of failure to enforce the law against public violators and the overall impact to the credibility of the enforcement program.[168] A strategy which involves potential enforcement actions against government facilities necessitates advance review and consideration by senior policy officials, as it will most certainly attract considerable controversy within the bureaucracy.

Whether the party targeted by the control is an individual, small family enterprise or major corporation should be factored in the compliance strategies. A conscious decision should be made at the time of development of a law or regulation whether targeting corporate directors and officers will improve compliance rates.[169] Similarly the choice of sanctions and penalties should reflect the special character of potential offenders and legal or political limitations to their exercise. For example, in some jurisdictions while criminal prosecution cannot be commenced against corporations, directors and officers can be charged.[170] Where

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[167] For a review of various approaches to seeking compliance by government-owned and operated facilities see E.F. Lowry, " Enforcement at Government Owned or Operated Facilities, Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 476; A. Delong (Rapporteur) "Enforcement at Government-owned or-Operated Facilities", *ibid*, p.189-190.

[168] Environment Canada prepared a separate policy document and held special briefing sessions for other federal departments in advance of the enactment of the CEPA.

[169] It also should be recognized that in some instances flexibility in choice of target for enforcement action may be limited by prevailing laws. For example in the Republic of Indonesia, criminal proceedings, with the exception of economic crimes, may only be initiated against real persons, not corporations. See *Law no. 8, 1981, regarding the Criminal Law of Procedure*, Republic of Indonesia.

[170] *Ibid.*

public facilities are also targeted, a more appropriate response may be control or cleanup orders rather that imposition of monetary penalties.

Care should be taken in exercising inconsistent enforcement responses based solely on financial capacity.[171] A more effective path to compliance may be targeting educational programs to smaller companies and encouraging self audit by major corporations. On the other hand, variances in response may be more appropriately at the time of sentencing or order.[172]

Finally, while the standard may apply to a broad category of parties, it may be more cost effective to target enforcement actions against a specific sector or a select group. For example, the development of a compliance data base will enable officials to target inspections and response to those with a known record of non compliance.[173] The same data base will enable better management of compliance incentives program.[174]

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[171] E. Barr, *supra*, note 34.

[172] See J. Swaigen, *supra*, note 148.

[173] *Supra*, note 57.

[174] For example, Czech officials reportedly factor compliance records into their calculation of pollution charges. See K. Velek, "Some Information on Enforcement Concerning Solid and Hazardous Waste Disposed in Czechoslovakia", Vol. 1, Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 517. Poland rewards timely response by polluters by allowing reduction in allotted fines where the offenders complete an ecological investment within a prescribed time period. Z. Kamieñski, "Process of Upgrading the Polish Environmental Procedures", Vol. 1, Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 56.

d) WHAT IS AN APPROPRIATE ROLE FOR THE VARIOUS PUBLICS OR DIRECT BENEFICIARIES OF THE CONTROL?

A compliance strategy should also address the intended role for the public in fostering compliance or triggering enforcement action. A wide variety of non-government entities can be identified as providing potentially beneficial contributions to enforcement and compliance programs including special interest organizations (environmental, development) industrial associations, unions, professional societies (engineers, lawyers, auditors), universities and private consultants.[175]

In some cases enforcement agencies have expanded their capacity to deliver monitoring and enforcement functions through a concerted strategy to facilitate public involvement. Private legal action can supplement efforts of enforcement agencies where political or inter-jurisdictional problems constrain government response. This may require legislative amendments to extend private rights of action and policy decisions regarding official responses to private actions.[176] For some nations the enactment of citizen enforcement

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[175] For a more thorough list see C. Wasserman , "Principles of Environmental Enforcement", *International Conference on Environmental Enforcement, supra,* note 4 at p. 117. The North American Agreement on Environmental Cooperation provides for the establishment of both regional (Joint Public Advisory Committee) and national advisory committees. The Parties of the Agreement have appointed representatives of ENGOs, industry associations, municipal and tribal governments to advise them in the delivery of their obligations, including effective enforcement. See articles 16, 17. See also S. Casey-Lefkowitz, et al, "The Evolving Role of Citizens in Environmental Enforcement", Vol. 1, Proceedings of the *Fourth International Conference on Environmental Enforcement, supra,* note 4 at p. 221; Special Topic Workshop H: Public Role in Enforcement: How to Go About Creating and Supporting Effective Citizen Enforcement, *ibid,* pp. 509-528.

[176] Many jurisdictions have a policy of public intervention to stay private action or to discourage cooperation in case preparation. For a review of issues involved in private prosecutions, see L. F. Duncan, *Enforcing Environmental Law: A Guide to Private*

rights is required by international law.[177]

Community based organizations can provide a useful watch dog role supplementing limited resources for government surveillance. Strategies for facilitating community watch have included legal requirements to submit monitoring reports to specified community organizations, and public hotlines for complaints or incident reporting. In some instances the establishment of community monitoring teams are made terms of operating licence. Constructive participation requires a conscious effort to lend support to community to build effective linkages. Commitment to provide technical training and communication channels to enforcement agencies.[178]

Industrial associations can also provide a useful conduit for information to regulated parties on regulatory and compliance initiatives as well as technology transfer. In some instances mentoring programs have been instituted to foster exchange of environmental management and technological expertise between larger corporations and small to medium facilities.

Prosecution (Edmonton: Environmental Law Centre, 1990)

[177] *Ibid*, article 6. The NAAEC requires the Parties to provide legal right to compel investigations, and private right of access to administrative, civil, and criminal proceedings and remedies. *supra*, note 3.

[178] For example, the Texas National Conservation Authority has given support to a community-based monitoring program for sampling and reporting on potable water quality. A training program was initiated by the Alberta Environmental Law Centre in 1997 to support community involvement in monitoring and reporting on environmental offences. The Commission for Environmental Cooperation, North American Environmental Fund has provided grants to a series of community based projects throughout North America establishing community monitoring programs.

Cooperation of workers, including government employees, can be encouraged through "whistle blower" provisions.[179] The expanded use of environmental and compliance audits by industry and government has created a significant niche for private consultants in directing voluntary compliance efforts. A number of governments have adopted policies of supporting protection of information from private audits to help facilitate private efforts to comply.[180]

e) WHAT IS THE RELATIONSHIP BETWEEN ENFORCERS AND OTHER GOVERNMENT OFFICIALS?

The development and implementation of an effective enforcement and compliance program also depends on a constructive relationship among government officials. Any strategy must address the degree of independence to be accorded to enforcement officials as well as measures for coordinating responses. This may be particularly critical to avoid conflicts between those managing incentive programs and those exercising enforcement responses. It will be important to employ measures to ensure close coordination between regulators, prosecutions, judiciary and politicians.[181]

Any effective enforcement and compliance strategy will also address enforceability in the

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[179] See for example, *Yukon Environment Act*, S.Y. (1991) C.5, S.20.

[180] See *CEPA Enforcement and Compliance Policy*, *supra*, note 15 at p. 29.

[181] E. Barr, *supra*, note 34 at p. 63; L.F. Duncan and M. A. Santosa, *BAPEDAL Development Plan, Regulatory and Compliance Program*, *supra* note 36.

instrument which establishes standards, compliance promotional programs, compliance monitoring, choice of sanction and program evaluation. The remainder of the chapter will discuss these components in greater detail.

3. ESTABLISHING A CLEAR DEFINITION OF COMPLIANCE

The backbone of any effective enforcement regime is the implementation of clear measures to determine compliance and to detect violations.[182] This requires the imposition of legally binding, precise, measurable and readily understood standards. It is equally important that those standards be integrated and consistent. Standards must be imposed in a timely fashion and in consultation with the affected parties.[183] Contrary to a popular assumption that the regulatory process is cost prohibitive, taking the effort to impose legally binding standards can provide a cost efficient route to compliance,

> Environmental agencies can increase compliance by developing regulations and permits that are enforceable. A system which combines enforceable regulations with the promise that the government will respond firmly to violations ultimately encourages a high level of voluntary compliance. When industry is motivated to control its own operations in order to achieve environmental standards, the need for public expenditure on inspectors and bureaucrats can be reduced, thus, enforceable standards contribute to efficiency as well as achievement of environmental goals.[184]

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[182] World Commission on Environment & Development, *supra*, note 7; *Agenda 21*, Chapter 8, *supra*, note 2; *Foundex Report, Environment and Development*, (International Conciliation), January 1972 at p. 22.

[183] C. Wasserman provides a detailed review of factors to consider in standard setting in C. Wasserman, " Principles of Environmental Enforcement ", Vol. 1, Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 67, at p. 43-63. For a helpful reference to check lists for drafting enforceable regulations and permits, see S.F. Fulton and E.J. Gilberg " Developing Enforceable Environmental Regulations and Permits ", *supra*, note 4 at p. 253.

[184] S. F. Fulton, *Ibid* at p. 253.

This section reviews lessons learned about the value of founding an enforcement and compliance regime on a sound system of precise, legally binding environmental standards.

a) LEGALLY BINDING STANDARDS

The enactment of clear, legally binding standards sets the stage for more effective enforcement targeting. The imposition by law of pollution control standards and procedures sends a clear message to regulated industry that compliance means compliance with the law. The law should specify who is bound, the precise standards, deadlines for compliance, self -monitoring or reporting obligations, assign enforce powers and prescribe sanctions for noncompliance.[185]

The establishment of clear binding standards will be critical regardless of the choice of compliance tool, that is, "command" and "control" or market instrument. Prescribed targets provide the foundation for a fair and consistent inspection and enforcement regime. They provide the minimum requirements for design and operation of facilities in a compliant manner, targets for self motivated technological innovation and for the calculation of

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[185] See C. Wasserman, Proceedings of *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 54-56 and 60-62 for a more detailed list of recommended provisions of an enforceable law or permit. See also *Environmental Protection and Sustainable Development: Legal Principles and Recommendations*, adopted by the Expert Group on Environmental Law of the World Commission on Environment And Development, Article 4, "General Principles concerning Natural Resources and Environment Interferences" (London, June 1986) at p. 24.

effluent charges and taxes.[186] They also provide a measure of accountability.

While considerable effort is frequently expended on establishing ambient objectives and on monitoring background contaminant levels, to be legally enforceable, standards must set clear targets for specified sources. Each jurisdiction explains its own unique means of imposing standards including legislation, regulations, licenses or permits and contracts or agreements.[187] In still other cases the standards evolve from an intensive facility-wide audit process. For example, Mexico, while establishing some standards through common means such as statutes or permits, have also introduced a unique standard setting process through intensive facility specific audits.

i) LEGISLATION

In most jurisdictions statutes are the selected instrument for imposing general rights and prohibitions and duties for a standard setting process (including the right of affected parties to participate in standard setting or to appeal).[188] Similarly, statutes have proven the

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[186] *Agenda 21*, article 8.13 supports this position. "Laws and regulation suited to country-specific conditions are among the most important instruments for transforming environment and development policies into action, not only through 'command and control' methods, but also as a normative framework for economic planning and market instruments", as cited in G. Bendi, *supra*, note 45, in the Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 115.

[187] For a more detailed review of the use and relative advantages of each mechanism see C. Wasserman, *supra*, note 4 and the *Report of the Auditor General of Canada to the House of Commons, Chapter 11*, (Ottawa: Department of the Environment, Conservation and Protection, 1991).

[188] See for example the CEPA, *supra*, note 122; *Alberta Environmental Protection and*

common instrument for imposing legal liability for non-compliance.[189] Where the greatest variances occurs, is in the choice of instrument to impose more precise standards specified pollutants or facilities.

A common practice where environmental regimes are newly established is to enact basic umbrella statutes enshrining environmental principles such as the duty to protect the environment or a general prohibition against pollution.[190] Many such umbrella laws were speedily enacted leading into the 1992 Rio UNCED Conference.[191] What is often missing however are the parallel instruments to impose site specific operating standards. This has led to failed and costly attempts at enforcement, with additional side effects of damage to the credibility of enforcement agencies.[192]

Enhancement Act, S.A. (1992) c. E-13-3; *Law No. 4, 1982, regarding Basic Provisions for Management of the Environment*, [Republic of Indonesia] *supra* note 103.

[189] It may be noted that enforcement actions have floundered where governments have not clearly prescribed liability for damage from polluting activities. See for example S. Haryanto," Environmental law enforcement needs improving", *Jakarta Post*, April 23, 1991, p.6 in which he identifies various inadequacies of the *Indonesian Environmental Management Act* including failure to precisely define strict liability. It may be noted that the new law enacted in 1997 purportedly addresses this gap (Interview with M. A. Santosa, Montreal, October 1997).

[190] Examples of this type of inaugural legislation include the Canadian *Fisheries Act*, *supra* note 103, which enacted a general prohibition against the deposit of any substance into waters frequented by fish which may be deleterious to the fish or their habitat, or human consumption; Indonesia *Act no. 4 of 1982*, *supra*, note 103, creates a right to a healthy living environment and a general obligation on every person to prevent and abate pollution (sections 5(1) and (2)).

[191] For example, Indonesia's *Environmental Management Act*, *ibid*; Mexico's *General Law of Ecological Equilibrium and Environmental Protection*, Diario oficial de la Federacion, 28 January 1988, amended by decree published 13 December 1996.

[192] For example the Indonesia Case *no. 122/Pid/B/1988/PN.Sda against Bambung Gunawan a.k.a Oei Ling Gwat* and *no. 142/Pen.Pid/1988/PN.Sda, Sidoarjo District Court*.

One way to prevent this kind of scenario is to contain these broad obligations or prohibitions by the creation of more precise standards through associated approvals, authorizations, regulations or permits.[193] This of course necessitates parallel action to institute the necessary administrative systems for implementing these ancillary instruments.[194]

Also often disregarded is the propensity of legislation to trigger a concomitant responsibility to ensure compliance. The act of creating a legislated standard may not only impose a duty on the parties specified to comply with the obligation and but also a duty on government to enforce.[195] Consequently care must be taken by regulatory agencies in enacting standards to ensure that they have given equal attention in program development and budget processes to mechanisms for both detection and response.

Legislation is also an appropriate tool for prescribing a consistent standard-setting process, and according participatory and appeals rights. It may also be worth restating the need to pay similar heed to the binding nature of legislated procedural rules, for example for

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[193] See for example, *Yukon Environment Act*, *supra*, note 179; Canadian *Fisheries Act*, *supra*, note 103; Indonesia's *Environmental Management Act*, *supra*, note 103.

[194] L. F. Duncan and P. Moestadji , "Appendix: A Critical Path for Implementing Pollution Control Legislation", in *The Licensing System for Environmental Pollution Control in the Republic of Indonesia* (Jakarta: Indonesian Ministry of Population and Environment, 1992) (Studi Perizinan Pengendaliaw Pencemaran Ling Kungan di Indonesia, Jilid I dan Jilid II).

[195] For a review of Canadian law on the duty to enforce see *Swanson*, *supra*, note 30; *Kamloops*, *supra*, note 30; *Tooke*; *supra*, note 30; *Swaigen*, *supra*, note 43 at p. 148.

environmental impact assessment, emergency response, or emissions trading rules. Where procedural rules are prescribed in law, the need will arise to enforce. Experience has shown that it may be preferable to legislate only the minimum procedural rules allowing for more flexible response pursuant to guidelines or inferior legal instruments. This can help agencies in avoiding an otherwise unmanageable enforcement load.[196]

ii) REGULATIONS

As previously mentioned, regulations have generally been found useful for establishing minimum national or regional standards for specified substances or for sources of pollutants by sector. Regulations can provide a consistent prescribed standard for negotiation of site-specific licenses or permits. They can also be used to provide more detailed criteria for review and approval of development applications. However, the regulation making process can prove to be extremely costly and time consuming , resulting in unnecessary delays in prescribing technical operating standards.[197] A more practicable alternative can be the enactment by law or regulation of licensing or permitting requirements and procedures leaving the site-specific standard setting process to the latter process .

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[196] For example, the Republic of Indonesia in its first enactment of an environmental impact assessment process established the legal obligation to conduct assessments of not only proposed but existing facilities. This created what became an overwhelming and basically impossible task of enforcing the impact assessment law against virtually hundreds of thousands of parties. The law has been since amended to limit the application of the requirement. See also C. Wasserman, *supra,* note 137.

[197] The Republic of Indonesia for example, has faced considerable delays in attempts to prescribe site specific standards through the regulatory process. See L. F. Duncan and P. Moestadji, *supra,* note 194 and *I.C.E.L. News Bulletin*, June 1996, Jakarta.

iii) LICENSE OR PERMIT

Once minimum standards are established, agencies have found that flexibility in site specific standards can be accommodated through the licensing or permitting processes[198]. This affords greater flexibility in determining site-specific standards such as sensitivity of receiving environment, cumulative impacts from loading of other adjacent sources or age of the facility. The imposition of these site-specific control standards, monitoring requirements and inspection schedules also facilitates ready parameters for self-monitoring and enforcement activities. As will be discussed later on, care should also be taken to integrate licensing processes to ensure consistency in approvals and in later enforcement responses.[199]

As a final consideration for the standard setting process, perhaps among the more frustrating experiences for an enforcement official is the discovery at the time of the attempted enforcement action that the alleged violated "standards" are in fact not legally enforceable. As a preemptive measure, some jurisdictions incorporate an enforceability screening process for draft regulations and permits. Varied approaches have adopted including

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[198] See C. Wasserman, *supra*, note 137 at p. 59.

[199] See "Special Topic Workshop C : Integrated Permitting and Inspection" and "Special Topic Workshop L : Creating Enforceable Permit Programs and Requirements: Discussion Focus on Water Pollution and Contamination of Drinking Water Supplies", Proceedings of the *Fourth International Conference on Environmental Compliance and Enforcement*, *supra*, note 4 at p. 333 to 378; 611 to 654.

establishment of drafting teams which combine technical and legal experts; preparation of model conditions; internal review processes enabling feedback among regulatory and enforcement officials including debriefings following enforcement action. It will be equally important to ensure that permitting agencies have the necessary training and skills to draft enforceable provisions.[200]

iv) NEGOTIATED SETTLEMENTS AND COMPLIANCE AGREEMENTS

In other instances, agencies have utilized negotiated settlements or compliance agreements as mechanisms to negotiate binding schedules for implementation of new standards.[201] In such cases the exercise of discretion to waive or defer enforcement action is replaced by a process to superimpose tailor-made standards by way of contractual agreement.[202] Such agreements have established site-specific or party specific standards with renegotiated compliance deadlines.[203] The move to legally enshrine the use of compliance agreements

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[200] See L. F. Duncan, et al, *supra*, note 181; C. Wasserman check list, *supra*, note 185.

[201] Environment Canada has recently introduced upgraded standards for pulp and paper mill effluent through negotiated compliance agreements and has proposed amendments to its laws to introduce the use of negotiated settlements in tandem with administrative penalties. Such agreements imposed by administrative order would purportedly enable the agency to revise monitoring requirements, and impose pollution prevention or production processes requirements. *Pulp and Paper Mill Defoamer and Wood Chip Regulations*, SOR 192-268; *Pulp and Paper Mill Effluent Chlorinated Dioxin and Furans Regulations*, SOR 192-267. See Response by Environment Canada, to the Parliamentary Committee Report. For a more lengthy discussion of these instruments see North American Report on Voluntary Compliance, *Commission for Environmental Cooperation*, *supra*, note 9.

[202] In at least one jurisdiction, Alberta, special legislation has been enacted to facilitate negotiations with regulatees for the opting out of otherwise binding standards of operation.

[203] Canadian agencies have in many cases only recently replaced informal waivers with legally binding compliance targets and schedules: See for example the Pulp and the Paper Regulations, *supra*, note 201. In other instances where the need for more formalized variances is recognized, the current law does not enable the negotiation of these negotiated

has been triggered by concerns raised about the legal veracity of the practice of waiving compliance requirements based on informal undertakings by industry.

Concern has been expressed that this process of renegotiating compliance schedules and technical compliance targets belongs more appropriately in the more public process of standard sections or regulation making. [204]

Where the negotiated settlement approach is adopted, public confidence in the process would undoubtedly be enhanced by enabling greater public scrutiny of the negotiation process, at a minimum for competitors and or directly affected communities. A disadvantage to this instrument may be the inability of persons who are not parties to the contract or agreement to enforce the terms thereby precluding any right of recourse for third parties.[205] This type of "opting out" mechanism may also raise concerns about regulatory fairness[206] and usefulness as instruments for general deterrence.[207]

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compliance schemes. See response by Environment Canada to the Report of the Parliamentary Committee on the Reform of the *Canadian Environmental Protection Act*.

[204] For a discussion of public concerns about the deregulation process see Commission for Environmental Cooperation, *Proceedings of the North American Dialogue on Environmental Law*, (Montreal: CEC, 1997) and background papers.

[205] For a discussion of this approach see Barry J. Barton et al, *A Contract Model for Pollution Control*, (Vancouver: Westwater Research Centre, University of British Columbia, 1984).

[206] For Canadian agencies this raises the specter of constitutional challenges relating to rights of due process or discriminatory application of the law under the *Canadian Charter of Rights and Freedoms*, *supra* note 42.

[207] See "Canada Country Report", Commission for Environmental Cooperation, *supra*, note 7.

b) MEASURABLE, UNDERSTANDABLE AND ACHIEVABLE STANDARDS

Achieving compliance requires that the standards be readily understood, measurable and achievable.[208] Uncertainty can hamper voluntary efforts to comply and effective surveillance and enforcement.[209] Standards of conduct therefore should be drafted in language that is clear to both the operator and inspector, including where appropriate, methods for calculation of the concentration and loading of effluent and the timing and location of effluent monitoring.

The standard setting process should include review processes which ensure that standards and requirements are scientifically defensible and technologically and economically feasible. This is important for both the regulator and the regulated sector. For example, standards which require complex calculations on concentrations or loading may be inappropriate for enforcement agencies with limited technical or scientific capacity including limited laboratory expertise.[210] Similarly, where self-monitoring and reporting is

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[208] For example, in one case a penalty was set aside by the United States Federal Court when they held the standard to be ambiguous and confusing. *Rollins Environmental Services (N.J.), Inc. v. EPA*, 937 F.2nd 649 (D.C. Cir., 1991) as cited in S.F. Fulton and E.J. Gilberg, *supra*, note 183 at p. 255.

[209] S. F. Fulton, *ibid* at p. 254; J. E. Calfee and R. Craswell, "Some Effects of Uncertainty or Compliance with Legal Standards", (1984) 70 *Virg. L. R.* 965.

[210] As J. Mayda, *supra*, note 140 at p. 1019 points out, "[I]f standards are set that monitoring requires overly complicated and costly equipment, they and their parent law will not be implemented. Technically complicated statutes, may in fact be a ploy to avoid effective environment regulation; there can be little doubt that this tactic has been used in some cases. More frequently, however, complex laws represent an infatuation with technical gadgetry

required, the regulated sector must have the capacity to institute the controls and to perform the monitoring tasks.

Consideration should also be given to the relative complexity of the standard.[211] This is important both in achieving the prescribed objective and in determining compliance. For example, enforcement of a general prohibition generally requires complex procedures including costly laboratory analysis and use of experts to prove deposit, causation and harm. This requires a high level of expertise and training in an inspectorate to coordinate the action and access to scientific, technical and legal experts. Consequently, where the capacity and resources are not yet sufficient to mount highly technical enforcement actions, governments may be wise to avoid premising their enforcement strategy on legal mechanisms which trigger a significant burden of technical proof by the government. [212]

In the alternative, where compliance is measured by adherence to operating or effluent standards as conditions to a permit, inspection and enforcement is more straight forward. It

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rather than the more realistic principle that the simplest 'adequate' technique is probably the best.

[211] See L. F. Duncan, et al, *supra,* notes 44 and 184. J.M. Tindemans, " Collaboration in "Environmental Enforcement: Experiences with the Build-up of a Coordinated Enforcement Structure", Proceedings of the *Third International Conference on Environmental Enforcement*, *supra,* note 4 at p. 215.

[212] The Republic of Indonesia's *Law no. 4 year 1982 regarding Management of the Environment*, for example created offenses which required a burden of proof on the part of the enforcement agency beyond its technical and resource capability. The government consequently pursued more practicable avenues for imposing standards which imposed a lesser burden on the government to enforce, *supra* note 188. L. Duncan et al, *ibid.*

is similarly simpler for regulated sources to undertake self-monitoring and take precautions to comply.

i) INTEGRATION OF STANDARDS

It has been the experience of a number of enforcement agencies that targeting single pollutant mediums (hazardous waste law or waste water standard) in inspection and enforcement can result in increased enforcement and compliance costs and regulatory confusion. As an alternative some agencies are adopting a multi - media approach to standard setting and enforcement.[213] This integrated approach avoids the result of transferring impacts from one medium (e.g. water) to another (e.g. land or air) through regulation or control of a single medium (e.g. waste water effluent standards). It also enables enforcement agencies to adopt an integrated approach to enforcement and allows regulated facilities to institute a more holistic environmental management system.

> To enforce single medium laws, authorities naturally respond by developing a system of single medium enforcement. Inevitably, this causes a situation where those enforcing air pollution laws are at odds with those enforcing water pollution laws. Compliance with air pollution standards, for example, might lead to reduced air pollution emissions but increase effluent for water authorities to deal with. A single medium approach also means that different agencies are inspecting the same plant, requiring facilities to fill our forms and provide much of the same information. This can cause confusion...added paper work, duplication of effort and disregard for public authorities administrative complexity and inconsistency.[214]

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[213] UNEP provides a listing of 11 European nations who have instituted or propose to institute an integrated permitting system. A number of jurisdictions are revising their laws and procedures to implement this approach, *supra*, note 22. For a review of these experiences see *supra*, note 197.

[214] UNEP, *ibid* at p. 22.

ii) INSTITUTIONAL INTEGRATION

To ensure enforceability of standards it will also be important to integrate standard setting with other management and review processes. For example, recommendations on standards arising from an environmental assessment process should be integrated with permitting processes to ensure that they are made legally enforceable as conditions to permits or binding agreements. In some cases it may be necessary to undergo institutional reorganization to facilitate this more integrated approach. An added benefit would be economization of resources assigned to standard setting and enforcement.[215]

iii) CONSISTENT STANDARDS

Effective enforcement requires consistent and compatible standards. Conflicting laws, operating conditions or instructions or contradictory advice by inspectors or other officials can all lead to failed enforcement actions.[216] It is therefore important that efforts be made to implement and apply consistent, compatible standards.

Governments have utilized a number of mechanisms to improve interagency coordination. One approach is to undertake multi jurisdiction consultation in standard setting (including regulatory development and environmental screening and review processes) towards

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[215] G. Bendi, *supra*, note 45 in "Proceedings of the *Third International Conference on Environmental Enforcement and Compliance*, *supra*, note 4.

[216] This defence termed "officially induced error" or "government induced error" has been successful as a defence in Canadian courts. See J. Swaigen, *supra*, note 43 at p. 202-206.

harmonized standards and processes.[217] Another option is to institute a "one-window" process for standard setting. Care should be taken however in attempting to consolidate standards across jurisdictions to ensure that legislative obligations and constitutional powers are being observed.[218]

Improved consistency can also be furthered through technical assistance, training and prescribed formats for permits, and administrative orders. In some instances processes which require interagency consultation in standard setting may be legally required as a means of avoiding later conflicts.[219]

iv) HARMONIZATION OF STANDARDS

It can be similarly problematical if a conflict exists amongst jurisdictions.[220] In some

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[217] For example Canadian national, provincial and territorial officials have initiated processes through the Canadian Council of Ministers of the Environment (CCME) for the harmonization environmental policy, pollution control standards and assessment review processes, *supra*, note 103. In 1990 the Netherlands implemented a model for collaboration among the provinces, municipalities, and water boards, police, public prosecutions and Ministries of Interior, Justice, Transport and Agriculture which includes annual joint programming, and the adoption of an integrated multi media approach. J. Peters, "The Relationship between Central Government and Provincial/ Municipal Authorities with regard to Enforcement", Proceedings of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 272.

[218] *Friends of the Old Man River*, *supra*, note 28.

[219] For example, section 54 of the CEPA requires the Canadian Minister of Environment to gain the concurrence of the Minister responsible for the administration of the federal works, undertaking or lands intended to be regulated prior to imposing any standards for pollution control or waste management affecting those areas. *Supra*, note 114.

[220] A prime example is the issuance by provincial agencies of licenses to pollute water courses regardless of the paramount federal law which prohibits the deposit of deleterious substances into any waters frequented by fish. Canadian *Fisheries Act*, *supra*, note 103.

countries the national government is granted a power of paramountcy or oversight which can be exercised to ensure consistency.[221] As discussed previously, to avoid regulatory confusion and politically sensitive intervention by national governments, some governments have instituted processes for harmonization of standards including equivalency, harmonization, or minimum national standards[222].

v) TIMELINESS IN STANDARD SETTING

To be enforceable a standard must have a clearly prescribed deadline. Compliance deadlines can be imposed in the regulation, or on a site specific basis through permits or by way of compliance agreement. Where allowances are made for phasing in of new standards, target dates should be specified for each stage of any necessary upgrade or retrofit to provide clear, binding measures of compliance .[223] This will be critical for maintaining credibility in the regulatory process. It will also provide concise targets for monitoring and surveillance and potential enforcement action.

It is also important in setting timelines for achieving compliance to consider the time necessary for regulated parties to comply and for officials to be able to effectively enforce.

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[221] For example as previously discussed, the USEPA holds a power of oversight which enables this national agency to both prescribe minimum standards for states and to intervene where they fail to abide by these standards. In Canada, where powers overlap, for example for the regulation of impacts to inland fisheries and waters, the federal law has paramountcy. See Lucas, *supra*, note 51.

[222] See also J.A. Peters, *supra*, note 206.

[223] See for example, Canadian *Pulp and Paper Regulations*, *supra*, note 201; S.F. Fulton, *supra*, note 183 at p. 258.

Industry may need to acquire new technology and upgrade operating skills. Government may require special skills and equipment to inspect and enforce. In other instances there may be legislated prerequisites to the standard setting process.[224]

In addition to considering compliance timelines it is also important that regulations should be updated by amendments as new technologies are developed, to better reference standard testing methods for lab analysis. This will take account of newly understood or discovered environmental and health risks. In effect rather than implementing outdated regulations it is more important to update the regulations.

A number of alternative planning mechanisms can be used for timing standard setting and enforcement. Any planning matrix for standard setting for example should also incorporate timing of staffing, training with phasing of compliance deadlines.[225] Some jurisdictions establish timelines for standard setting on the basis of risk, exposure or public concern.[226] Care should be taken in establishing unrealistic expectations through overzealous regulatory or licensing activity unless similar attention can be devoted to enforcement.[227]

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[224] For example, the Indonesian Regulation for water pollution control requires classification of receiving water quality prior to the imposition of source specific waste water effluent standards. See L.F. Duncan et al, *supra,* note 44.

[225] See L.F. Duncan and P. Moestadji, *supra,* note 194 which provides a model critical path.

[226] For example the CEPA Priority Substances List provided for in CEPA, *supra,* note 114; R. van Heuvelen et al, *supra,* note 4.

[227] See *1991 Report of the Auditor General of Canada to the House of Commons, ch. 13, supra* note 187. The Netherlands allocated extra funds in 1989 and 1990 to eliminate the backlog in proper standard setting. J.A. Peters, "The Relationship between Central Government and Provincial/Municipal Authorities with Regard to Enforcement", Proceedings

c) *COMMITMENT TO COMPLIANCE THROUGH CONSULATION IN STANDARD SETTING*

The process of standard setting can also be critical to compliance. Consultation with regulated industry, technical and scientific experts and environmental lawyers can ensure that standards are technically and scientifically defensible, economically feasible and legally enforceable. Consultation with special interest groups and affected communities can build public awareness, involvement and commitment to the standards particularly where the input is given serious consideration. A broad array of rights to participate have been granted to facilitate public involvement including right to consultation in regulation making, and permit review, opportunity to trigger standard reviews and dispute resolution processes.[228]

4. PROMOTING COMPLIANCE

There is little dispute that the most cost efficient route to compliance is voluntary action. With this in mind many jurisdictions have incorporated into their compliance strategies mechanisms to promote compliance including information and education programs, self audits, incentives and rewards for voluntary compliance and publicizing voluntary efforts and enforcement action (to encourage deterrence). More recently, partnerships have been forged between government and industry and in some instances non-governmental

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of the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 269.

[228] See for example *Canadian Environmental Protection Act*, *supra*, note 114, *Yukon Environment Act*, *supra*, note 179, *Alberta Environmental Protection and Enhancement Act*, *supra*, note 188.

organizations to institute programs which foster investment in environmental protection which have as their objective exceeding compliance.[229]

As with other components of the strategy, promotion of voluntary compliance should be considered at the earliest stages of regulatory action. References to promotion programs should be included in any policy or strategy document. In some instances it may be necessary to include special powers in enabling statutes, for example the power to expend resources on promotional programs or to institute financial charges or incentives.[230]

a) INFORMATION / EDUCATION

It has been argued that there is a direct correlation between the record of compliance and the level of understanding or awareness about the law.[231] It is therefore important that any information strategy target all affected parties, including regulated industry, government (including enforcement officials, senior mangers, and government facility operators) and the public.[232]

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[229] See for example B. Smart, *supra* note 15.

[230] For example, the Indonesian *Environmental Management Act*, *supra*, note 201, Sections 8-10, imposes an obligation on the government to promote efforts to " sustain the capability of the living environment to support continued development", as well as to " cultivate and develop the public's awareness of its responsibility in the management of the living environment by means of information, guidance, education and research..." and the power to regulate environmental taxes and retribution.

[231] B. Seigal, *supra*, note 104; D. Saxe, *supra*, note 7.

[232] The Netherlands follows a triple-tracked strategy including informing and motivating enforcement officials, motivating administrators and informing companies. Recognition is

Recognizing this need, many countries have instituted special programs within their enforcement agencies mandated to promote compliance through the introduction of special incentive programs and the dissemination of information on the consequences of noncompliance.[233] Useful communication channels to industry and public have included advance notice through regulatory consultation processes, information packages on new laws, wide distribution of enforcement and compliance policies and use of existing communication packages such as business or trade periodicals.[234]

From a strictly pragmatic perspective, it may be necessary to target resources to assisting smaller businesses leaving large corporations with their normal coterie of in-house technical

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also given to the need to inform legislators and judiciary. J.M. Van Ekeren and M. Van De Voet, "Information Campaigns Benefit Enforcement of Environmental Laws", Vol. 1, Proceedings of *International Conference on Environmental Law, supra,* note 4 at p. 287.

[233] For example in 1994 the United States Environmental Protection Agency created the Office of Compliance specifically mandated to promote voluntary compliance. (Interview with USEPA April, 1995). In 1995 the Canadian Office of Enforcement, Environment Canada was reorganized to create a separate office of Compliance Promotion. (Interview with Dale Kimmett, Director, Office of Enforcement and Compliance, June 1995).

[234] For example, simultaneous to tabling its Canadian Environmental Protection Act in Parliament, Environment Canada also tabled an Enforcement and Compliance Policy which incorporated voluntary compliance initiatives; United States President Bill Clinton in March 1995 launched a regulatory reform policy "Reinventing Environmental Regulation" which included a 180 day enforcement grace period for small businesses and reduced penalties for all those companies who voluntarily disclosed and corrected violations as well as the establishment of a Small Business Compliance Assistance Centers. President Bill Clinton and Vice President Al Gore in, "Common Sense Compliance Policy" in, the Press statement," Reinventing Environmental Regulations", March 16, 1995; "Interim Policy on Compliance Incentives for small Businesses", United States Environmental Protection Agency, June 1995; USEPA "Fact Sheet on Compliance Assistance Centers".

and legal experts to track regulatory and policy reforms. When those being regulated are neither governments nor large corporations, the design of compliance and enforcement measures developed by the government should be based on the premise that most lack knowledge of their legal obligations and therefore will likely assign a low priority to environmental compliance. Non-compliance should be assumed to be the norm. In light of this assumption, when the cost of compliance is low and complex knowledge is not required, regulators can limit promotion activities to wide dissemination of information about the laws. However, when the cost of compliance is high and effective design requires special expertise, then considerable investment in educating regulatees and changing their assumptions and priorities, is likely to be required.[235]

Some agencies have implemented programs dedicated to transmitting information about technologies, training opportunities and technical assistance for pollution prevention.[236] Among the more unique approaches for assisting small businesses is a mentoring program in which companies with good compliance records serve as mentors for those in need of technical assistance.[237]

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[235] E. Barr, *supra*, note 34 at p. 208. Recognizing the special needs of small and medium businesses (SMBs) the Commission for Environmental Cooperation (CEC) in August 1996 established a fund to support the transfer of information on clean technologies to these entities, the first phase concentrating on Mexico.

[236] The USEPA issues an annual *Reference Guides to Pollution Prevention Resources* and a newsletter *Pollution Prevention News*. They have also cosponsored with Mexico and more recently with Canada and the CEC, voluntary compliance information seminars targeted to the US-Mexico border area industries (maquiladoras).

[237] Programme instituted by the USEPA Office of Compliance which also includes the provision of grants to those states willing to institute a mentor program. (Interviews with EPA Office of Compliance, August 1995).

Educating and motivating government can be an even greater challenge. Yet inconsistent enforcement responses for government violators can impact on the credibility of enforcement actions against private operators who may validly complain about a double standard.[238] As a preventative measure some countries have enacted special laws or adopted policies for ensuring consistency in response to public and private regulatees.[239]

Effective means of promoting compliance by public facilitates have included briefings for politicians and senior managers, information to public service unions (operators may be liable) and where necessary, special briefings on government compliance duties and collaboration between enforcement officials and other departments in training.[240]

Information on technical compliance alternatives can be facilitated through programs for technology transfer. Care should be taken however to ensure clear separation between

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[239] For example, the United States has enacted the *Federal Facilities Compliance Act of 1992*, Public Law 102-386 and *Sovereignty Waiver* 42 U.S.C. *f* 6961; Environment Canada officials have suggested that the Government of Canada has a moral obligation to show leadership in environmental compliance. See Paul Cuillerier, "Enforcement of Canadian Laws of Environmental Protection as Applied to Federal Facilities"; *Proceedings of the International Conference on Environmental Enforcement*, *supra*, note 4 at p. 448. Towards this objective Environment Canada in 1984 issued a separate *Enforcement and Compliance Policy Document for Government Operated Facilities* for the CEPA.

[240] As an illustration of ingenuity in effectively communicating the implications of government noncompliance with regulatory statutes (including environmental), a seminar series sponsored by the Canadian Department of Justice on Crown liability for enforcement reportedly had an appreciable impact on raising the consciousness of the implications of failing to enforce the law or to ensure compliance. (Interview with Lyle Fairbairn, Justice Canada, June 1994).

information roles and enforcement responsibilities in addressing technological issues. Some agencies have adopted more indirect channels to offer technical advice through indirect means including financial support to private technical journals, training sessions and trade shows.[241] Others continue to prefer to limit official technical advice to conditions to official directives.

b) COMPLIANCE AUDITS

Among the more effective tools for facilitating voluntary compliance is the use of self audits for assessing compliance .[242] Use of this form of audit is generally encouraged for both private and government facilities and can be useful for identifying compliance problems, weaknesses in management systems and areas of significant risk.[243] In the case of public facilities, identification of problems prior to an inspectors visit can also help avoid embarrassment. Audits are also useful indicators of potential liability and a measure of due

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[241] One example of an indirect support to technological innovation is the substantial financial support provided by the Canadian government to the annual clean technology transfer conferences, the first called *Globe 90.*

[242] For example, the Republic of Mexico's Environmental Enforcement Agency (PROFEPA) bases its enforcement and compliance strategy almost exclusively on a program of comprehensive environmental audits which entail an official program for certification of independent auditors, official approval of the audit program and some degree of deferral of enforcement action pending completion of the audit. Presentation by Jose Luis Calderone, Subprocuradoria, "Environmental Audit Program, Seminar on Voluntary Compliance and Pollution Prevention", Ciudad Juarez, Mexico, June, 1995; CEC, *supra,* note 9.

[243] *CEPA Enforcement and Compliance Policy, supra,* note 15 at p. 29.

diligence.[244] To promote the use of self-audits some jurisdictions have adopted audit privilege policies which provide specified waivers or variances to enforcement action as incentives for disclosure and correction of violations.[245] While there appears to be a fair degree of consensus on the value of these self audits as incentive measures, considerable difference of opinion remains on the degree to which self audits should replace or defer enforcement action.[246]

c) *TARGETING DETERRENCE*

Some jurisdictions also find value in a more direct approach to promoting compliance

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[244] Canadian case law now defines due diligence as including activities undertaken by a regulated party to comply with legal standards as well as recognized standards of practice inclusive of efforts to train and educate employees and corporate directors, conduct of audits, preparation and communication of compliance plans etc. See *Bata, supra,* note 29. For a review of the American approach see C. Wasserman, *Proceedings of International Conference on Environmental Enforcement, supra,* note 4 at p. 77.

[245] See for example the *CEPA Enforcement and Compliance Policy, supra,* note 15.

[246] For example, in the United States the debate remains heated among regulatory authorities over the subject of immunities. In June 1995 the USEPA issued an *Interim National Policy on Environmental Audit Privilege* with the express intent of countering the effects of state level legislation which extended broad immunity protection from civil and criminal prosecution to companies who completed self audits. The EPA Policy offered more limited immunities in the form of elimination or reduction in civil penalties, limitations in criminal action referrals and more limited disclosure protection. See "Voluntary Environmental Self-policing and Self-disclosure Interim Policy Statement", *Federal Register*, Vol. 60, No. 63, Monday April 3, 1995, 16875. The U.S. government has asserted its oversight power by launching legal actions against those state governments refusing to follow the federal policy (conversation with International Enforcement Office, USEPA, June 1996). See also E.S. Schaeffer, "Encouraging Voluntary Compliance without Compromising Enforcement: EPA's 1995 Auditing Policy", *Proceedings of the Fourth International Conference on Environmental Compliance and Enforcement, supra,* note 4 at p. 451.

through targeted, high profile criminal prosecutions.[247] It has been suggested that enforcement responses, in particular prosecution, have "a statistically significant impact on the behaviour of corporations".[248] The level of deterrence is reportedly increased where corporate directors and officers may be found (and have been found) personally liable.[249] Further, empirical studies indicate that corporate directors and officers premise their compliance expenditures on the likelihood of enforcement action both against their corporations and themselves [250] Whether or not deterrence plays a significant role reportedly depends as much on the perceived possibility of apprehension as the liability and severity of sanction or penalty.[251]

Other jurisdictions attempt to foster voluntary compliance by widely publicizing significant or repeat offenders as well as significant voluntary compliance efforts:[252]

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[247] The USEPA, consistent with its view that the publicity associated with successful criminal prosecution of serious violations has a more significant deterrent effect than generally higher penalties gained through administrative proceedings, in 1981 created a separate centralized Office of Criminal Investigations. See C. G. Wills and D. C. Gripe, "US Experience and Differences Between Civil and Criminal Investigations and Use of Central Elite Force to Supplement Local Inspections", Vol. 1, *Proceedings International Conference on Environmental Enforcement*, *supra*, note 4 at p. 329; Lee Paddock, "Developing Effective Enforcement Programs at the State Level", *ibid*, at p. 382.

[248] D. Saxe *supra*, note 7 at p. 46.

[249] Results of an empirical study of corporate directors and officers indicates that both threat and actual prosecution of those parties has a significant effect on their decision to initiate voluntary action to comply with environmental laws. D. Saxe, *supra*, note 7 at p. 45-54.

[250] *Ibid.*

[251] B. Seigal, *supra*, note 104.

[252] For example the British Columbia Ministry of Environment, Parks and Lands issues annual reports of compliance with its environmental laws. The Indonesian Minister of Environment regularly issues public statements to the media including the names of violators.

If deterrence is an important element of program strategy, the information communicated can include not only educational material but also reports of enforcement activities. This helps create an " enforcement presence" and an atmosphere of deterrence. This atmosphere will help provide an incentive for sources to seek assistance and comply.[253]

d) INCENTIVES AND REWARDS

Strategic use of incentives and rewards can also facilitate compliance. As discussed previously in the section on Compliance Strategy, in deciding to use market-based approaches consideration must be given to the close interrelationship with command-control mechanisms. This necessitates at a minimum close consultation among officials delivering the respective programs and in some instances involvement by enforcement officials in surveillance and enforcement of market measures.[254]

Examples of the factoring of compliance in the application of market measures include proportional discounting of ecological fees (charges for use of resources) where efforts are made to use more environmentally benign technologies ("ecological investments)[255],

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[253] C. Wasserman, *supra*, note 175 at p. 73.

[254] G. Bendi, *supra*, note 45 at p. 117: See also D.R. Stewart et al., *supra*, note 70.

[255] Z. Kamieński: "Process of Upgrading the Polish Environmental Enforcement Procedures", *supra*, note 45 at p. 56.

reduction in fines for timely ecological investments[256], relaxation in waste deposition fees for good compliance records [257] and offsets, that is, approvals for new facilities (pollution sources) premised on pollution control improvements at existing facilities.[258] Other compliance rewards have included reduced self monitoring requirements or reduced government surveillance of facilities with a good compliance record and as previously mentioned, specified periods of amnesty from enforcement action where violations are self-identified, disclosed and corrected.[259]. In yet other instances, companies with good compliance records are given the freedom from the technological specifications of existing regulatory systems to explore alternative environmental management systems which provide superior environmental performance.[260]

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[256] *Ibid*

[257] K. Velek, *supra*, note 162 at p. 517.

[258] C. Wasserman, *supra*, note 4, Vol. 1, Proceedings of the *International Conference on Environmental Enforcement* at p. 76; L.F. Duncan, *supra*, note 25 at p. 292-294.

[259] In June 1994, the USEPA Environmental Leadership Program (ELP) introduced providing similar kinds of incentives to select industries who are considered environmental leaders according to prescribed criteria, including a good compliance record and in place environmental management and audit systems. The intent of the program is to encourage innovative audit and compliance programs and to reduce the risk of non compliance through pollution prevention. The incentives are prescribed in Memoranda of Understanding with the Agency. As an added incentive the selected companies benefit from public recognition of their participation. *Federal Register*/Vol. 60 No. 63/Monday, April 3, 1995/Notices "Voluntary Environmental Self-Policy and Self Disclosure Interim Policy Statement" and "Notice and Press Release" April 7,1995 announcing the selected participants (EPA).

[260] See for example the description of the USEPA Project XL in Commission for Environmental Cooperation, *supra*, note 7.

5. MONITORING COMPLIANCE

As previously stated, voluntary compliance efforts are directly related to the risk of detection.[261] In addition, if the objectives of an environmental regulatory and compliance program include reduced environmental risk and prevention of damage or harm then any effective program must incorporate mechanisms to enable timely detection of incidents or violations.[262] Without an effective strategy for monitoring compliance enforcement decisions will be reliant on conjecture and credibility may slide when targets are not met. Compliance monitoring ensures that those who fail or refuse to comply receive no unfair competitive advantage (profit from pollution) over those who make the effort to comply.[263]

Failure to inspect or to determine compliance by some other means may also trigger liability. In some jurisdictions the act of legislating standards triggers an accompanying duty to inspect.[264]

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[261] B. Seigal, *supra*, note 104 at p. 10.

[262] This is, of course, premised on the presumption that standards are set at a level of accepted risk. Embarrassment, for example, experienced by the Canadian Fisheries Department in loss of one million salmon due to faulty monitoring equipment has dealt a major blow to the credibility of their conservation and regulatory program. *Toronto Globe and Mail* September 16, 1994. Numerous other examples of failure to implement effective targeted inspection programs as a factor in poor compliance results are documented in Seigal, *supra*, note 104: See also *Report of Experts Group on Environmental Law*, *supra*, note 34, which recommend that states "establish systems for the collection and dissemination of data and requires observative of natural resources and the environment in order to permit adequate planning of the use natural resources and environment, to permit early detection of interferences with that resource and the environment and ensure timely intervention, and to facilitate the evaluation of conservation policy and methods" (at p. 26).

[263] L.F. Duncan, *supra*, note 25 at p. 295.

[264] *Supra*, note 27.

Options for detection include self monitoring or self audit, government inspection, investigation and surveillance and community watch. In designing a monitoring program consideration must be given to the viability of the options (including relative technical and financial capabilities) and distribution of costs.[265]

a) SELF MONITORING

Most jurisdictions have at least partially instituted a polluter pay model through obligations on regulated industry to monitor, record and report.[266] Self monitoring can have a dual effect of facilitating voluntary compliance through self audit and consequent reduction of government expenditures through minimized surveillance and enforcement. Self-audits can also provide an effective measure of due diligence.[267] Where self-monitoring is utilized the law, should also specify obligations including points and frequency of monitoring and the requirements for record keeping and reporting. As previously discussed, many jurisdictions have also introduced policies and programs to encourage the practice of self-audits.

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[265] UNEP, *supra*, note 32.

[266] For example Canada, USA, Norway, England, Poland. For a review of the Norwegian system of self-monitoring see Gro Rodland, *supra*, note 141 at p. 320.

[267] See *Bata*, *supra*, note 29.

b) INSPECTION AND SURVEILLANCE

Regardless of the willingness of companies to conduct self-monitoring and self-audits, government involvement will remain necessary but may be reduced. Review of monitoring reports, follow up inspections or compliance audits [268] to verify compliance or reliability of the self reports and investigations in response to reports, incidents (e.g. emergencies) or complaints are all necessary and unavoidable components of a compliance program.

Government programs can, however, be made more efficient and effective through adoption of certain basic tools. These include development and maintenance of a compliance data base, preparation and delivery of an inspection plan, issuance of an inspections and investigations protocols and targeted technical and legal training.

Among the more useful tools for targeting enforcement action is a compliance data base.[269] It generally contains information about regulated facilities, compliance profiles on owners and operators drawn from inspection and investigation reports and any enforcement actions (warnings, directives, orders) and records compliance responses.[270] It can be differentiated from other information bases in that it is directly tied to actions of individual parties and is

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[268] Norway supplements inspections and self reporting with audits to determine the reason for non-compliance including more detailed information about management and control systems. This information helps to direct effective sanctions or orders. See Gro Rodland, *supra*, note 141 at p. 321.

[269] B. Seigal, *supra*, note 104 at p. 15; UNEP, *supra*, note 32 at p. 41.

[270] Some jurisdictions refer to this as a management information system. A compliance data base is often a part of a larger information management system.

generally treated as confidential data. The data base enables officials to target inspections and to ensure consistent and appropriate responses. A compliance data base is equally useful as a reference for incentive/ reward programs [271] and for assessing staffing needs to meet legal obligations.[272]

A second important tool is an inspection plan, generally considered the "backbone of most enforcement programs".[273] An inspection plan helps to focus enforcement activities by providing a frame of reference for inspections instead of reliance on ad hoc responses not triggered by objective, fair and consistent criteria. A plan helps focus inspections on regulatory requirements and compliance records. To reduce inspection costs many agencies attempt to target inspections by focusing inspections on known or consistent violators, new facilities and untested technologies, and in other cases on facilities posing the greatest environmental risk.[274]

Planning for inspections involves more than making a lists of sites to visit. It requires advance planning for special training needs, acquisition of special equipment and

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[271] For example the North American Working Group on Environmental Enforcement and Compliance is exploring the potential for inter agency exchange of compliance data to determine qualifications for incentive or voluntary programs.

[272] E. J. Swanson et al., *The Price of Pollution: Environmental Litigation in Canada* (Edmonton: Environment Law Centre, 1990).

[273] C. Wasserman, Vol. 1, Proceedings of the *International Conference on Environmental Enforcement*, *supra*, note 4 at p. 79.

[274] *Ibid* at p. 83-86; C. G. Wills, *supra*, note 247 at p. 325.

development of laboratory protocols.[275] It also involves coordination with technical experts, prosecutors and in some instances other enforcement agencies.[276]

An inspection plan can bring major cost savings by integrating inspections. With advance planning inspections can be coordinated to cover multi media - air, waste, water streams. Cost savings across agencies and government levels can be achieved through consolidated inspection plans and sharing of inspection reports and data bases.[277]

A third, equally valuable tool is an inspections manual which prescribes a consistent methodology for the conduct of inspections including right of entry, search, seizure, statements and enforcement responses. The manual should clearly differentiate between inspections and investigations and the respective powers and actions. Associated with this procedural manual is an investigations protocol which clarifies roles of involved parties (e.g., inspector, prosecutor, manager, politician). It may also be important to include a basic training programme in legal awareness for personnel such as scientists, lab employees and other officials who administer the programme but are not "enforcers" as such. This will increase awareness of the importance of enforcement and also may help avoid "officially induced error" problems.

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[275] C. G. Wills, *ibid* at p. 335.

[276] For example, in some jurisdictions police assistance may be necessary for issuing warrants, taking statements or gaining entry to facilities controlled by uncooperative owners.

[277] R. van Heuvelen, *supra*, note 67 at p. 168.

While the process of inspection and investigation can be prohibitive, many jurisdictions have instituted emission or product charges, resources user fees, taxes and penalties to help defray costs. [278] Some jurisdictions have financed their inspection programs by assessment of fees based on the class of polluting activity.[279]

It will be important to differentiate between the financing of inspections and investigations. Greater public sensitivity generally arises from any attempts to finance investigations through penalty assessments although some jurisdictions empower the courts to consider investigation costs in assessing penalties.

c) *INVESTIGATIONS PROTOCOL*

A useful parallel tool for instilling consistency in enforcement response is an investigations protocol.[280] Protocols can prove helpful within an environmental agency to clarify the respective roles of field inspectors, regional program managers, senior policy officials and politicians. It can also provide a buffer against external attempts to influence enforcement action through contact with senior officials or politicians. A formally endorsed protocol can serve as a valuable reference point for enforcement officials trying to keep enforcement on a

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[278] In France, the United Kingdom, Czech Republic and Poland fees are calculated to cover inspection costs. See UNEP, *supra*, note 32 at p. 42.

[279] See for example the fee structure imposed by Norway in Gro Rodland, *supra*, note 141 at p. 320.

[280] *1991 Report of the Auditor General of Canada to the House of Commons, Chapter 11, supra note* 187 at p. 270 -271.

prescribed track.

As discussed previously, resourcing for effective enforcement includes providing adequate budgets to hire and train qualified staff. Protocols and procedural manuals are only a supplement to an adequate complement of experienced and adequately resourced and mandated staff.[281] Failure to recognize these basics can seriously undermine the credibility and effectiveness of any enforcement regime.[282]

d) COMMUNITY WATCH

While most jurisdictions recognize the significant contribution made by the public in reporting suspected violations, a limited few have actually revised their laws and programs to facilitate this role.[283] Some nations have encouraged public involvement by enacting legal rights to notice of incidents or spills and permit applications, and the right to report and compel investigation of pollution complaints.[284] In other instances the public watch dog

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[281] C. Wasserman, *supra,* note 4 at p. 131.

[282] *Ibid*; L. Maslarova, *supra,* note 45 at p. 99. A September 2, 1994 Canadian Department of Fisheries and Oceans memo also corroborates this view," [C]racking down on the flagrant, wholesale poaching by all user groups was next to impossible for the enforcement officers in the Vancouver Island District. Since 1989, staff had been cut from eleven to four. Local fishery officers are extremely frustrated and demoralized with their inability to work effectively due to severe manpower shortages." *Toronto Globe & Mail*, October 8, 1994.

[283] For example, in Poland citizen involvement reportedly plays a key role in monitoring environmental compliance despite the lack of official recognition or facilitation of their involvement. J. Jendroska, *supra*, note 107, at p. 354 in *International Conference on Environmental Enforcement*, *supra,* note 4.

[284] CEPA *supra,* note 114, ss. 108, 109; For a review of citizen rights in Canada see S. Elgie,

role is encouraged by providing access to monitoring data [285] and by communicating reporting channels to the public.[286]

6. ENFORCEMENT RESPONSES AND SANCTIONS

Strict standards alone will not ensure pollution control. They must be enforced. There is wide support for the view that one of the more effective means to foster voluntary compliance is timely, effective and strategic enforcement.[287] This requires attention to the

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"Environmental Groups and The Courts: 1970-1992" *Environmental Law and Business in Canada* ed. G. Thompson, M. McConnell and L. Huestis (Aurora: Canada Law Book 1993); For a review of citizen rights and their contribution to monitoring in USA see R. van Heuvelen and L.K. Bregger "Citizen Participation in U.S. Environmental Enforcement", *International Conference on Environmental Enforcement, supra,* note 4 at p. 574, and Paul Keough and N. Willard "Use of Public Disclosure in Environmental Protection Programs to Enhance Compliance and Change Behaviour in the United States" *id,* p. 611. See also L.F. Duncan, *supra,* note 168.

[285] S. Elgie, *supra,* note 284. For a review of the public watch dog role in the United States; see E. Roberts and J. Dobbins "The Role of the Citizen in Environmental Enforcement", Op. Cit, at p. 534, 550. For the Netherlands see R. Hallo, "Citizens Role in Enforcement: A Spur, A Supplement, and a Substitute", *International Conference on Environmental Law, supra,* note 4 at p. 562 to 565. For Flanders, Belgium, see Rik de Baere, "Free Access to information and the Licensing Procedures for Industrial Plants: the Flemish and Belgian Situation" Op. Cit. at p. 605.

[286] In the USA increased public awareness has resulted in greater willingness by the public to provide "tips" concerning environmental crimes. C. Wills, *supra,* note 247 at p. 329.

[287] As stated by the European Council in a 1990 *Bulletin of European Communities*, "Community Environmental Legislation Will Only Be Effective if it is Fully Implemented and Enforced by Member States"; cited by Richard MacRory, in "Membership in the European Economic Community: What it Means for Environmental Requirements and Enforcement", Proceedings of Second *International Conference on Environmental Enforcement, supra,* note 4 at p. 171; As stated by the then Canadian Minister of Environment, Tom McMillan "A good law, however, is not itself enough. It must be enforced -ruthlessly if need be. Accordingly, the new *Environmental Protection Act* will be accompanied by a plan to reverse the country's appalling record of enforcement and compliance," *supra,* note 10; C. Wasserman has posited that serious sanctions are critical

previously described strategic actions, that is, a clearly prescribed enforcement mandate and clarified roles, legally binding standards, mechanisms to detect violations, and measures to promote compliance. Effective enforcement, however, also requires an adequate array of enforcement responses and sanctions and the requisite powers to use them.

Enforcement requires advance planning to ensure that the necessary specialized measures are implemented well before standards become law. These measures include an adequate array of responses and sanctions, delegated powers to exercise the sanctions, an enforcement and compliance policy (as previously discussed), an investigations protocol, and an enforcement strategy.[288]

As previously discussed, enforcement can be made more effective and cost efficient through development and observation of an enforcement and compliance strategy. While the adopted strategies vary amongst jurisdictions, a number of strategic tools and approaches have been proven to heighten effective action as the environmental enforcement programs evolve.[289] One common strategy for more effective, coordinated response has been the use

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since 70% of regulated parties premise their compliance activities on how government responds to the 5% who violate, *supra*, note 261. Regarding the reactions of corporate directors to enforcement actions against peers, see van Heuvelen, *Supra*, note 277. For a review of Canadian experience, see D. Saxe, *supra*, note 7.

[288] It may be necessary to establish separate strategies to meet particular geographic, transboundary circumstances or peculiarities associated with each regulation or industrial sector.

[289] See Section B.2 "An Enforcement and Compliance Strategy". See also Review Panel on Environmental Enforcement, *An Action Plan for Environmental Enforcement in Alberta* (Edmonton: Government of Alberta, 1988), *supra* note 58; *British Columbia's Environment: Planning for the Future, the Ensuring Effective Enforcement*, (Victoria: B.C. Environment,

of inter-departmental team building for planning and conducting investigations and for selecting sanctions.[290] Other strategies have maximized environmental benefit through geographic targeting, risk based or facility targeting and comprehensive, integrated and multi-media enforcement action.[291] And, as previously discussed, the selective use of sanctions, for example criminal prosecution, can have a substantial deterrent effect. An important aspect of any enforcement strategy is the choice of sanctions and mechanisms for ensuring fair, consistent use.

a) ADEQUATE ARRAY OF RESPONSES AND SANCTIONS

Considerable variances exist across jurisdictions and among agencies in the use of enforcement responses including informal responses, negotiated settlements, and administrative, criminal, civil and economic sanctions. The most effective regime has been found to be one which has at its disposal a diverse package of responses and sanctions enabling officials to select the response appropriate to the nature of the violation, character

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1991).

[290] Many Canadian environmental protection agencies have developed a team process with technical expertise in their agencies and with prosecutors for more effective investigation and case preparation. See F. Gordon, "Peranan Saks Ahli Dalam Penuntutan Perkara Linkgungan" in *Penindakan pelanggaran Hukum Lingkungan, prosiding Lokakarya, Semarang, Surabaya, Medan*, [Jakarta: BAPEDAL dan EMDI Proyek, 1991.] [unpublished]

[291] See L. Peterson, " The Great Lakes Enforcement Strategy: Using Enforcement Resources to Maximize Risk Reduction and Environmental Restoration in the Great Lakes Basin", *Third International Conference on Environmental Enforcement, supra, note* 4 at p. 181-196; R. van Heuvelen, *supra, note* 31.

of the offender and any other special circumstances.[292] Many environmental agencies are now authorized to issue warnings and tickets, a variety of directives and orders and can, in cooperation with justice officials, initiate criminal, administrative or civil proceedings and, in limited instances, may refer compliance issues to a dispute resolution process.[293] It is also a common practice to impose a hierarchical use of penalties.

The choice of sanction will depend on the end objective(s) which may be singular or multi-faceted. Prosecution and sentencing play an important role in both general and specific deterrence. Responses and sanctions can be used to create an atmosphere of deterrence (significant fines or incarceration), to prevent impacts (stop order or injunction), to mitigate damage (clean up order), to remove economic benefits gained from noncompliance or to compensate victims.[294] The availability of sanctions can also be limited by past government

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[292] For a detailed discussion of sentencing criteria see J.Z. Swaigen at al, *Supra* note 148. For examples of the application of similar criteria by Canadian courts see *R. v. Bata, supra,* note 29 and *R. v. Northern Metallic Sales, supra,* note 26. See also the Canadian *Agriculture and Agri-Food Administrative Monetary Penalties Act,* S.C. 1995, ch. 40 which introduces sanctioning criteria based on a classification of offences.

[293] While the introduction of increasingly stringent penalties, including incarceration and million dollar fines has attracted public attention, within the pollution control agencies concerns tend to focus more on expanding the array of administrative and economic sanctions, particularly as preventative measures. See for example minutes of the Proceedings of the Canadian Parliamentary Standing Committee on Environmental Sustainable Development, Order of Reference regarding the CEPA (Ottawa, 1994); *Alberta Environmental Protection and Enhancement Act, supra,* note 188, s.221; E. Barr recommends hierarchical use and rapid escalation of both penalties and incentives, *supra,* note 34 at p. 212. See also *CEPA Enforcement and Compliance Policy, supra,* note 15; *Yukon Environment Act, Enforcement and Compliance Policy, supra,* note 58; Canada's *Agriculture and Agri-Food Administrative Monetary Penalties Act,* S.C. 1995, ch. 40.

[294] J. Swaigen, *Supra,* note 276; C. Wasserman, *Supra,* note 129.

action (or inaction) providing yet another reason for closely regulated response.[295]

Any practice of prefacing strict enforcement action with informal, negotiated responses, for example warnings or technical advice, should also be carefully managed to avoid later conflicts. Many jurisdictions attempt to control discretion in the use of verbal warnings and waivers on compliance through prescribed criteria for use and format of these administrative responses.[296]

b) DELEGATION OF SANCTIONING POWERS

Enforcement action necessitates the designation of special powers beyond those activities

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[295] For example, in some instances the courts have acquitted an accused on the grounds that standards were excessive or unreasonable or where officials have been found to have mislead the accused by past failure to enforce or by providing inaccurate or misleading information about the law ("officially" or "government induced error"). See *R. v. Byron Creek Collieries Limited* (1979) 8 C.E.L.R. 31; *R. v. Cancoil Thermal Corporation and Parkinson, supra* n. 132. See Swaigen *supra*, note 148 at p. 36-37 where he cites the decision of Stuart, J. in *R.*. v. *United Keno Hill Mines Ltd.* (1980), 10 CELR 43 (Y.T. Terr. Ct.), p. 47. "If the responsible government agency is not pressing for compliance, or is actually encouraging non-compliance through tacit or explicit agreements to permit non-compliant operations, the corporations cannot be severely faulted." As a result of past problems caused by broad power of discretion in licensing or by granting waivers to compliance, a Government of Alberta appointed Review Panel on Environmental Law Enforcement recommended reform of law and practice to remove the practice, *supra*, note 58. See also, E.J. Swanson et al, *The Price of Pollution: Environmental Litigation in Canada* (Edmonton: Environment Law Centre, 1990) at p. 168-176.

[296] American, Canadian and European agencies use a number of verbal and written warnings or notices. See C. Wasserman, *supra*, note 173 at p. 96; *CEPA Enforcement and Compliance Policy, supra*, note 15 at p. 45; L. Paddock, " Civil Field Citations " in Proceedings, *Third International Conference on Environmental Enforcement, supra, note* 4 at p. 401; S.A. Sutton-Mendoza. " Field Citations: A Tool for Enforcing UST Regulations in New Mexico ", *id*, at p. 409; J.B. Rasnic and J.M. Engbert, " United States' Clean Air Act Field Citation Program: New Enforcement Authority to Address Minor Violations ", *id*, at p. 421.

generally associated with compliance activities, for example, permitting and inspection. One ready measure of the extent of political and bureaucratic commitment to timely enforcement is the degree to which officials have been given, expressly or implicitly, by legislation the necessary powers to conduct investigations, to commence legal proceedings or to issue orders or directives.

However, as a balancing measure, governments must also implement mechanisms to fetter and direct enforcement action [297] and where necessary to allow for direct intervention. It has been the experience of many environmental agencies that inconsistent and in some cases illegal or unconstitutional responses are taken if officials are granted blanket, unfettered discretion.[298] It may also become necessary for an agency to directly intervene, for example where other governments or agencies fail to abide by enforcement agreements or protocols.[299]

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[297] For example, while as previously mentioned, Environment Canada has issued an *Enforcement and Compliance Policy* which prescribes the appropriate enforcement response, field inspectors report to regional directors, not the central Office of Enforcement and Compliance. This has resulted in considerable variance among regions in the nature and intensity of enforcement activity and response to violations. *supra*, note 13.

[298] Canadian governments have amended environmental laws to prescribe procedures for inspection, search and seizure to ensure activities do not violate the *Canadian Charter of Rights and Freedoms*, *supra*, note 42.

[299] For example, in the United States the power of oversight granted to the EPA enables the agency to intervene to initiate enforcement action, where a state agency has been found wanting in its enforcement efforts. This includes the power of the federal agency to " over-file " where a state initiated enforcement action has resulted in a lesser penalty. [Interview with E. Devaney, Director of Criminal Enforcement, USEPA, Washington, April 1996]. See also C. Wasserman, *supra*, note 173 at p. 112.

Some jurisdictions have supplemented their environmental inspectorate with a specially trained often centrally located investigative team who directly investigate or provide special expertise in complex cases.[300] In others, environmental enforcement duties are distributed among national, provincial and municipal officials,[301] and in still others, tribal or First Nation governments.[302] In some cases the police retain authority for investigation of environmental crimes [303] and in others the military police play a key role.[304] In still others,

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[300] For example the US EPA has established the Office of Criminal Enforcement employing specialized, full-time, criminal investigators whose work is supplemented through an MOU with the FBI. In recognition of the need to develop specialized skills for environmental prosecutions the U.S. Department of Justice established a separate Environmental Crimes Section to assist regional prosecutors. The result has been a steady increase in number of criminal referrals and the amount of penalties imposed. Earl Devaney "The Evolution of Environmental Crimes Enforcement at the United States Environmental Protection Agency", *Third International Conference on Environmental Law*, *supra*, note 4 at p. 457. The U.S. National Enforcement Investigations Center (NEIC) also provides specialized expertise, support and training for the EPA for complex investigations. See C. G. Wills et al, *supra*, note 247 at p. 332-336.

[301] For example, in the Netherlands, extensive powers are vested in municipalities to enforce environmental laws. Drs. P.H. Dordregter, "Environmental Enforcement by Municipalities in the Netherlands", *Third International Conference on Environmental Law*, *supra*, note 4 at p. 391.

[302] The USEPA has delegated enforcement authority to some tribal governments. (Interview with R. Hardacher, International office, USEPA, April 1995 and U.S. Government Advisory Committee to EPA Administration, Washington, March 1995). In Canada, pursuant to constitutionally entrenched First National final agreements, powers to enact environmental protection laws have been incorporated, although direct powers of enforcement are limited. See for example, *Champagne and Aishihik First Nations Final Agreement*, May 1993 and *The Champagne and Aishihik First Nations Self-Government Agreement*, May 29, 1993.

[303] For example, the Republic of Indonesia, See L.F. Duncan et al, *supra*, note 44. For a discussion on the role of the police in The Netherlands, see J. Van Dijk, "The Interest of Cooperation between Police, Public Prosecutors and Governmental Authorities in the Field of Environmental Enforcement", in Proceedings *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 175; R. Hessing, "The Task of the Police", *id* at p. 571-575. For the United States, see E. Neafsey, "The Role of Local, County, and State Police Officers in New Jersey in Environmental Enforcement, *id* 561-570. On the role of Interpol, see S. Klem, "Environmental Crime and the Role of ICPO-Interpol", *id* at p. 335-341. In Hungary, see Sandor Fulop, "The Public Prosecutor Office of Hungary and its

prosecutors have been granted authority to initiate investigations.[305]

As a general rule the power to prosecute is the sole prerogative of the Attorney General.[306] In some countries, however, the judiciary has chosen to directly intervene in the process of bringing polluters before the courts.[307] In yet others, the power to commence proceedings may be assigned directly to environmental inspectors. [308]

Development" *id* at p. 373-377. In Argentina, "The Ecological Police", see Judge Daniel Hugo Llermanos, *supra* note 36 at p. 249.

[304] For example in Guyana see J.G. Singh, Chief of Staff, Guyana Defence Force Headquarters, "The Enforcement Experience in Guyana on Exploitation of Natural Resources", *supra,* note 4 at p. 205.

[305] While in the majority of cases powers vested in the prosecutor are limited to determining whether charges will proceed to trial, in some countries they have retained a more hands-on role in environmental investigations. For example, in the Netherlands prosecutors have the power to initiate an investigation. (Interview with Hans Fangman, and Gustaaf Biezeveld, Department of The Attorney General, Government of the Netherlands, April 1991, The Hague). In Hungary, it has been proposed that the power to investigate environmental offenses be delegated to the Public Prosecutor Office due to complexity of the legal issues and the need for special expertise. See, Sandor Fulop, *supra,* note 303 in Proceedings, *International Conference on Environmental Law, supra,* note 4.

[306] For example, Canada, USA, Netherlands. For a discussion of the role of the Office of Public Prosecutions in environmental enforcement, see G. Van Zeben, "Enforcement of Environmental Legislation under Criminal Law by the Public Prosecutions Department of the Netherlands", in Proceedings *Third International Conference on Environmental* Enforcement, *supra, note* 4 at 451-456.

[307] In Argentina, Judge D.H. Llermanos, frustrated by the lack of initiative of the government, acted ex-officio in bringing a series of environmental cases before him arguing an overriding duty pursuant to the Constitution and the Penal Code to protect the public health. See Daniel Hugo Llermanos, *supra,* note 36 at p. 247-251 and personal interview, April 1994 in Oaxaca, Mexico).

[308] Conversation with Jalaluddin Ismail, Director, Malacca & Sembilan Department of Environment, Oaxaca, April 1994.

Many countries empower environmental inspectors, senior managers (e.g., Director of Pollution Control[309]) or elected officials (including Ministers responsible for environment, health, industry) to take administrative action to enforce the law. Powers to sanction environmental offenders through administrative action are generally prescribed in environmental laws. These powers are generally assigned to inspectors to be exercised in the course of their compliance activities with more heavy handed responses (temporary closure or shutdown orders) reserved to ministers. [310] In some countries administrative penalties are issued by special courts established within the bureaucracy .[311] It is important that powers be delegated not only to sanction polluters after the fact but also to effect preventative action.[312]

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[309] The *Alberta Environmental Protection and Enhancement Act supra,* note 188 at s. 1988 empowers a designated Director of Pollution Control to issue orders to suspend approvals, shut down activities, specify measures.

[310] See for example the *Yukon Environment Act* provides more than 15 separate administrative actions which an inspector or Minister may use to sanction a violator. *Supra,* note 179. Sections 35 and 40 CEPA provide the Minister of the Environment with the power to take preemptive action to prevent anticipated harm, *supra,* note 114. See also *Agriculture and Agri-Food Administration Monetary Penalties Act, supra,* note 292.

[311] For example, the USEPA has established Administrative Court Judges. See C. Wasserman, *supra, note* 129 at p. 97.

[312] By way of example, powers granted to environmental inspectors under the *Canadian Environmental Protection Act* and federal *Fisheries Act* focus on responses after the fact. Op. cit. For an analysis of the limitations of inspector powers and need for anticipatory or preventive powers, see L. F. Duncan, *supra,* note 25; Environment Canada, *Inspectors' Powers and Provisions Governing Official Analysts in the Canadian Environmental Protection Act (CEPA); Reviewing CEPA, The Issues (Paper #15)*, Environment Canada, (Ottawa: Environment Canada, 1994); and H. Versteeg, *Examining the Current and Proposed Potential of the Canadian Environmental Protection Act to Incorporate Pollution Prevention Principles and Strategies*, (Ottawa: Environment Canada, 1993).

d) SANCTIONING CRITERIA

As discussed earlier, an enforcement and compliance policy can be useful not only for sending a clear message to regulated parties about the response which can be anticipated if the law is violated, but also for tempering the exercise of discretion by enforcement officials in response to a suspected or reported offence. By prescribing national, or where deemed appropriate, regional criteria for the appropriate enforcement response or sanction, the policy can help instill accountability for fair and consistent enforcement action and inform the community about the official action they should anticipate in response to their complaints.[313]

An enforcement and compliance policy is also a useful mechanism for clarifying roles for inspectors, investigators, prosecutors, judiciary and the public. The policy should clarify the respective powers and roles for the benefit of the regulated industry, public and government regulators.

The relative effectiveness of the policy as a mechanism to deter offenders or to ensure consistency depends on adherence to the policy. This can be facilitated through wide distribution of the policy (public watchdog), directed training, by mandating an environmental agency to ensure adherence to the policy and by formal endorsement of an

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[313] See for example *CEPA Enforcement and Compliance Policy, supra,* note 15, *Yukon Enforcement and Compliance Policy, supra,* note 58. Ontario Ministry of the Environment, *Uniform Enforcement Policy*, May 1986.

enforcement protocol.

d) PRIVATE ENFORCEMENT

Private enforcement action can be important to spur government action, or as a supplement or replacement for official enforcement.[314] Both direct and indirect roles have been found constructive in increasing accountability and in spurring enforcement action. For example, in some jurisdictions private individuals or organizations can compel the investigation of a suspected offence and an official report on the response taken.[315] The right of access to monitoring data and compliance reports also facilitates a watchdog role.[316] Yet while public complaints or reports are widely recognized as a significant trigger for enforcement action, efforts are not always made to encourage or to access this source.[317]

An equally important stimulus to government enforcement has been the granting of the

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[314] R. Hallo, "Citizens Role in Enforcement: A Spur, a Supplement and a Substitute", *supra* in *International Conference on Environmental Law*, *supra*, note 4 at p. 561-573. Public interest environmental suits have been initiated in many countries including Canada, the United States, Australia, India, Sri Lanka, the Philippines, Indonesia, Malaysia, Germany, Columbia, Ecuador, Peru, and Russia. See S. Elgie, *supra*, note 284, at p. 196. In the Philippines, villages are empowered to directly enforce environmental laws. See *ESCAP Report, Ch. IV, Statutes of Environmental Legislation in the ESCAP Region*, at p. 144.

[315] *CEPA supra, note* 114 ss. 108, 109; *Yukon Environment Act, supra*, note 179 ss. 14-18; *Alberta Environmental Protection and Enhancement Act*, *supra*, note 188, s.184.

[316] F. Irwin et al "From Public Disclosure to Public Accountability: What Impact Will it have on Compliance?", *Proceedings International Conference on Environmental Law*, *supra*, note 4 at p. 589-603; Paul Keough, et al, *supra note* 284 at p. 611-616.

[317] C. G. Wills, *supra, note* 247 at p. 329; S. Elgie, *supra*, note 284.

right to directly initiate criminal prosecutions or civil proceedings for injunction or damages.[318] Successful civil actions against government for damages caused by non-enforcement has provided significant stimulus for improved enforcement. [319]

It has been suggested that private enforcement rights shall be widely publicized so that "citizens are able to take concrete action to compel enforcement rather than merely voicing outrage and politicize the regulatory process".[320] Private legal action can be particularly effective in forcing official action against government owned or operated facilities or in clarifying enforcement duties.[321] In some instances, liability is imposed on Ministers, government officials where they have been found to have directed, authorized or asserted to or acquiesced in participation of an offence.[322]

While many environmental enforcement agencies support giving a role to the public, they also express concern about the impact of privately triggered investigations or enforcement on limited resources and any strategic plan for enforcement.[323] A logical path around this

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[318] *CEPA, supra, note* 114, ss 136; *Yukon Environment Act, supra,* note 179, ss. 8, 19; *Alberta Environmental Protection and Enhancement Act, supra,* note 188, ss. 204 and 205.

[319] See L.F. Duncan, "Crown Liability and Environmental Rights", Proceedings *of the Environmental Law Seminar*, (Ottawa: National Judicial Institute, 1993) and *supra,* note 27.

[320] E. Barr, *supra,* note 34 at p. 222.

[321] *Friends of the Old Man River Society, supra,* note 28; C. Wasserman, *supra*, note 4 at 118.

[322] *Alberta Environmental Protection and Enhancement Act, supra,* note 188, s.217.

[323] For a discussion of these issues see L. F. Duncan, "The Implications of an Environmental Bill of Rights for the Administration of an Enforcement program" an address to the *6th Annual Environmental Conference of Canadian Enforcement Officials*, Victoria, June 1993.

dilemma is of course public consultation in the development of any enforcement strategy or policy.

7. MEASURING EFFECTIVENESS - COMPLIANCE INDICATORS

The dynamic nature of environmental regulation creates a scenario demanding constant reevaluation and reform. Scientific discoveries, technological advances in detecting impacts or causes, new industrial processes, changing social, economic and political climates - the mutual interrelationships of all of these factors combine to create the need for an evaluation process which enables review and revision of management and control strategies. The need for ongoing assessment and change is equally critical for an enforcement and compliance program to ensure that its policies, strategies and sanctions remain responsive to the character and substance of the laws they are intended to address.[324] In addition, governments may be accountable to regular external reporting responsibilities and scrutiny for their enforcement programs.[325]

Recognizing the fluidity of environmental regulation, many agencies have incorporated an evaluation process into their compliance framework.[326] As laws and policies evolve and

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[324] UNEP, *supra*, note 32 at p. 19.

[325] For example the Parties (Mexico, United States and Canada) are obligated under the NAAEC to report annually on their enforcement related obligations. *Supra*, note 3, article 12(2)(C). The CEC is working with the North American Working Group on Environmental Enforcement and Compliance Cooperation to develop common indicators for effective enforcement.

[326] C. Wasserman, *supra*, note 4 at p. 121.

priorities shift, enforcement agencies must be capable of revising their programs and approaches.[327] Aspects which merit regular review and assessment include compliance strategies, inspection plans, incentive programs, sanction and penalty options and training and resource needs.

It is also important to have mechanisms in place to enable the evaluation of enforcement and compliance activities and strategies against overall environmental quality objectives.[328] These objectives and performance standards should be reflected in the regulations, inspection plans, incentive programs and enforcement and compliance budgets.[329] In this way governments can better forecast resource and training needs.

At the same time it is important not to limit the evaluation process to the enforcement and compliance program, automatically casting all blame on the enforcement end of the spectrum. Failure to achieve objectives in the prescribed time frame may not rest solely, with the enforcement and compliance program or agency. Fault may lie with the

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[327] B. Seigal, *supra*, note 104 at p. 9-10.

[328] *1991 Report of the Auditor General of Canada*, *supra*, note 187 at p. 271; C. Wasserman, *International Conference on Environmental Enforcement*, (Proceedings Vol. 1), *supra*, note 4 at p. 121-123; R.F. Duffy, "Measuring the Success of Compliance and Enforcement Programs", Proceedings *Fourth International Conference on Environmental Enforcement*, *supra*, note 4 at p. 489; "Special Topic Workshop F: Measures of Success", *id.* 479.

[329] The Auditor General of Canada in the 1991 Audit of Environment Canada, *ibid*, criticized them for failure to maintain sufficient data bases to demonstrate the effectiveness or efficiency of its enforcement and compliance activities and for failure to define performance standards to enable evaluation of the effectiveness of its regulations, and enforcement and compliance activities to ensure environmental quality.

environmental objectives, the laws enacted to meet those objectives or with barriers caused by conflicting priorities.[330] It may simply be failure to lend sufficient political or financial support to deliver an effective compliance program.

Consequently, any evaluation of an enforcement strategy should be conducted within a broad context, not merely focusing on the relative success and failures of individual enforcement actions, for example the annual count of successful prosecutions.[331] Any thorough review should also encompass roles played by non-enforcement officials, the impact of intergovernmental relations,[332] and potential impacts of conflicting objectives or compliance tools.[333] For example, it has been recommended that the use of incentives be closely monitored and audited to identify enforcement deficits.[334] Consequently, any evaluation of a compliance program or strategy must also include assessment of the impact

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[330] B. Seigal reports that evaluations of regulatory programs indicate that factors which have a detrimental effect on compliance activities include uncertainty about the relative priority of enforcement, lack of policy direction, inadequate training, lack of adequate data, lack of political commitment to use of Ministerial sanctions and lack of ability to estimate non - detected violations. Seigal, *supra*, note 104 at p. 7-8.

[331] This is a common tendency to limit the measure of commitment or success of environmental enforcement on the number of successful prosecutions. See for example " Environmentalists decry lack of charges for pollution offences", *Ottawa Citizen*, July 10, 1994. It may be noted that the issue of "bean-counting" continued to be a significant matter of dispute between the federal and state level agencies in the United States in the process of instituting their oversight policy and grants program.

[332] For example policies initiatives towards harmonization of standards and processes and regionalization of delivery can have a significant impact on an enforcement program. See previous discussion in Section B.1 (b) "Clarified Roles and Responsibilities".

[333] B. Seigal, *supra*, note 104 at p. 11 -12.

[334] E. Barr, *supra*, note 34 at p. 211-218; see also K. Webb, *supra*, note 80.

of incentives on compliance records.

a) INDICATORS OF COMPLIANCE

There are innumerable sources of indicators for assessing whether the enforcement strategy, policy or responses are effective. The regulatory and compliance process itself contains many key indicators of problems and directions for change. As discussed earlier, the decision to enact of any new laws, including creating new standards, procedures, sanctions or incentives, should be treated as an automatic trigger for reassessing the institutional capacity to achieve compliance.[335] A compliance database if properly maintained can be a useful tool for identifying problem individuals or sectors and the need to redirect staff or resources. Compliance statistics can also serve as valuable indicators of adherence to alternative enforcement or control mechanism, whether regulatory or private.

Enforcement field experience can provide one of the more tangible sources of information about the effectiveness of the enforcement tools and strategy. Careful documentation of any technical or legal problems or resource deficiencies experienced in the course of on-going inspection and enforcement work can provide the backbone of a pragmatic enforcement strategy review and training program.[336]

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[335] C. Wasserman, *supra*, note 323.

[336] R.F. Duffy, *supra*, note 328.

Other useful indicators can be found in empirical or policy studies conducted in-house or by other departments [337] or by external parties such as legal or policy institutes or universities.[338] Some agencies have incorporated this review and evaluative function into their institutional structure and mandate to enable effective strategic planning through tracking of innovative strategies and approaches adopted by other agencies and jurisdictions.[339]

Other triggers which should not go unheeded include complaints by the public or regulated parties or judicial decisions.[340] Surveys of regulatees also provide valuable information

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[337] For example, the 1988 Studies in Regulation and Compliance commissioned by the Canadian Department of Justice including D. Chappell, *supra 10* and D. Chappell, *The Use of Criminal Penalties for Pollution of the Environment: A Selective and Annotated Bibliography of the Literature* (Ottawa: Department of Justice Canada: 1988); see also the series of study reports issued by the Compliance and Regulatory Remedies Project, Department of Justice Canada, *supra*, note 36.

[338] For example, ongoing research and reform proposals by law reform commissions, environmental law institutes, non government organizations. See for example the study series by Protection of Life Project, The Law Reform Commission of Canada; studies sponsored by the Canadian Institute for Advanced Research including *Sanctions and Rewards in the Legal System: A Multi disciplinary Approach*, M.L. Friedland ed. (Toronto: University of Toronto Press: 1989); and M.L. Friedland, *Securing Compliance: Seven case Studies*, (Toronto, University of Toronto Press: 1990). See also *Environmental Enforcement: Proceedings of the National Conference on the Enforcement of Environmental Law*, ed. L. F. Duncan (Edmonton: Environmental Law Center: 1985); CEC, *supra*, note 7.

[339] Environment Canada's Office of Enforcement and Compliance includes staff positions dedicated to legal and policy research on alternative approaches to compliance. The USEPA undertakes intensive evaluations of its enforcement and compliance programs and strategies in addition to the conduct of ongoing research into alternative approaches. See for example *Enforcement in the 1990s Project: Recommendations of the Analytical Workgroups*, USEPA, Office of Enforcement (LE-133, 22E-2000), (Washington,: EPA, 1991)

[340] E. Swanson, *Public Response Indicators for Measuring Effective Enforcement*, (Montreal: CEC, 1997) (Unpublished manuscript).

about reasons for non-compliance.[341] It has been suggested that this information can be useful in designing compliance strategies in response to underlying reasons for non-compliance.[342] To facilitate a public role in the evaluative process, compliance histories should be made publicly accessible.[343]

b) ALTERNATIVE EVALUATION PROCESSES

Evaluation processes have taken a variety of forms including in-house reviews, reviews by neutral parties (for example law reform commissions or Auditors General)[344] or multi stakeholder reviews.[345] Empirical studies by external parties can also provide valuable

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[341] B. Seigal, *supra*, note 104 at p. 10.

[342] *Ibid.*

[343] E. Barr, *supra*, note 34 at p. 214. For example, both Environment Canada, Pacific and Yukon Region and the B.C. Ministry of Environment, Lands and Parks publish reports on compliance records. For example, Environment Canada, *Compliance Status Summary Report: British Columbia*, Fiscal Year 1993-1994, Regional Program Report 94-04 (Vancouver: Environment Canada, 1994).

[344] The Law Reform Commission of Canada, Protection of Life Project produced numerous studies and working papers on key environmental regulatory and enforcement issues and alternatives including reports on crimes against the environment, sentencing in environmental cases, workplace pollution and private prosecution; E. Barr recommends regular evaluation by the office of the Controller General, *supra*, note 34 at p. 223. In 1996, the Parliament of Canada established by statute the Commissioner for Environment and Sustainable Development with a mandate to audit the policies and programs of federal agencies if implementing strategies for sustainable development. *An Act Respecting the Office of the Auditor General of Canada and Sustainable Development Monitoring and Reporting*, S.C. 1995 c.43. The Commissioner in the first report to Parliament identified environmental enforcement programs as one of his first target for audit. See *Report of the Commissioner of the Environment and Sustainable Development to the House of Commons*, 1997.

[345] In 1989 Canada's federal Department of Agriculture established an independent secretariat and multi stakeholder review committee for the purpose of evaluating the existing regulatory and enforcement regime for managing pesticides and making recommendations for reform.

information about compliance strategies.[346] In some jurisdictions accountability and evaluation processes have been legislated empowering a variety of parties to evaluate adherence to law and policy including appointed committees, legislators or the general public.[347]

c) *AUDITING THE ENFORCER*

It is equally important that the decisions of enforcement officials themselves be subjected to scrutiny and assessment to remove any potential for perverse considerations. This has been effected through statutorily imposed review processes, provision for private right of action and multi-lateral agreements.[348] It has been suggested that there should be systematic scrutiny of reasons for failure to require compliance to identify who may be exercising too little or too great control.[349]

For the resulting legislative and policy reform, see *supra*, note 308.

[346] D. Saxe, *supra*, note 7.

[347] In the United States this " oversight" role is effected through legislative hearings, judicial review of agency actions, accountability to the Executive, and private right of action. See W. M. Eichbaum, "Alternative Organizational Structures for a Compliance and Enforcement Program", *Proceedings International Conference on Environmental Compliance, supra*, note 4 at p. 298: Wasserman, *ibid* at p. 121. In Canada numerous processes are in place to effect public review of compliance actions or inactions, see for example the *Yukon Environment Act* empowers an independent Council to review all complaints regarding regulatory or enforcement activities of the government and extends to any citizen the right to compel a review of these programs. *supra*, note 179, ss. 24 and 23. Section 39 of the Act requires regular audits of the efficiency and fairness in delivery of environmental programs. See also, *supra*, note 341.

[348] *Supra*, note 341. See also Section 6 (d) "Private Enforcement".

[349] E. Barr, *supra*, note 34 at p. 211.

IV. INDICATORS OF SUPPORT FOR AN ENFORCEMENT FRAMEWORK

Chapter III presented a framework within which law, policy and institutional would enable effective enforcement of environmental laws. Numerous examples were given with the text of individual components of the proposed framework. This chapter conveys various viewpoints of governments about the usefulness and efficacy in implementing an enforcement framework including specific assistance to support implementation. The Chapter closes with observations on the potential special constraints or barriers which either have or potentially could be faced by emerging or economically developing nations in creating more effective policies or programmes for effective environmental enforcement.

A. GOVERNMENT RESPONSES TO THE CONCEPT OF AN ENVIRONMENTAL ENFORCEMENT FRAMEWORK

While action to institute more effective enforcement may at times appear spotty, there is evidence of global support, at least among enforcement agencies, for the concept of a comprehensive framework for implementation.[350]

Wide recognition has been given for the adoption of a common strategic framework against which environmental compliance can be anticipated or measured.[351] Support for a universal

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[350] NAAEC, *supra*, note 3, article 5 sets a common frame for effective enforcement.

[351] C. Wasserman states that a positive response was given to the draft strategic framework for environmental enforcement and compliance presented for discussion at the 1990 meeting of representatives from 13 countries and international organizations. Subsequent conferences

framework for implementing environmental enforcement, nonetheless, reflects an understanding of necessary variances in instituting its components due to the unique socio-political context and financial capacity of individual nations.[352] Still, there is wide agreement that the probability of compliance is related more to individual deterrence than one of a cultural response[353] (with the exception of course of corporate culture).[354]

In Canada, federal and some provincial and territorial governments, enforcement and compliance polices and strategies have been recognized as necessary corollaries to the effective implementation of laws.[355] The Auditor General for Canada, for example, has set

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in 1992 and 1994 drew participation from over 80 countries and international organizations. See C. Wasserman, "The Principles of Environmental Enforcement and Beyond: Building Institutional Capacity", *Third International Conference on Environmental Enforcement, supra,* note 4 at p.22.

[352] As one example, while Canadian prosecutors have had mixed success in persuading judges of the serious (sometimes criminal) nature and consequences of environmental offenses, the Indonesian judiciary have given enthusiastic endorsement to incarceration of environmental violators. See *Proceedings of 1992 Seminars on Environmental Enforcement,* ed. Duncan/Moestadji (Jakarta: EMDI/Indonesian Ministry of Population and Environment, 1992). Polish officials have emphasized the need to recognize the significant difficulties associated with the massive privatization of economic activity and the consequent inappropriateness of some enforcement responses including both coercive and market measures. See P. Syryczynski, "The 'Ecological Semaphores' for Fourteen Paths of Ownership Changes in Poland, *International Conference of Environmental Law, supra,* note 4 at p. 453-463. In Bulgaria, implementation of an enforcement framework has been hindered by a lack of necessary implementing regulations, and financial in capacity of both the regulated industry and government regulators. See L. Maslarova, *supra,* note 45 at p. 97-102. *Proceedings Third International Conference on Environmental Law.*

[353] It should be noted that the potential impact of cultural values has not been discounted by the author and is listed as one possible factor affecting the choice of enforcement response and the relative probability of successful implementation. See next section, "Developing and Emerging Nations: Barriers and Constraints".

[354] D. Saxe, *supra,* note 7.

[355] See for example, *A Strategic Approach to Developing Compliance Policies: A Guide,*

out a framework for implementation economical, efficient environmental compliance, including clarification of enforcement roles; appropriate working relationships with provinces and other federal departments; establishing and following a set of policies, priorities and plans including a balance of promotional and enforcement activities; allocation and efficient use of resources in accordance with predetermined priorities; and program evaluation based on predetermined objectives.[356] Since the mid-1980's, enforcement responses by most Canadian jurisdictions have been dictated by official enforcement and compliance policies and in some instances detailed procedural guides.[357] In at least one jurisdiction these documents are required by law.[358]

Similar policy documents have been adopted by the USEPA and State environmental agencies.[359] In addition to detailed policies, procedural manuals, strategies and intensive

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supra note 56; E. Barr, et al, *supra*, note 34. See also the evaluative framework set out by the Auditor General of Canada for assessing the performance of the federal Department of the Environment in enforcing environmental laws. *Report of the Auditor General of Canada to the House of Commons, Chapter 13, supra*, note 187 at p. 268.

[356] *Ibid*, at p. 268.

[357] For example the federal, Alberta, British Columbia, Ontario and *Yukon Enforcement and Compliance Policies, supra*, note 58 and 129. The Canadian Department of Justice as already issued a series of documents outlining the merits of an enforcement and compliance policy and strategy and outlining the necessary steps. *Supra*, note 142. All federal regulatory impact statements now require that a compliance strategy be gazetted along with any new regulation. See *RIAS Writer's Guide, supra*, note 139. It may also be noted that the Canadian position in negotiation of the NAAEC purportedly drew its foundation from the *Canadian Environmental Protection Act Enforcement and Compliance Policy*. See H. Mann, "The North American Agreement on Environmental Cooperation: Implications for the Enforcement of Environmental Law", *supra*, note 63.

[358] *Yukon Environment Act, supra*, note 179, section 150.

[359] C. Wasserman, "Overview of Compliance and Enforcement in the United States: Philosophy, Strategies and Management Tools", Proceedings International Enforcement

training programs, the USEPA has endorsed a Four Year Strategic Plan for improved enforcement and compliance action.[360] The USEPA detailed framework for effective environmental enforcement has been subjected to intensive international scrutiny as a working framework for other nations.[361]

Support for a basic framework for measuring progress on improved environmental compliance has had a more mixed reception in Europe at least by the individual members countries of the European Economic Union (EU).[362] Nonetheless the European Council has called for full implementation and enforcement of Community legislation and instructed the Commission to conduct and make public regular evaluations of progress in this area.[363]

> Community environmental legislation will only be effective if it is fully implemented and enforced by Member States.[364]

Workshop, *supra*, note 4 at p. 7-46; Commission for Environmental Cooperation. *1995 Annual Report, (Annex III: Annual Report on Enforcement)* (Montreal: CEC, 1996).

[360] USEPA Office of Enforcement, *Enforcement in the 1990's Project, Recommendations from the Analytical Workgroups*, (Washington: EPA: 1991). For a more detailed discussion of American policies and strategies see Proceedings of the second, third and fourth International Conferences on Environmental Enforcement, *supra*, note 4.

[361] The framework was the focus of international discussion and debate during the series of international conferences on environmental enforcement held in Utrecht, Budapest, Oaxaca and Chiang Mai, *supra*, note 4.

[362] An overview of difficulties faced in persuading Member states to institute consistent enforcement responses for environmental laws is provided in R. MacRory, "Membership in the European Community: What it means for Environmental Requirements and Enforcement", *Proceedings International Conference on Environmental Law, supra*, note 4 at p. 171-181 and L. Kramer, *supra*, note 66.

[363] L. Kramer, *ibid* at pp. 184 and 185. Member states are obligated to not only to incorporate community environmental standards into their domestic laws but also to enforce them.

[364] Statement of the European Council (Bulletin of the European Communities 6-1990) at p. 18-21, as cited in R. MacRory, *supra*, note 362.

> The Netherlands can be singled out among those countries voicing strong support for adoption of the basic framework.[365]

A 1985 OECD case study of American, Dutch and British approaches to implementing environmental policy identified a common failure to give adequate attention to enforcement and compliance.[366] These discussions precipitated a number of international exchanges on approaches to environmental enforcement and compliance culminating in three international conferences, focused on the need for enforcement, building the necessary framework and alternative approaches.[367] The dialogue initiated among Western European and North American jurisdictions was later expanded to include enforcement practitioners from eastern Europe, Africa, Russia, Caribbean nations, central and southern America and Asia. Similar exchanges on approaches to environmental enforcement were occurring between the Republic of Indonesia, the Netherlands and Canada.[368]

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[365] In 1990, for example, the Netherlands established the National Coordination Committee for Environmental law Enforcement (LCCM) to monitor and promote the implementation of a more effective enforcement structure. See J. A. Peters, " The Relationship between Central Government and Provincial/Municipal Authorities with Regard to Enforcement", *supra*, note 4 at p. 273. The Netherlands Ministry of Housing, Physical Planning, and the Environment (VROM) has contributed generously to the series on international conferences of environmental law, *supra*, note 4.

[366] C. Wasserman, *supra*, note 4 at p.22; F. Plate, *supra*, note 40 at p. 239-241.

[367] *Supra*, note 4.

[368] A series of enforcement training seminars and conferences were held between 1989 and 1993 sponsored by the Environmental Development in Indonesia Project (EMDI) and the Netherlands Ministry of Justice in cooperation with the Indonesian Ministry of Population and Environment (KLH), Department of Justice and Environmental Impact Control Agency (BAPEDAL).

It was observed during the course of the these international dialogues, that discussion quickly progressed from a debate of the relative merits of environmental enforcement to a consensus on the need to build the capacity for compliance and enforcement as one of the essential elements of environmental management. [369] While wide support has been expressed for the basic framework for effective enforcement, many nations have voiced reservations about their capability to implement the necessary reforms due to limited training and resources. Some have voiced the need to adapt the components of the framework to fit their own unique priorities and situations.[370] These constraints and necessary variances to the basic framework are discussed in the next section.

B. DEVELOPING AND EMERGING NATIONS: BARRIERS AND CONSTRAINTS

Regardless of the wide support for the concept of a framework for environmental enforcement, certain additional barriers and constraints may be faced by lesser developed or emerging nations in its implementation. Variances to the recommended framework may be necessary to reflect diverse cultural, political and, in particular, economic differences. Regardless of the view that the task of achieving compliance centers on a common challenge of affecting individual behavior, including that of public, corporations and

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[369] C. Wasserman, *supra*, note 4 at p. 22.

[370] This view was expressed by a number of delegates, particularly those from eastern European, Asian and African nations, at the series of International Environmental Enforcement Conferences in Budapest, Oaxaca and Chiang Mai. Among the issues identified as unique to newly emerging or less developed nations is the recent privatization of economic development activity and critical lack of resources and expertise, *supra*, note 4.

government officials, as opposed to distinct cultural values, none the less, it is recognized that some nations may face unique constraints and barriers in implementing a credible working environmental enforcement regime.

These variances may be most pronounced for developing or emerging nations.[371] In many instances the differences may only be a matter of degree or delay. For example, basic capacity building to establish a working bureaucracy (education, training) and institutional reform (judicial and administrative systems), requires a greater investment at the front end than may be necessary in nations with these systems in place. There will be little value in efforts to implement complex enforcement or compliance programs without this necessary foundation.

Developing workable laws in itself is a tricky business. But having the right laws and appropriate sanctions is only part of what is needed to successfully transfer tested methods of environmental protection to other countries. Related legal infrastructure must develop on a parallel track and long-standing cultural differences must be recognized and assessed. Economic realities must be taken into account and resources (both human and monetary) must be made available. Very possibly, the single most essential element of the successful transfer of environmental solutions is the domestic will of the receiving country. Without this, assistance is likely to be a one-sided endeavor.[372]

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[371] Recognition for these very differences became a central focus of the *Rio Conference on Environment and Development* and the resulting *Agenda 21*, *supra*, notes 1 and 2.

[372] R. Greenspan Bell and S.E. Bromm *supra*, note 107.

In recognition of these differences, a number of international agencies, have recommended that lesser developed countries establish interim, achievable goals thereby phasing in improved standards over a longer time period.[373] This approach can help alleviate the scenario of enacting laws which go unenforced due to lack of resources or expertise, with the consequent loss of credibility or face by environmental agencies.[374] Some nations have adopted a strategy of phasing in controls, concentrating on significant polluters on a sectoral or regional basis.[375] A third alternative may be to limit standard setting to new facilities to avoid overly prohibitive costs to industry in retrofitting. This may also alleviate a discouraging backlog of non compliance for government enforcers.[376]

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[373] For example the World Health Organization as cited in F. Halter, "Towards more Effective regulation in Developing Countries" (Paper presented to OECD Conference on Environmental Management in Developing Countries) (Paris: October 3-5, 1990) at p. 19. Evidence of the growing recognition by some international environmental and aid organizations of the need to provide front end assistance to build an institutional foundation supportive of environmental protection reforms include the recent environmental compliance related and more general institutional capacity building programs of for example UNEP, the World Bank, USAID, and CIDA. The latter example has provided over $30 million through the Environmental Development in Indonesia Project to the Republic of Indonesia directed at environmental management capacity building in government, university institutions and the private sector. This model is now being duplicated by other aid programs. See for example UNEP and World Bank, *supra*, note 18.

[374] *Ibid*, p. 17.

[375] The Republic on Indonesia, for example, with the assistance of the Canadian International Development Agency sponsored Environmental Management Development in Indonesia (EMDI) Project in 1989 launched PROKASIH as a pilot program under which the Indonesian Ministry of Population and Environment (KLH) and later the Indonesian Environmental Impact Management Agency (BAPEDAL) would lay the foundation for standard setting, ambient monitoring and enforcement for water quality. See N. Marakim, J. Nagendran, C. Potter, C. S. Jardine, G. Adnan, "Water Pollution Control in Indonesia: The Clean River Program (PROKASIH)" (Jakarta: EMDI/BAPEDAL, 1991).

[376] F. Halter, *supra*, note 373 at p.14. For example, the Republic of Indonesia is enacting their environmental impact assessment process introduced a significant enforcement and

From the perspective of many developing and emerging nations, establishing these basic building blocks for effective environmental regulation and enforcement are viewed as a " super-added" task.[377] If developing nations are to be expected to progress within a reasonable time frame towards implementing their respective international environmental obligations, in tandem with building a strong economic foundation, recognition must be given to the special constraints and barriers they face and target assistance to implement this basic framework.[378] The following discussion reviews some of the unique constraints these nations face in instituting effective enforcement.

1. LACK OF JURIDICAL FOUNDATION

In many instances before nations can contemplate implementing an effective environmental compliance strategy, concerted efforts will be required to establish an effective juridical system. An effective compliance regime is premised on the enactment of enforceable laws, evidentiary and procedural rules,[379] capable legal officers and a skilled, independent

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compliance headache by requiring the completion of assessment for facilities pre-dating the law. In 1994, due to a significant (hundred of thousands) of backlog of incidents of non-compliance, the law was amended to restrict the requirements to proposed operations. See L. F. Duncan, *supra,* note 34.

[377] With deference to Justice La Forest who first coined the phrase in his decision on *Friends of the Old Man, supra,* note 27.

[378] Prof. Dr. Emil Salim, then Minister of State for Population and Environment, Republic of Indonesia, " Towards a Sustainable Future", paper presented at preparatory meeting for UNCED, (Geneva, July, 1991).

[379] For example enforcement of environmental laws in Hungary is purportedly constrained by the lack of clear definition of environmental offences. A. Momannay, "Enforcing the Law at Government Owned or Operated Facilities", *supra,* note 4 at p. 467.

judiciary.[380] Where a juridical system is not established, it cannot be presumed that illegal or even harmful activities will be made subject to the "Rule of Law". The enactment of environmental laws will have minimal practical effect unless these systems are in place to make them binding.[381]

A parallel reform process may be necessary to consolidate and update laws including rescinding outdated or conflicting statutes and regulations.[382] It may be necessary to enact or revise administrative, civil and criminal procedural codes and evidentiary rules. In addition it may be necessary to prepare compilations of relevant laws to facilitate ready access and reference by lawyers and judiciary.[383] It may also be necessary to improve basic legislative drafting skills and capabilities to screen laws for enforceability.[384]

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[380] See W. S. Bieblo, "Environmental Enforcement in Central and Eastern Europe in Transition", *International Conference on Environmental Law, Supra, note* 4 at p. 229-234; G. Bandi, *supra,* note 45 at p. 237.

[381] F. Halter, *supra,* note 373 at p. 19.

[382] See L. Maslarova, *supra,* note 45; L. F. Duncan and M. A. Santosa, *supra,* note 36; T. Panayotou, "Economic Incentives in Environmental Management and their Relevance to Developing Countries", (Paper prepared for the OECD meeting on Environmental Management in the Developing Countries), (Paris: OECD, 1990) at p. 12; J. Mayda, *supra,* note 140 at p. 1014-1015.

[383] This need was identified by prosecutors and judges participating in the 1991 environmental enforcement training seminars sponsored by EMDI in Indonesia. See L. F. Duncan and P. Moestadji, *Penindakan Pelanggaran Hukum Lingkungan,* (Batu) (Jakarta: EMDI/KLH, 1990) and L. F. Duncan and P. Moestadji, "*Penegakan Hukum Lingkungan*" (Semarang, Surabaya, Medan) (Jakarta: EMDI/BAPEDAL, 1992).

[384] This need was identified in the program analysis on institutional capacity for environmental enforcement and compliance for the Republic of Indonesia, L. F. Duncan and M. A. Santosa, *supra,* note 36.

It has also been suggested that the orientation and skills of lawyers and judges in developing countries may constrain environmental enforcement, in particular the acceptance of more innovative approaches to sanctioning.[385] This may however be more a question of degree as there is evidence of a widespread failure in the legal community to recognize and admit to the complex nature of environmental law.[386] For many nations legal expertise is lacking for legislative drafting and its enforcement.[387] In other cases a general scarcity of skilled government lawyers limits opportunities to hone specialized skills.[388] A related constraint is the inability of government agencies to compete with private firms in attracting qualified practitioners. In other instances, developing nations suffer the effects of the "brain drain" where those fortunate enough to acquire advanced education, seek their fortunes elsewhere where opportunities exist to use their special expertise.

Another significant barrier to timely reform of laws and procedures is the dearth of material on environmental law published in the languages of receiving nations,[389] and all to rarely do

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[385] J. Mayda, *supra*, note 140 at p. 1008-1014. The CIDA sponsored EMDI Project supported development of an environmental law curriculum for the Republic of Indonesia as early as 1989.

[386] In Canada, for example, many members of the legal community, including lawyers, prosecutors and the judiciary remain sceptical of the idea that special training may be necessary to practice environmental law. Regardless, environmental courses in law schools and seminars for practitioners have grown exponentially.

[387] F. Halter, *supra*, note 373. "Towards More Effective Regulations in Developing Countries" paper presented to OECD Conference on Environmental Management in developing Countries (Paris: Oct. 3-5, 1990).

[388] Interviews with lawyers in the Indonesian Department of the Attorney General supports this view with lawyers simultaneously responsible for civil and criminal cases. Interviews with officials in the Department of the Attorney General, 1990-1994.

[389] J. Mayda, *supra*, note 104 at p. 1010 noteworthy exceptions includes the EMDI Project

legal materials or training programs address the unique needs and systems of the receiving nations.[390] Consequently, environmental laws may be enacted which cannot be practically implemented causing both discouragement and loss of face for newly established environmental enforcement agencies.

2. LACK OF BASIC INSTITUTIONAL CAPACITY

Similarly, while many emerging nations have enacted basic enabling statutes for environmental protection and pollution control, less progress has been made in the necessary restructuring of government to improve the capacity to implement controls.[391] A 1985 study reported that few industrializing and less industrialized nations had any institutional capacity for managing pollution.[392] Those experienced in efforts to assist emerging nations in the implementation of environmental controls have suggested that institution building remains "among the most difficult and elusive of objectives just as it is

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publishing legal texts, study reports, and conference proceedings in Bahasa, Indonesian and the CEC North American Environmental Law Database available in English, Spanish and French. The IUCN Environmental Law Centre has also collaborated with the IUCN Commission on Environmental Law in support of the compilation of environmental laws of the ASEAN nations.

[390] Programmes initiated by UNEP, the International Enforcement Office of EPA, International Office of Enforcement, Fish and Wildlife Department, Environment Canada and World Bank among others are beginning to address this gap: See note 18 at p. 362.

[391] F. Halter, *supra*, note 373 at p. 2-8.

[392] *Ibid.* It may be noted that some progress has been made in providing enforcement training since that date. See *supra*, note 387.

among the most important causes of program failure".[393]

It has also been suggested that as environmental agencies in lesser developed nations may lack the necessary clout to move their protection agendas, there may be a need to adjust expectations.[394] This is all the more important for enforcement programs. Again, this is a constraint common to most nations who have yet to reform their decision making structures to better reflect the principles of sustainable development.[395]

There is also a propensity for lesser developed nations to employ officials with advanced education but minimal practical experience. This is often fostered by pay scales correlated with scholarly achievements.[396] It is therefore important that governments and donors be encouraged to provide greater importance to study opportunities which will provide more directly related skill development and capacity building programs, in particular for gaining enforcement expertise. Another strategy may be to ensure involvement by local officials and professionals in any foreign funded studies or consultancies to foster the development of in - country enforcement expertise and institutions building.[397]

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[393] *Ibid.*

[394] *Ibid* at p. 10; T. Panayoyou, *supra,* note 382 at p. 12.

[395] E. Swanson, *Putting Sustainable Development to Work: Implementation Through Lawand Policy* (Edmonton: Environmental Law Center, 1994).

[396] For example, the pay scale for civil servants in the Republic of Indonesia is calculated on a formula which among other factors gives significance to the level of scholastic achievement.

[397] For an example, the EMDI Project included the participation of Indonesian government officials, legal practitioners and academics in all legal studies and training programs sponsored by the Project. See also, L. F. Duncan and M. A. Santosa, *supra,* note 36.

Similar to other nations, developing nations often suffer from a lack of coordination between respective development and protection initiatives by various departments and agencies can constraint development of effective enforcement programs, the problem often exacerbated by donor aid. The necessary preoccupation by developing nations with economic development is yet another hurdle.[398]

3. LACK OF DEMOCRATIC FOUNDATIONS: A CULTURE OF INFLUENCE

Another related constraint to implementing effective enforcement regimes common to many lesser developed countries is lack of a basic " democratic" foundation to facilitate public accountability.[399] Entrenched systems of corruption and influence and dearth of citizen rights to access environmental information or to participate in enforcement processes, are prime examples.

The culture of corruption, or " rent seeking behavior", serves as a major barrier to the implementation of pollution control programs. While one of the arguments for replacing a "command and control" regime with market measures has been the potential impact of

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[398] J. Mayda, *supra*, note 140 at p. 1016 -1017.

[399] M. A. Santosa provides a cogent argument for the impact of citizen participation and basic democratic rights on environmental decision making through a comparative analysis of respective rights in north America and the Republic of Indonesia in *Citizen Participation in Environmental Administrative Decision-making: A Case Study of Indonesia*, LLM thesis, Osgoode Hall Law School, Toronto, April 1990.

bribes on enforcement efforts,[400] it is arguable that this problem would be even more significant for any system based on collection or waiver of taxes or fees can impact every facet of the compliance regime from the processing of permits to exercise of discretion to inspect or enforce. The power of influence and direct financial gain associated with control over these activities can dominate decisions about the development of the whole regulatory regime.[401]

Considered from another viewpoint, where there is a high propensity for rent-seeking a behavior, it may be all the more important that measures be instituted to establish channels to ensure transparency and accountability. However, in many developing nations the potential role for the public as a watch-dog for lack of enforcement is often limited by the generally low level of education and awareness in the general populace.[402]

Even where an NGO community has established itself as an environmental watch-dog, limited right of access to information and participatory rights may seriously limit their effectiveness.[403] In other instances environmental rights have been enacted without the

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[400] T. Panayotou, *supra*, note 382 at p. 13.

[401] While the culture of corruption can seriously constrain domestic efforts to employ market measures, it is only logical that attempts to institute global emissions trading programs would suffer from the same limitations, only on a grander scale.

[402] M. A. Santosa, *supra*, note 399 at p. 282; T. Panayotou, *supra*, note 382 at p. 13.

[403] By way of example, even in some European countries the right of access to monitoring data is limited in practical value by the frequent failure to implement efficient systems for collating and accessing the information. Rik De Baere, "Free Access to Information and the Licensing procedures for Industrial Plants: The Flemish and Belgian Situation" *supra*, note 4 at p. 605-609.

necessary implementing regulations and procedures, and efforts at dispute resolution may be hampered by laws which forbid community gatherings.[404] Finally, while it has been suggested that a totalitarian government be advantageous, where it chooses to move an environmental agenda, it can also increase reticence of officials to acknowledge problems in implementing their programs.[405]

4. TRANSITIONAL ECONOMIES

While debt repayment and economic development have captured the attention of all governments, for lesser developed or emerging industrial nations the debt load and consequent pressure for escalated development can be counted among the most significant barriers to environmental enforcement. Emerging industrial states, including those who have moved rapidly into an economy based on resource extraction are hard pressed to implement necessary parallel environmental controls.[406]

The all too frequently perceived conflict between environmental directives and ability to

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[404] For example the Republic of Indonesia in 1982 enacted the right to a healthy environment as well as right of standing for citizen suits but have yet to promulgate the necessary regulations to actualize these rights. M. A. Santosa, *supra*, note 399 at p. 281-286. See also J. Jendroska, *supra*, note 107 at p. 354 and L. Maslorova, *supra*, note 45 at p. 98.

[405] F. Halter, *supra*, note 373 at p. 9.

[406] L. Maslarova, Bulgarian Ministry of the Environment advises that for her country "Environmental concerns, despite the declarations, are still not integrated into economic and policy decisions and they are rapidly being pushed into the background by purely economic priorities", *supra*, note 45.

have unlimited economic choices is all the more exaggerated in emerging and industrializing nations.[407] It is also suggested that the propensity to adopt economic models based on conventional economics (i.e. growth model) rather than economic strategies which reflect sustainable development principles has a parallel negative effect on the capacity to achieve environmental compliance.[408]

Developing nations often lack associated infrastructure including communications and transportation, have inadequate intelligence and information management systems and a scarcity of scientific or technical expertise for basic impact assessment and control systems.[409] In some countries limited budgets for field level enforcement activities including environmental monitoring and inspection have left vast areas virtually unregulated.[410]

The siting of economic control may also constrain the effective operation of an environmental compliance regime. This may be particularly critical where the major polluting industries are owned by government, individual government officials, or the

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[407] J. Mayda, *supra*, note 140 at p. 1007.

[408] *Ibid.*

[409] J. G. Singh, "The Enforcement Experience in Guyana on Exploitation of Natural Resources", *supra*, note 4 at p. 205-209.

[410] Interviews with officials in Republic of Indonesia, Kalimantan during 1990 to 1992 and State level agencies of Mexico, 1995 to 1997. This is also a problem for Canada's northern lands.

military.[411] The problem is exacerbated where the military hold the power to enforce environmental laws.

Problems have also been identified in the process of privatizing activities under former communistic regimes including the minimal role afforded to environmental agencies in the process, limited impact audits and failure to adequately address liability for past pollution.[412] Enforcement has been made difficult by requests by foreign investors to waive emission charges, introducing inequities between domestic and foreign owned enterprises and a general breakdown in accountability for payment of fines.[413] The process of privatization and major restructuring of the economies, in particular ownership and control of industrial facilities, introduces the need for whole new approaches to environmental compliance.

5. CULTURE AS A LIMITING FACTOR

Some have suggested that culture can play a role in either limiting or facilitating regulatory activity.[414] Where it may have the most significant impact is in the general attitude or value towards accepting or controlling fate with consequence for participatory demands. Clearly a

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[411] F. Halter, *supra,* note 373 at p. 19.

[412] P. Syrycznski, *supra,* note 106 at p. 103-118.

[413] P. Syrycznski, *supra*, note 352 at p. 455-456.

[414] M. A. Santosa, *supra,* note 399. This view is also shared by Mtro. Antonio Azuela, Attorney General (Procurador), for PROFEPA, Mexico (Interview, 1995, Mexico).

society which argues against any form of human intervention to protect the environment may give little support to a guardianship role of the state over the environment through any form of surveillance or enforcement.

On the other hand, a highly lineal society may place great reliance on senior officials or decision-makers to protect their interests. Public expression of support by respected officials for involvement of citizens can encourage their participation.[415] Similarly, mores about the relationship between humans and nature will determine attitudes about the relative necessity to exploit or respect nature (air, water, wildlife). Finally the relative significance given to processes involving conflict versus harmony or equanimity will influence the choice of mechanisms for resolving problems or disputes.[416] For example, it may influence the relative effectiveness of mediation and litigation as instruments for achieving compliance.[417]

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[415] *Ibid* at p. 283. By way of example, the practice by Prof. Dr. Emil Salim, former Indonesian Minister of Population and Environment, of expressing public support for the rights of citizens and environmental organizations in participating in environmental decision-making has had a significant influence on willingness of citizens to express their views in that country.

[416] *Ibid* at p. 81-82.

[417] Prof. Dr. Koesnadi has frequently argued for the use of mediation rather than litigation to resolve environmental disputes in Indonesia because of the general cultural rejection of conflict. Achmad Santosa, *ibid*, however suggests that where the traditional rights and values individuals and communities are violated through expropriation of their lands and loss of traditional livelihoods through industrial pollution there is evidence of increased willingness to express opposition through demonstrations and litigation; the difference in litigation between USA and Canada is often cited as an argument against according standing for citizen suits.

6. THE NATURE AND SCALE OF ENVIRONMENTAL IMPACTS

It has been suggested that the difference in the nature and scale of environmental problems in developed and less developed nations may affect compliance.[418] While in developed nations, it is development which is the key cause of environmental degradation, in less developed countries in many instances pollution is fostered because of poverty and lack of development (at least appropriate development)[419]. For emerging industrializing nations the problems are exacerbated by the infusion of industrial pollutants into communities incapable of mitigating the impacts due to lack of resources, technology or institutional structures.

In addition, in lesser developed countries pollution sources are often small, widely dispersed cottage or small scale industries, unregulated housing settlements and widespread uncontrolled pesticide use and disposal.[420] While some have argued for use of economic measures rather than regulation to control these disparate sources [421], it is suggested the poor are the least likely to be able to pay and the administrative cost would be prohibitive. Alternative strategies have focused on regulation of major industrial sources targeting

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[418] J. Mayda, *supra*, note 140 at p. 1010-16.

[419] J. Mayda, *ibid*; T. O'Riordan, "The Politics of Sustainability", R. Kerry Turn, ed. in *Sustainable Environmental Management: Principles & Practice* (London: Bellhaven: 1988) at p. 38-42.

[420] F. Halter, *supra*, note 373 at p. 10; T. Panayotou, *supra*, note 382 at p. 13.

[421] T. Panayotou, *ibid.*

domestic and other non point sources through education and awareness programs.[422]

C. *TARGETING ASSISTANCE FOR EFFECTIVE ENFORCEMENT*

While the 1992 United Nations Conference on Environment and Development did not dedicate significant attention to the issue of environmental enforcement and compliance, one of the key action documents from the conference, *Agenda 21*, endorses a strategy for maximizing compliance with laws and regulations relating to sustainable development which includes enforceable, effective laws, appropriate sanctions, mechanisms to promote compliance, institutional capacity and mechanisms for public involvement in the making and enforcing of laws on environment and development.[423]

The necessary legislative, policy and institutional reforms, including those prescribed by multi-lateral agreements, will be beyond the reach of most developing nations without the infusion of significant and targeted aid. The alternative mechanisms to provide this assistance were exposed intensively during the 1992 United Nations Conference on Environment and Development and the follow-up meeting of the Parties to the *Rio Declaration* in 1997. A number of significant new institutions and programs have evolved to address the issue of financing the implementation of sustainable

[422] For example, the approach adopted by the Republic of Indonesia.

[423] *Agenda 21*, chapter 8, *supra, note* 2.

development.[424] Less attention has been paid to targeting financial and technical assistance for effective enforcement.[425]

It will be important that any technical assistance recognize the political realities in the receiving countries, in other words, assistance programs should be planned for the long duration. Part of the process of implementing environmental compliance regimes is the processing of legislative, policies and institutional reforms through senior decision makers. In any government this takes more time than is ever anticipated; for developing nations there may be substantially greater delays unless parallel assistance is also being provided to improve institutional structures and general administrative competence.[426]

The longevity of an enforcement program will be substantially increased if technical assistance or aid involves direct involvement and benefit by local officials and organizations, and it has been suggested, "missions should provide 'state of the art'

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[424] For example the creation of the Global Environment Facility (G.E.F.) and numerous other programs within the United Nations institutions, international banks (e.g., World Bank, Asian Development Bank), and in some cases new international capacity building programs in national governments, (USAID, CIDA). An example of a specific institution created to deliver this mandate is the CEC, *supra,* note 3.

[425] Under the NAAEC, the Parties specifically commit to promoting education in environmental law and further commit to ensure their respective laws not only provide for high levels of environmental protection, but also to continue to improve them. The CEC is mandated to foster cooperation in the development and improvement of these laws through exchange of expertise. *Supra, note* 3, articles 3, 10(3). F. Halter, *supra,* note 373 at p. 22; L. F. Duncan and M. A. Santosa, *Third International Conference on Environmental Enforcement*, Theme 6: Establishing International Networks, *supra, note* 4 at p. 321-371.

[426] J. Mayda, *ibid* at p. 998.

information, tailored to the needs and capabilities of the recipient nation, in a manner that builds the recipient nation's ability to solve its own environmental problems."[427] This includes sponsoring or fostering in-country studies, data collection, training, information and response networks. For this to occur it has been suggested that it may also be necessary to educate the donors and to improve coordination of assistance programs to ensure critical needs are targeted, for example, to avoid concentrating assistance only to one component of the enforcement framework or the financing of programs which may conflict with the overall enforcement strategy.[428] Some bilateral and multilateral aid programs have redirected technical assistance to support lesser developed countries in the design and implementation of more effective environmental enforcement and compliance regimes. For example, the Canadian International Development Agency (CIDA), $30 million Environmental Management in Indonesia Project (EMDI) has since 1989 provided technical assistance directed at building the institutional capacity for environmental enforcement and compliance.[429] The EMDI project also facilitated a process for coordinating the involvement of other foreign assistance programs in providing assistance for regulatory and compliance programs.[430]

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[427] J. Mayda, *ibid* at p. 1024.

[428] F. Halter, *supra*, note 373 at p. 26. Efforts have been made in North America to coordinate enforcement capacity building programs sponsored by the CEC, Border XXI program and domestic assistance.

[429] The EMDI project has provided advice on institutional development, legislative, regulatory and policy development, as well as staff development and training. The Regulatory and Compliance component provided expertise in environmental law and procedure, enforcement and compliance alternatives and program development and integration as well as education and training.

[430] A donor coordinator was facilitated through and funded by Canada and the World Bank.

Since 1991 the USEPA has been delivering a capacity building program for other nations focused on the development and implementation of a framework for enforcement and compliance.[431] Canada and several European nations, most notably the Netherlands, have also contributed substantially to programs for enhanced capacity to enforce environmental laws.

The United Nations Environment Programme (UNEP) in 1990 organized a meeting of international experts on environmental enforcement culminating in a framework document for building institutional capabilities to achieve environmental compliance.[432] The focus of the UNEP program is the provision of assistance to developing or newly emerging nations who have identified the need to initiate a enforcement and compliance program. This has been particularly helpful for those countries who had enacted laws without giving adequate attention to necessary control mechanisms or infrastructure:[433] The UNEP training program was developed to provide assistance to nations in the process of identification of the basic components of an effective regulatory and compliance regime and to identify alternatives appropriate to their unique political and institutional and economic situation. The program is also a direct response to *Agenda 21*.[434]

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[431] C. Wasserman, *supra*, note 4 at p. 21-26.

[432] R. Glaser, Ministry of Housing, Spacial Planning and the Environment, the Netherlands, Opening speech to the *Third International Conference on Environmental Enforcement*, *supra*, note 4 at p. 2.

[433] *Ibid.*

The World Bank has also endorsed the need to direct attention and resources towards improved capacity in lesser developed nations for environmental enforcement and compliance and is working with donors and recipient countries in the development of country environmental action plans which incorporate a compliance framework.[435] The agenda adopted for preparation of the country plans reflects an appreciation for the frameworks proposed in Chapter III :

> Experience with the plans has shown that there are five main requirements for successful policy implementation: a clear legislative framework, an appropriate administrative structure, technical skills, adequate money, and decentralized responsibility.[436]

Consistent with this strategy, the Bank has extended financial assistance for the implementation of environmental regulatory and compliance regimes for a number of countries.[437]

Finally, a number of international and regional networks have been established for the purpose of facilitating the exchange of expertise in alternative approaches to enforcement

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[434] UNEP, *supra*, note 2 at p. 8.

[435] The International Bank for Reconstruction and Development/The World Bank, *World Development Report 1992, Development and the Environment*, (Oxford: University Press, 1992) at p. 90.

[436] *Ibid.*

[437] L. F. Duncan and M. A. Santosa, *supra*, note 36.

and compliance.[438] These networks have also enhanced the capacity for timely response to environmental offenses involving transborder activities and impacts.

[438] For example, the International Network of Environmental Enforcement and Compliance (INECE), the European Network of Enforcement Agencies (IMPEL) and the North American Working Group on Environmental Enforcement and Compliance Cooperation.

V. CONCLUSIONS

The nations of the world will continue to confront the task of finding common solutions to issues of global concern. Global warming, ozone depletion, desertification, lost biodiversity, are all problems which command major political commitment to address. In the process of seeking solutions, pressure will mount to find increasingly more innovative means to ensure that environment remains an inherent factor in trade expansion and development agendas. It will be important in designing new tools not to lose sight of the need to put in place and maintain the basic building blocks which will guarantee that environmental protection and sustainable development are not forgotten (and that the race to the top does not become the race to the bottom.) One of the critical building blocks is enforcement.

Regardless of the issue confronted (e.g., protection of endangered species, ensuring safe drinking water) or the mechanism chosen to implement the protection measure (e.g., regulations, emissions trading), the same basic underlying issues will be confronted. Does the political will exist to institute the agreed agenda, and, secondly, how do we measure the depth of commitment? While many nations continue to espouse support for adherence to the "Rule of Law" in the exploitation of the world's resources, in far too many instances the means to institute those democratic principles have been found seriously lacking.[439]

[439] Observe for example the massive environmental and health impacts from raging forest fires

In Chapter II a series of arguments were made for the indispensable role of enforcement in achieving sustainable development, including its inextricable link to the " Rule of Law". If one accepts that precept, it then follows that a test of true commitment to this underlying democratic principle is the enactment of the necessary powers and mechanisms and dedication of the necessary resources to ensure compliance with environmental standards, regardless of the instrument chosen to implement them. As was previously outlined, this requires the implementation of a basic framework for effective enforcement, including the enactment of binding standards, institution of mechanisms for promoting and monitoring compliance and the creation of tools and a strategy to respond to non-compliance. Implementation of this framework will be necessary regardless of the innovative mechanisms adopted for triggering and enhancing compliance. As has been outlined, the ultimate effectiveness of alternative measures, inclusive of the widely touted emissions trading regimes, environmental management systems, or green taxes, is premised on a solid regulatory foundation. It will be equally important in devising new environmental management tools to maintain the processes ensuring transparency and participation, in many cases legislated in tandem with regulatory and enforcement

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caused by the failure of the Republic of Indonesia(by their own admission) to enforce forest practice laws and the resulting strain between the trading nations of ASEAN. See for example" The smoke in Asia's eyes", *The Economist* as reprinted in the *Toronto Globe and Mail*, Monday October 6, 1997, at p. A21 and "Malaysian forest fires straining relations with ASEAN", *Toronto Globe and Mail*, Tuesday October 7, 1997 at A11B in which information is provided to the effect that 176 logging companies were under investigation for violation forestry protection laws. A November 2, 1997 report found an even greater problem in Brazil with reported 28 % increase in burning in the Amazon region. " Amazon ablaze; Forest fires up despite world pressure", *Montreal Gazette*, November 2, 1997 p. A6.

processes.

It is well recognized that investment is attracted to a jurisdiction with a proven record of regulatory consistency . The intent of many recent multi-lateral trade agreements is not only the expansion of economic opportunities, but concurrent with that the assurance of a level playing-field. As has been presented, one means of establishing that arena is an effective domestic environmental regulatory and enforcement regime for setting and meeting standards.[440]

In evaluating the contribution of enforcement to the process of achieving sustainable development, it will be important to first fully comprehend what enforcement actually entails. Enforcement must be recognized as more than an end result. Enforceability can provide a measuring stick for the viability of any system for implementing environmental protection or sustainable development. It provides the test for consistency and fairness in any system of standards or procedures. The same issues apply regardless of the intended target whether it is ensuring conservation and biodiversity are respected in allotting timber concessions, the licensing of transport and disposal of hazardous wastes, or an approval process for construction of an irrigation dam. Are there consistent and binding rules? Are procedures for transparency and participation prescribed? Where there are

[440] As previously discussed, the NAAEC, implemented as a side agreement to the NAFTA, not only subjects the Parties thereto to the possibility of imposition of monetary penalties or trade sanctions for persistent pattern of failed enforcement of their respective environmental laws, but also introduces a forum for the review of any abrogation's of environmental commitments for the purpose of gaining an economic advantage. *Supra* note 3, article 5, 10(6) and Part Five.

opportunities for the non-compliant (i.e. free-riders) to gain an unfair advantage over those who do comply, are processes in place for detection and response ?

There is nothing mysterious about an effective environmental enforcement regime. Perhaps it is this lack of mystique which fails to evoke substantive interest or support. For the most part, enforcement involves the basic technical tasks of standard- setting, monitoring, information management, and institutional responses. Market measures and complex trading schemes and the urgent substantive issues like global warming or rapidly disappearing species understandably capture the public attention. Yet without the basic foundation of a working enforcement and compliance regime, little real progress can be made in addressing these bigger problems.

In the framework presented for instituting an effective enforcement regime, it is important to recognize that each component is mutually reliant. Enforcement action will not be possible without legally-binding standards and mechanisms in place to detect violations. The credibility of an enforcement and compliance regime will be put at risk unless parallel attention is given to the necessary institutional mechanisms to mitigate against conflicting messages and responses. Voluntary compliance and enforcement actions demand precise and binding standards and clearly delineated roles for regulated industry, government and the affected community. Still, contrary to the views of some detractors, this "recipe for success" does make allowances for considerable flexibility and innovation. Enforcement is not only synonymous with "command and control". It encompasses a broad spectrum of regulatory, market and voluntary initiatives.

Finally, in propounding any formula for successful enforcement, allowances must be made for the particular constraints confronting developing nations. Nonetheless, a common commitment to the principle of effective enforcement will be necessary if we hope to effect real change.

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Regina v. Northern Metallic Sales, Reasons for Judgement, Judge B. Stuart, Territorial Court of the Yukon, September 13, 1994.

Rollins Environmental Services (N.J.), Inc. v. EPA, 937 F.2nd 649 (D.C. Cir. 1991).

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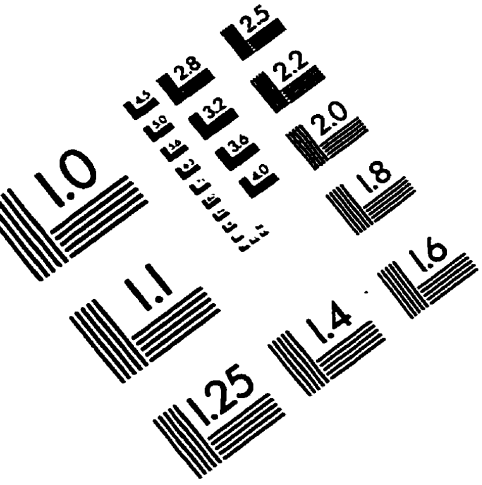
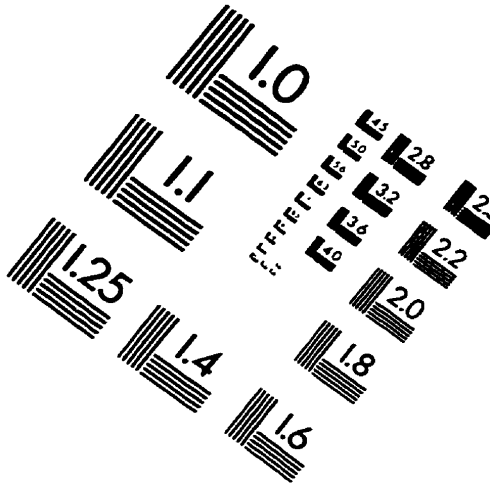
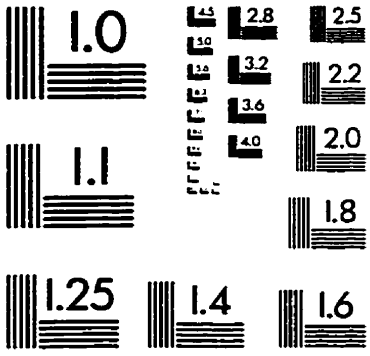
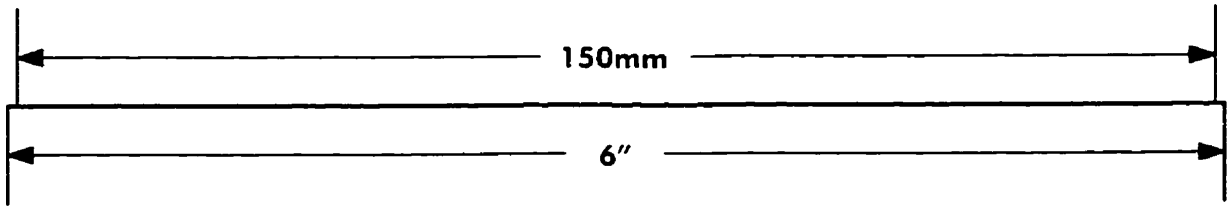
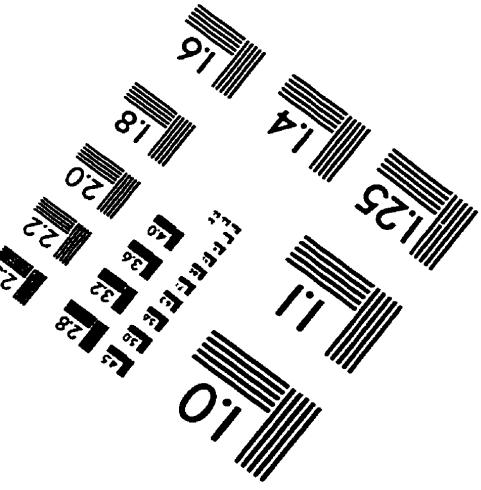
IMAGE EVALUATION
TEST TARGET (QA-3)

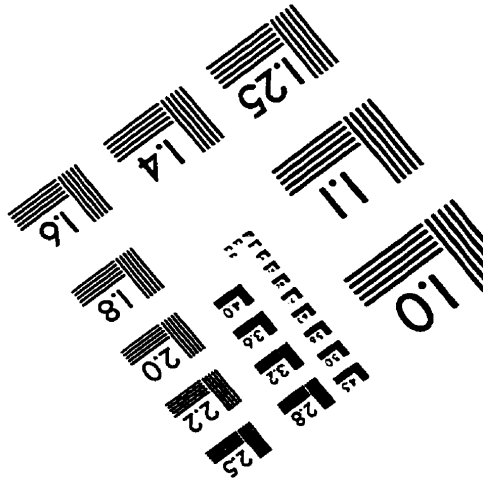












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