Judges and Other Lawmakers: Critical Contributions to Environmental Law Enforcement

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INTRODUCTION

Most of the dialog about environmental law enforcement starts with the assumption that the law is established and concentrates on those who are actively engaged in assuring compliance with the laws. As a result, much of the focus on building of enforcement capacity emphasizes the identification, investigation and prosecutorial response to law violations (or, as a supplemental or alternative approach, the enforcement starts with the assumption that the law is established and concentrates on those who are actively engaged in assuring compliance with the laws. As a result, much of the focus on building of enforcement capacity emphasizes the identification, investigation and prosecutorial response to law violations (or, as a supplemental or alternative approach, the

education, encouragement, and inducement of law compliance). This paper addresses the less frequently discussed but vitally important role of law-makers in the success of enforcement and compliance programs. Broadly defined, law-making involves the activities of legislators and law drafters, regulators and regulation-drafters, permit writers, license preparers, and all others who codify the applicable requirements as well as the activities of judges and other adjudicators who apply the law to the facts of particular cases in ways that define the scope and nature of the law. Judges, of course, do more than "make law". They are critical arbiters of the fairness of the system, help assure reasonable consistency among similarly situated cases, and provide the mechanism through which intransigent law violators can be compelled to comply.

This paper addresses the important ways in which law-making can and should enhance and support enforcement of environmental laws, whether at the sub-national, national or international levels. It also discusses the special role of judges (and similar adjudicative decision-makers) in the environmental enforcement process and draws conclusions about opportunities to improve the effectiveness of law-making and judging in the environmental law context. Because judicial law-making and other critical judicial contributions to environmental law enforcement occur only after and based in part upon law made by legislators, regulators and permit preparers, law drafters and judges are covered in "Enhancing Environmental Enforcement in the Law-Drafting Process" and "The Special Role of the Judiciary," and "Conclusions and Suggestions for Improving the Effectiveness of Judges and Other Law-Makers" is devoted to conclusions and suggestions applicable to either or both.

ENHANCING ENVIRONMENTAL ENFORCEMENT IN THE LAW-DRAFTING PROCESS

ASSUMING THE ENFORCEMENT OF ENVIRONMENTAL REQUIREMENTS

While many considerations influence the drafting of instruments imposing environmental requirements, none can be fully effectuated without clarity in conveying the choices involved
and mechanisms to determine whether those choices are successfully implemented. Whether based on technology availability or desired levels of protection, on absolute values or cost-benefit considerations, with detailed specificity or with performance expectations and flexibility of acceptable approaches the chosen requirements are, in the end, designed to be followed. Put simply, without compliance with the environmental protection choices reflected in environmental law requirements, such requirements are empty gestures at best and misleading shams at worst. This section discusses a range of considerations that go into assuring that environmental law drafting (whether legislative, regulatory, or permitting) succeeds in creating instruments that assure that compliance is achievable and that non-compliance can be identified and addressed.

Technical and Economic Realism

As a threshold matter, requirements must be possible to achieve and be practicable in the circumstances in which they are applied. While it is certainly appropriate to establish requirements that are not easy to achieve and that require costs and effort (even considerable costs and effort), there is no way to comply with-or to enforce successfully-requirements that are plainly impractical. If requirements are too stringent, depend on technology that does not exist and cannot be developed, are effective so quickly that the regulated community cannot take the necessary steps to comply or involve costs well beyond the capacity of the regulated community to bear, the result can be a lack of respect for compliance with law and a lack of willingness on the part of government to enforce.

Legislative designers may feel that it is preferable to establish a very high standard in order to express the most desired outcome or to accommodate public desires for the highest levels of protection. However, if the intent is ever to achieve such outcomes and desires, it is generally advisable to describe such high standards as goals, to establish them with a longer-term effective date, or to limit their initial application only to larger commercial entities or to situations where additional resources can be made available to assure achievability. If there is not some way to bridge the gap between the possible and the leg-

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Ease of Understanding: Accessibility

In the environmental field, where both the environmental conditions of concern and the mechanisms to achieve environmental protection involve complex science and sophisticated technology, it is often difficult to describe requirements with clarity and simplicity. When one adds to the scientific complexity the additional challenges associated with policy considerations that encourage flexibility, avoidance of unnecessary burdens, and harnessing of market forces and other incentives, the law-drafter is presented with many competing pressures. Notwithstanding this difficult juggling act, the law-drafter cannot escape the plain truth that only those requirements that are understood can be obeyed. The goal, for this purpose, is clarity, understandability, and the avoidance of ambiguity. Achieving that goal is no small task. Law drafters must clarify who has the obligation. Definitions of key concepts are often critical, especially for distinguishing such things as product from waste. The requirement should be clear about the time period covered, about the spatial reach, and about whether and when any exemptions or exceptions apply.

One effective technique for law drafters to assure that requirements are achieving the intended message is to think through how they themselves could go about avoiding having to comply with the intent of the requirements by exploiting loopholes or taking advantage of unclear provisions. Similarly, the requirements could be shared with persons expert in the regulated activity in a way that evaluates whether there is full and accurate understanding. Persons with enforcement experience, especially those experienced in field investigations and in development of legal actions in response to violations, can help identify potential problems with clarity. Based on this kind of feedback, the requirements can then be written to minimize the opportunities for misunderstanding and evasion.

Of equal importance to understandability is accessibility of information about applicable requirements. No matter how clearly set forth, requirements that are not known to the regulated community will not be followed. On the other hand, complex and highly technical requirements that are accompanied by adequate information and assistance delivered in a manner that is workable and effective for regulated entities can often be fully and effectively implemented. It is for these reasons that compliance assistance efforts by government, industry groups, private consultants, attorneys, and others can play such a crucial role in the implementation of environmental compliance programs.

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Clear and Defined Duties; Mandatory Language

No matter how carefully crafted or technically clear, legal provisions can only give rise to a genuine duty if they are worded so that they specifically impose a duty. For example, a statement that a person (owner, operator, user) should act in a certain way will generally be seen only as advice or encouragement. The failure to do so would not clearly violate any enforceable duty. While there could be a number of sound reasons to include certain advisory or hortatory provisions in environmental regulatory instruments, such provisions should not be regarded as effective if the intention is to obtain full and meaningful compliance. Words like must, is required to, mandatory, shall, has the duty to all help to ensure that obligations bear the force of law. The problem with choice of language that is not sufficiently mandatory tends to occur more frequently in the permit or license drafting context, where there are fewer persons involved in the drafting and the law-drafters may be less experienced or trained in choice of language considerations.

While clearly stating specific duties in the substantive provisions of environmental laws, regulations and permits may be sufficient to assure enforceability, many law drafters also address enforceability through enforcement provisions, which not only establish such things as the forums for adjudication of violations or the nature of available sanctions, but also specify what constitutes a violation or an unlawful act under the law. While these "enforcement" provisions are most common in statutes, they can also be included in regulations (so long as they are consistent with the statute under which the regulations are promulgated) and in permits or licenses (again, consistent with the governing authority under which they are issued). These kinds of provisions can have the effect of clarifying and emphasizing the mandatory nature of the duties set forth elsewhere in the statute (or regulation or permit) and of assuring that the regulated entity has full and fair notice of what actions or omissions constitute enforceable violations. If this approach is used, however, it is important to be sure that all the duties described elsewhere in the law are brought into these provisions, unless there is a specific intent to omit them and exempt them from the duty to comply or to render that duty unenforceable through sanctions or mandatory legal action.

Measurability; Ease of Detection

It is, of course, critical for both the regulated entity and for the government to be able to detect, determine, and measure whether there is compliance with a requirement. In the absence of this fundamental capacity, neither can know whether compliance is achieved, and the government cannot carry any burden of proving or demonstrating violations. Whether or not compliance measurement is made a part of the duties imposed, the availability of reasonable, practicable approaches to measurement is critical to the effectiveness of any requirement. While the technical complexity of particular requirements or policy considerations relating to regulatory burdens or regulatory flexibility may lead to situations where simple, instantaneous, and inexpensive compliance measures are not available, no requirement should be embraced until the law drafters can identify some workable means for both the regulated entity and the enforcing government to evaluate compliance. As noted here, the law-drafters may provide for the enforcing governments to rely on compliance demonstration requirements imposed on the regulated, but in those situations, effective governmental enforcement would depend on clarity about when and how such demonstrations are or can be required.

ASSURING THE AVAILABILITY OF ADEQUATE LEGAL TOOLS

While the emphasis of the previous section is upon the characteristics of law drafting at the stage of designing and imposing specific environmental protection requirements, this section addresses the provisions of law which provide the authorities and tools necessary to conduct effective enforcement activities and create a climate of credible governmental capacity to oversee, motivate, and mandate compliance. In many legal regimes, provisions of law outside the four corners of specific environmental statutes will have significant impact on both the availability of particular enforcement instruments and options and on the constraints and limits on their use. Notwithstanding these more broadly applicable authorizations and limitations, law drafters can and should consider whether and to what extent environmental statutes and implementing regulations and licenses might include provisions designed to assure the availability and responsible use of mechanisms to provide for comprehensive, efficient, effective, and fair enforcement. Compliance Monitoring

At the heart of every compliance approach is the interaction between the regulated community and the enforcing authority. Regardless of the enforcement "philosophy" adopted by government, which might range from a primarily incentive or reward based approach through a mixed multiple-tool approach to a purely deterrence/punitive approach, government will need to be able to evaluate the extent, nature, and state of compliance. In order for government to motivate compliance by any means or combination of means, it must have some capacity to

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understand the extent of compliance and non-compliance with enough particularity to identify the significance for success or failure of the desired environmental protection. In order to plan enforcement priorities and target limited resources, government must have some understanding of what levels of compliance are occurring for the various requirements and regulated sectors. In order to become involved in motivating individual regulated entities, government must have the capacity to investigate and evaluate compliance at the entity or facility level.

Monitoring of compliance can be based on record-keeping and self-reporting by regulated entities, inspections or other investigations, and measurements of prevailing environmental conditions. Each of these approaches can be enhanced by specific and thoughtful law drafting.

**Self-Monitoring, Self-Record Keeping and Self-Reporting**

Law drafters may encourage or require self-monitoring, self-record keeping, and self-reporting by regulated entities, either as a broadly applicable part of general environmental law requirements or with particularity for certain facilities, sizes of operations, or periods of time. Such provisions shift much of the burden for documenting compliance from government to the regulated community. They sacrifice some of the independence and credibility of government for the increased expertise, efficiency, and cost allocation associated with the regulated community. The required information can relate directly to compliance status or it can relate more broadly to environmental or ambient conditions.

These tools can make a big contribution to the enforcement process by supplementing scarce government resources, and it is almost always sensible for legislators to authorize governments to require self-monitoring, record keeping, and reporting in appropriate circumstances. The decision whether to actively require such activities in implementing regulations and permits should consider several factors: 1) practicality, costs, and burdens to the regulated community; 2) usefulness and intended purpose of the information; 3) reliability and credibility; and 4) ability of government to oversee and manage the information, including whether to make the information publicly available.

**Inspections and Investigations**

Even with strong and comprehensive self-monitoring and reporting, governmental capacity for independent evaluation of compliance activities will depend in part on the legal framework provided for inspections and investigations. Effective inspections and investigations, for example, require adequate authority for physical access to facilities, for opportunities to interview knowledgeable persons, for review of books and records, for obtaining physical samples, for use of measuring and analytical equipment, or for taking photographs or other reproducing images. All of these opportunities carry the potential for abuse or overreaching, and law drafters must balance the need for effectiveness and efficiency against considerations of fairness and burden. Because effective inspection authorities must be both broad and relatively intrusive, measures to insure governmental integrity acquire great importance. One way to build confidence in the exercise of these authorities is to limit their use to persons who have government-issued inspector credentials.

Well-designed inspection regimes will account for circumstances in which entry is denied and assure that legal mechanisms are available for inspectors to obtain the aid of the courts, the police, or some other appropriate authority that can both assure necessary access and allow owners or operators to challenge whether the access is lawful. Where practicable, environmental investigative authorities should be consistent with comparable authorities under other laws, such as health or occupational safety provisions, that are likely to apply to the same facilities. This helps promote cross-training of inspectors, sharing of expertise and techniques, and effective information sharing about facilities.

**Other Monitoring and Evaluative Tools**

Law drafters may also consider providing legal mechanisms to support government or private environmental monitoring, hot lines and other citizen-based reporting, and cross-program information sharing. In addition to authorizing these various options, legislators can provide for funding to support them. Regulatory and permit drafters can develop provisions that facilitate the use of these kinds of tools.

**Orders and Injunctive Authorities**

**Compliance Orders**

Although the statutory and regulatory provisions may clearly impose duties, the government’s detection of a violation is not always sufficient to motivate the violator to comply. Legislative drafters can provide government with the tools to require compliance. Even where the violator is willing to comply, it may not always be possible to do so quickly, and good enforcement practice may warrant orderly oversight of a schedule and intermediate steps to compliance. Compliance orders can specify the steps necessary to achieve compliance, establish reasonable but firm deadlines, and create the potential for escalating consequences.
Compliance orders may be either administrative or judicial (civil). They may be issued with the consent of the violator, where the terms are negotiated and agreed to by both the enforcement agency and the violator (and in the case of the courts, approved by the court.) Negotiated orders are usually termed "consent orders" (or "consent court decrees") and may include provisions for resolving disputes that arise under the order or an agreed-upon penalty for violation of terms of the orders. Most law drafters simply provide authority for the issuance of administrative or judicial orders and the authority for consent orders is inferred from such authority. So long as general order authority is provided, compliance orders that cannot or should not be obtained through negotiation and consent can nevertheless be issued. If law drafters want to be sure that there is complete clarity about the availability of both consent orders and unilateral orders, it could be useful to explicitly provide for both.

Law drafters may explicitly provide that enforcement agencies can seek from the courts both preliminary compliance orders (i.e. prior to resolution of the merits of the claims about the violations) and final orders (following resolution of the substantive claims). Where fully matured legal systems provide for both preliminary and permanent injunctive relief for all types of proceedings, it may not be necessary to make any such explicit provisions in specific environmental laws. In the absence of such a system, law drafters may wish to explicitly authorize this kind of flexibility, in light of the significant human health and environmental issues that can be present in some environmental enforcement cases.

While court-issued orders will, by definition, require that enforcing agencies bring the matter to the court, there can also be situations where administratively issued orders will also come before courts. If alleged violators choose to refuse to comply with administrative compliance orders or to challenge such orders, the matter could come to the court either through a mechanism by which the alleged violator may appeal the order to the court or through an approach by which the enforcing authority may take the matter to the courts to seek judicial enforcement of the order. It is useful for law-drafters to clarify which of these routes is intended.

It bears mention that compliance requirements can be imposed in connection with criminal proceedings. At the point of criminal proceedings where guilt has been established, the question of an appropriate sentence will arise. Specific criminal sanction authorities are discussed in section "Criminal Sanctions" infra. In addition to sanctions, judges can impose conditions on the criminal sentence which could include compliance requirements. While the authority to impose such conditions on sentences may generally be inferred from sentencing authority, any uncertainty about that option could be addressed at the law drafting stage.

Sanction Authorities

Sanctions are the various forms of adverse consequences that can be imposed upon violators as a tool either to motivate the specific violators, usually called specific deterrence, or to motivate other potential violators, usually called general deterrence. Sanctions can also be used to promote economic fairness by removing or reducing the competitive advantage that may be gained by those who violate rather than bear the cost of compliance. Generally, such adverse consequence may be either civil (or administrative) monetary penalties or various criminal sanctions.

Emergency Authorities

In certain, usually rare situations, government may need an immediate and strong mechanism to ameliorate an imminent hazard or to stabilize and address the adverse impacts associated with an emergency situation. Such situations involve harm that is already occurring or appears imminent and may result from accident or deliberate acts. Due to their emergency nature, these situations may warrant action before an adequate investigation into causation or fault or they may warrant action independent of the issue of whether there has been a violation of law. In these circumstances, emergency authorities can provide an orderly, effective, and reasonably circumscribed governmental response. Legislative provisions for emergency authorities can take the form of administrative or judicial orders issued to owners, operators, or other responsible persons to stabilize the situation, contain or rectify the immediately hazardous conditions, or provide necessary protections for affected persons. Whether the order authority is designed to be administratively issued in the first instance with recourse to the courts to obtain compliance with such orders or to be sought directly from a court from the outset, either the overall judicial system or the specific enabling legislation will need a mechanism for expeditious proceedings and rapid action by the courts.

... strong and swift judicial action may be essential to the integrity of both the particular enforcement situation and the overall program for compliance with environmental law.”
Civil Monetary Penalties: Administrative and Judicial

As part of designing the authority to issue monetary penalties, choices must be made about where the authority is established (administrative, judicial, or both), the amounts and types of such penalties, how they relate to multiple violations at the same time and violations over time, and the procedures for imposition, challenges, and appeals.

The threshold question of whether to provide for penalties that may be imposed directly by administrative authorities or to require that enforcement agencies seek penalties only through the court system is closely related to a host of other considerations regarding administrative and judicial enforcement mechanisms.43 In broad terms, administrative authorities may be more efficient, faster, and lower profile. The counterpart effect of those characteristics could mean that administrative mechanisms involve fewer safeguards and carry less impact and clout. Administrative penalty systems may be best designed and used where relatively modest penalties are appropriate or where rapid and efficient responses are particularly valued.

It is possible and may be desirable, to provide for both administratively and judiciously imposed civil penalties. This approach allows the enforcement agency to tailor the penalty response to the facts and circumstances of each situation. Where the amount of potential penalty is set lower for administrative than for judicial actions, lawmakers should set the administrative limit high enough to provide for meaningful use of the administrative tool.44

The legislative amount authorized for penalties involves a number of complicated questions. It is extremely difficult if not impossible to establish in legislation a precise penalty amount that is appropriate across the full range of violations and violators. This problem can be addressed by establishing a set maximum penalty amount for each violation or for each day of violation. Under this approach, the implication is that the maximum penalty is designed for the most extreme, severe, and compelling circumstances. In order for this assumption to prove workable, it becomes important both to set the maximum at a significantly higher level than would be appropriate for many or most "normal" situations and for all concerned to understand that this is the case. One way that statutes can attempt to address the necessarily wide discretion that this leaves to enforcement agencies and courts is to enumerate criteria that should be considered in setting penalties, ranging from factors like seriousness and duration of violations to size and compliance history of violators.45 In general, the maximum penalty should be sufficient to recapture the economic advantages from non-compliance where appropriate.46 Setting a specific currency value for penalties can be complicated where currencies are unstable and inflation is rapid or highly unpredictable. One answer can be a process for the fixed amount to be automatically or easily adjusted.47

Criminal Sanctions

Wherever violations of environmental laws can be categorized as crimes, there will be some kind of provision for criminal sanctions. In some systems, the criminal law contains all of the various elements applicable to environmental crimes, and no additional separate law-making is left to the drafters of the environmental statutes. For this approach, it may only be necessary to define violations of the various environmental statutes as crimes.48 Usually, though, either the environmental laws or the general criminal laws or both will benefit from greater particularity and specificity regarding both criminalization of environmental violations and the scope and nature of criminal sanctions.

The nature, use, and significance of criminal sanctions for environmental violations can vary considerably across national legal systems. If the environmental protection approach includes extensive and workable civil (perhaps including administrative) penalty authority, criminal sanctions will likely be reserved for the more severe and egregious cases and will be available only after the government has met a high standard of proof.49 In systems with limited or no civil, judicial, or administrative penalty authority, the criminal law system may be used for much less serious violations across a large segment of regulated behaviors.50 In this latter context, both the degree of social stigma and the severity of criminal sanctions is likely to cover a broader range to reflect the varying degrees of importance attached to such violations.

Despite these widely variant approaches to the role of criminal enforcement in the environmental context, the basic types of potential criminal sanctions are monetary (e. g. fines or forfeiture) and various forms of loss of liberty (up to and including imprisonment).51 Lesser forms of restraints on liberty might include mandatory public service, "house arrest," or constraints on travel or movement. Since corporations usually cannot perform these liberty related sanctions, criminal penalties on corporations or other entities usually involve fines, although individual corporate officers can be held liable in appropriate situations.52

In setting the statutory levels of applicable criminal sanctions, whether monetary amounts or duration of imprisonment or other confinement, lawmakers face the same basic considerations as discussed regarding civil penalties, supra at "Civil Monetary Penalties: Administrative and Judicial." And, as in that context, where the issue is resolved through setting a maximum level for given violations or violation days, thought should be given to providing guidance about the exercise of discretion in imposition of particular sanctions for specific cases.
Such guidance might take the form of statutory criteria or administratively issued detailed provisions.53

Citizen Suits and Other Enforcement Approaches

So far, this section has identified and discussed a range of authorities and legal provisions that allow, support, or enhance governmental exercise of the enforcement function. Certain other governmental actions can have the effect of achieving compliance or punishing or deterring violators. These include barring violators from participating in government programs or contracts,54 the termination or suspension of licenses or permits,55 or the shutting down of facilities or the seizure or stoppage of sales of goods.56 These kind of authorities can be established for administrative or judicial implementation and will need mechanisms for challenges and appeals as ultimate recourse to the courts to assure their effectiveness.

Although governmental entities are almost always likely to be the prime enforcement operators under any legal system, there may be significant impacts on environmental law compliance as the result of other actors and entities. Banks and other lenders may condition funds availability on environmental compliance. Insurers may require compliance as a condition of obtaining insurance or of recovery of claims. Institutional or general public consumers of goods may condition purchases on environmental law compliance. Private business associations may establish formal or informal mechanisms to enhance member compliance. Environmental and other law drafters may wish to encourage, facilitate, or even mandate certain of these private mechanisms to support environmental law compliance. For example, legal mechanisms for greater public access to information can facilitate all of these approaches.57

Private lawsuits represent another avenue for direct or de facto enforcement of environmental laws. Some may be grounded in various common law principles, especially torts,58 but others may be based on express statutory provisions for citizen enforcement of environmental requirements. These mechanisms by which citizens effectively serve as private attorney generals are generally called citizen suit provisions in U. S. federal environmental law.59 Law-makers may choose to make explicit provision for such causes of action and may provide implementing details regarding who may bring such actions,60 where they may be brought, what remedies may be sought,61 and against whom.62 Either the environmental statute or more general legal provisions may allow for the payment of attorneys fees to successful citizen plaintiffs.63

The Special Role of the Judiciary

The Judiciary as Law-Maker

Without opening the debate of whether judges should be activist and expansive in the development of law or confined and constrained by narrow construction of applicable law,64 it is safe to conclude that judges serve as law-makers in a number of important ways. In each instance of the application of law to the facts of a case, the judge will necessarily clarify and interpret the law for that case.65 Whether in common law legal systems driven by res judicata66 and stare decisis67 or in code-based systems where judicial opinion may only have persuasive effect in later decisions, judicial decisions have a significant impact upon subsequent cases with similar law or facts.68 The way in which judges understand and apply existing law serves as a powerful feedback loop to the drafters of statutes, regulations, and permits. In the particularization of injunctive relief, judges may describe specific steps and elements of law compliance. Through all of these routes, judges are either making law or influencing the making of law.69

In its most fundamental sense, judicial interpretation and implementation of legislation, regulations, licenses, or permits may come in the context of legal challenges to such provisions. Legislation may be challenged as unconstitutional or ultra vires in some way.70 Regulations are frequently reviewable by courts.71 Permits, licenses, and administrative orders may be appealable to the courts, before or after an administrative appellate process.72 Beyond direct legal challenges, all forms of environmental legal requirements may be subject to judicial interpretation, clarification,73 and application in the context of enforcement cases, whether civil or criminal, or whether initiated by government or by citizens. In all of these types of judicial involvement, the opportunity is available for judges to contribute materially to the clarity and enforceability of such provisions. In some situations, judicial interpretation may enhance the understandability and enforceability of the requirements. In others, judicial review may identify shortcomings in existing legislation that impede or prevent effective enforcement.74

The Impact of the Judiciary on the Climate of Compliance, Respect for the Rule of Law, Societal Norms and Expectations

A fundamental and central tenet of successful environmental protection compliance and enforcement programs is the credibility and integrity of the government.75 If government is or is perceived to be corrupt or even merely capricious and unfair, it is unlikely that the regulated community or the society at large will support environmental compliance goals.76 An independent, professional, and credible judiciary is a key component of the rule of law, respect for law, and belief in governmental integrity.77 Because of its role as an arbiter of competing interests and its neutrality in any specific dispute, the judiciary's upholding of appropriate and well-grounded environmental protection laws and actions to implement them adds materially to their acceptance by society at large. By the same token, the judiciary's rejection of inappropriate application of such laws increases the trust of all in the system and reinforces the expectation that such laws can and will be soundly applied.78

By contrast, if the judiciary exhibits ineptitude, corruption, bias, or hostility to legitimate legislative and executive action, the balance necessary for acceptance of the entire governmental
structure is undermined and environmental law compliance (and other types of law compliance) will suffer or completely collapse. It is, therefore, not exaggeration to say that as the judiciary goes, so goes environmental law compliance.

THE BALANCING ROLE OF THE JUDICIARY TO MODERATE PROSECUTORIAL EXCESS OR ADDRESS OFFICIAL MALFEASANCE

While, as discussed supra at "Orders and Injunctive Authorities," legal authority to conduct effective investigation and legal tools to assure a strong, behavior-changing response are critical aspects of effective environmental legislation, the exercise of such authorities, and use of such tools should be responsible, fair, and consistent with the rights of affected persons and entities. These are considerable powers, and therefore susceptible to considerable abuse.

An independent judiciary provides a mechanism for accountability and oversight that can both deter misuse of enforcement power and correct and redress such misuse when it occurs. The courts may establish practices or implement legislative provisions that prevent the use of wrongly obtained evidence,79 that impose sanctions on offending officers or agencies,80 and that provide compensation to wronged individuals or entities.81 By these express measures and a myriad of specific approaches as matters come before the courts, judges can establish the tone for the exercise of investigative and prosecutorial discretion and for professionalism and ethical standards in environmental law enforcement.

THE ROLE OF THE JUDICIARY IN ASSURING THE TIMELY AND EFFECTIVE USE OF LEGAL ENFORCEMENT MECHANISMS

While the statutory availability of adequate enforcement mechanisms is a necessary starting point and the capacity and will to exercise these authorities is prerequisite, the courts provide the ultimate recourse where there is resistance to investigation and unwillingness on the part of the regulated community to comply with the demands of the enforcement authorities. In the absence of a judicial backstop, both intransigent violators and those who are generally responsive to clear governmental action but unwilling to comply without credible government enforcement,83 will likely continue to violate. If the involvement of the judiciary leads to inordinate delays,84 major unpredictability, or a perception of corruption or incompetence, the judicial backstop is essentially nullified.

As part of a system that permits and promotes effective environmental law compliance, a credible and capable judiciary is crucial. In certain specific situations, such as a refusal of access to inspectors, emergency conditions, or persistent intransigence by violators, strong and swift judicial action may be essential to the integrity of both the particular enforcement situation and the overall program for compliance with environmental law. In the more comprehensive context of the complete docket of environmental enforcement matters that come before the judiciary, a consistent, fair, and sufficiently forceful response to demonstrated violations becomes a foundation of the entire system of environmental law enforcement.

JUDICIAL CONTRIBUTIONS TO THE OVERALL TRANSPARENCY AND OPENNESS OF ENFORCEMENT

Although statutory provisions and choices by implementing enforcement agencies generally control the extent and nature of the overall transparency and openness of a government’s approach to compliance and enforcement, there are a number of mechanisms through which the courts can contribute to these important aspects of sound environmental law compliance programs. Court systems often, for example, control the manner and extent to which cases are publicly reported and the ease with which they can be accessed by practitioners and others.85 Courts can support and even undertake efforts to compile information about cases and decisions and to analyze trends or patterns in them.86 These kinds of efforts may be particularly important in code-based legal systems which may lack the long history of ready availability of relevant prior court decisions.87

CONCLUSIONS AND SUGGESTIONS FOR IMPROVING THE EFFECTIVENESS OF JUDGES AND OTHER LAW-MAKERS

TRAINING AND SKILLS ENHANCEMENT

As a starting point for skills development, law school curricula would benefit greatly from enhanced attention to statutory and regulatory drafting, including enforceability considerations.88 Specialized continuing education and training for law-makers in drafting of substantive provisions for enforceability and in development of adequate statutory enforcement provisions is available, but relatively rare.89 Judicial training is increasingly organized, expected, and enhanced in the U.S.,90 though it has not been without controversy. Other nations also make extensive use of judicial training programs and institutions.91

Because environmental cases can be very complex in both law and facts, judges might also benefit from some specialized training in the subject-matter of environmental protection.92 While "environmental courts" are quite rare,93 sub-specialization within a court is a somewhat more frequent phenomenon, either explicitly or informally.94 Usually, though, environmental cases are likely to be assigned in a less systematic way and it becomes important that the whole judiciary be better prepared to understand and act responsibly in environmental cases.95 A number of recent international initiatives are attempting to promote this kind of subject-matter awareness-raising and training for judges, nationally, regionally, and world-wide.96

NETWORKING

Interaction, cooperation, and collaboration among professionals with similar responsibilities, challenges, and experience can be both useful and personally satisfying. Networking across organizational, political, jurisdictional, or geographic boundaries can provide an efficient, nonbureaucratic mechanism for shared learning and skills development.
At the international level, a rich and growing body of literature now identifies international networks of various types of government officials and others with language as strong as a "new world order." These kinds of networks can and do operate among legislators, agency personnel, and judges and can operate at the international, national, or subnational level. While organized activities among legislators or judges are increasing, especially at the international level, networking around a specific substantive area of the law is still relatively rare. Happily, environmental law is emerging as a leading area for international judicial networking. When one reflects on the fact that there are only a small handful of specialized environmental courts of any type in any nation and that neither civil nor criminal dockets are by any means dominated by environmental cases, this level of international judicial engagement is somewhat extraordinary.

A group of more than one hundred and thirty judges from more than 60 countries met in Johannesburg on the eve of the World Summit on Sustainable Development and produced a "Statement of Principles" relating to justice and the environment, a truly unusual development in the history of foreign affairs. The Johannesburg meeting of the jurists followed on the labors of the Division of Policy Development and Law of the United Nations Environment Program, which had been working for several years in regional judicial symposia and other meetings, and has been followed by several other, mostly regional gatherings of judges, some quite prominent, who appear committed to judicial networking on environmental topics.

Among the topics of evident interest to these judicial networks is enforcement and compliance. This robust model of international judicial networking in the area of environmental law enforcement can serve as a model for similar international, national, or subnational networking among legislators, regulatory drafters, permit writers, and all other types of actors in the area of environmental law enforcement.

**EXPORTATION OF BEST PRACTICES**

Successful models from other systems or experiences can be adopted or adapted if and when certain preconditions are met. The "best practices", in this instance for law-drafting and judging, must be known and understood by those who might adopt them, must be adaptable to the "importing" situation, and must be sufficiently admired and respected to receive a fair and full consideration. Education and training (supra at "Training and Skills Enhancement") and networking (supra at "Networking") contribute to these preconditions. So do all the means by which the activities of law drafters and judges are made transparent (infra at "Feedback, Accountability, and Measurement") and supported by legislative or regulatory histories and other amplifying materials (supra at "TheBalancingRoleoftheJudiciarytoModerateProsecutorialExcessorAddressOfficialMalfeasance").

Fortunately, most legislative and regulatory materials, as well as many individual permits, are typically publicly available and easy to access. Some developing countries and systems without fully developed judicial administrations may not routinely and comprehensively publish judicial decisions, but a large volume of "judge-made law" is also widely and readily available from throughout the world. It only remains, then for comparative environmental law studies to focus on enforcement and enforceability issues. Judges also have the option and the opportunity to turn to extra-territorial sources for relevant and useful models and sources of law, insight, reasoning, or perspective.

**FEEDBACK, ACCOUNTABILITY, AND MEASUREMENT**

As noted, supra at "The Judiciary as Law-Maker," judges perform a form of feedback and accountability function for environmental law drafters and for environmental enforcement agencies which can contribute in major ways to the overall credibility and effectiveness of the system. In a more judiciary-specific way, courts, judges, and the judicial system can adopt mechanisms and processes which provide feedback to the judiciary and which improve accountability and measurement of judicial effectiveness. For example, the judicial system can track and report on such measures as time to decision, frequency of reversal by higher courts, back logs of undecided cases, and the like. Academic and other independent institutions can be encouraged to study and evaluate the judiciary. All of these approaches can be adapted with particular attention to judging in environmental cases and environmental issues.

**CONCLUSION**

Effective law enforcement and reliable compliance with environmental laws are necessary if environmental protection efforts are to produce their desired results. This article has identified the critical role that lawmakers, both as drafters and judges, can and should play in promoting environmental compliance. While other governmental and non-governmental actors are often the primary focus of thinking, scholarship, and writing about environmental compliance and enforcement, the particulars identified and elaborated here illustrate the fundamental foundation function of law-making and the rich opportunities for judges and other lawmakers to promote and enhance environmental law compliance and environmental protection throughout the world.
ENDNOTES: Judges and Other Lawmakers


2 Of course, if standards are set with the express intention of serving as the functional equivalent of a ban on the regulated activity, different considerations apply. Even in these circumstances, practicability considerations are important to assure orderly shutdown of operations, management of contamination, and displacement impacts. For an example of a study that assesses an outright ban, analyzes compliance rates and enforcement costs resulting from the ban, and suggests ways to improve the cost effectiveness of traditional enforcement, see K. Kuperan & Jon G. Suinten, Blue Water Crime: Deterrence, Legitimacy, and Compliance in Fisheries, 32 LAW & SOC’Y REV. 309 (1998) (looking at the behavior of Malaysian fisherman who face a ban against fishing in a zone along a coast and suggesting ways to increase viability of regulations).

3 For a somewhat contrary view, see a discussion of the value of “partial compliance” with an ambitious goal in the international context, Ronald Mitchell, Compliance Theory: An Overview, in IMPROVING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL LAW 3, 24-26 (James Cam et al, ed, 1996).

4 Even stating that “any person” must act in a specified way raises the question of what constitutes a person—does it include corporations or governmental entities? If the obligation is intended to apply to certain businesses, is the obligation imposed on the owners of the business, the owners and (separately) the operators, etc.? This can matter a great deal if owners are absentee and outside the jurisdiction, for example.

5 For an example of the many disputes that arise under the United States’ Resource Conservation and Recovery Act’s (“RCRA”) definition of “hazardous waste,” see United States v. Dean, 969 F.2d 187 (6th Cir. 1992) (holding that chronic acid was considered “hazardous waste”).

6 A numeric standard may be intended to be measured for continuous compliance, for a twenty-four hour average, for a weekly or monthly maximum, or for any of a number of other possible time frames.

7 If the drafters intend to provide for exceptions or waivers of the requirement under certain circumstances, enforceability is enhanced if such circumstances are narrowly and precisely defined. If those who seek to claim exception are required to demonstrate eligibility, this can also minimize the difficulties inherent in exception provisions. Contra Cass R. Sunstein, Problems with Rules, 83 CAL. L. REV. 953 (1995).


9 Because the regulated entities may not be fully cooperative and helpful in this enterprise, efforts should also be made to identify neutral but expert help from sources like academics or independent research centers.

10 See Emily Barker, DuPont Tries to Clean up its Act, The Am. Lawyer, Oct. 1991, at 40; Marianne Lavelle, Companies Staff Up and Struggle to Stay Ahead of the Green Machine, 15 Nat’l L.J. 52 (August 30, 1993) (discussing attorneys’ roles in assisting companies attempting to comply with environmental regulations and highlighting the companies’ difficulties meeting these requirements); David L. Markell, The Role of Deterrence-Based Enforcement in a ‘Reinvented’ State/Federal Relationship: The Divide Between Theory and Reality, 24 HARV. ENVTL. L. REV. 1, 25-26 (2000) [hereinafter The Role of Deterrence] (discussing EPA’s efforts to launch compliance assistance programs); Joel A. Mintz, Scrutinizing Environmental Enforcement: A Comment on a Recent Discussion at the AALS, 30 ENV. L. REP. 10639 (August 2000) (saying that under a cooperation-based system, regulatory agencies give advice and consultation to businesses to help them understand the rules and come into compliance).

11 See Clifford D. Rechtschaffen, Deterrence vs. Cooperation and the Evolving Theory of Environmental Enforcement, 71 S. CAL. L. REV. 1181, 1201-02 (1998) [hereinafter Deterrence vs. Cooperation] (arguing that one source of the complexity surrounding environmental laws is that it is difficult for the regulated to locate the law when the regulations are densely worded and made through informal agency documents). For a discussion of the importance of clear legislative history, see Alice Bolet Ackerman, Drafting Legislative Intent Statements, The Legislative Lawyer, Vol. 11, No. 1 (Winter 1997), available at http://www.ncsl.org/programs/legman/LegalSrv/Vol11No1.htm (last visited April 9, 2004).

12 Failure to act in accordance with recommendations might give rise to tort liability under some negligence theories, might influence labor negotiations or might otherwise influence the behavior of the regulated entity. But see Deterrence vs. Cooperation, supra note 11 at 1197-98 (1998) (arguing that because of the difficulty in plaintiffs’ succeeding in lawsuits alleging environmental harm from routine and continuous discharges, corporations understand the very small likelihood of their being sued, and instead focus on avoiding accidents, which remain the primary source of environmental tort liability. The author suggests that regulatory requirements such as training, record-keeping, or reporting obligations do not relate to direct environmental harm so that there is almost no likelihood of tort liability for noncompliance).

13 Examples of United States statutes creating clear legal obligations include Toxic Substances Control Act, 15 U.S.C. § 2603(b)(2)(B) (mandating “[t]he following person shall be required to conduct tests and submit data”); National Environmental Policy Act, 42 U.S.C. § 4332 (requiring Federal Agencies to cooperate “to the fullest extent possible”); Clean Water Act, 33 U.S.C. § 1341 (requiring “any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in discharge into the navigable waters shall provide the licensing or permitting agency a certification from the State”). See also Jack Stark, Shall or Must?, Vol. XVI, Issue 3 LEGIS. LAW. 5, available at http://www.ncsl.org/programs/legman/legal/srv/vol17no1.pdf (arguing that, despite contentions of plain language advocates that the word “must” is a superior choice, the word “shall” retains utility in statutory drafting).

14 See discussion infra at Section “Sanction Authorities.”


16 Even in regulatory schemes that place the burden on the regulated entity to demonstrate compliance, such provisions would prove unworkable in the absence of the tools and methods to establish the necessary facts to support such a demonstration.

17 Required compliance measurement can be general or very specific, as when particular tests of a particular design are specified. See, e.g., 40 C.F.R. 122.48 (general monitoring and reporting requirements for effluent permits under the U.S. Clean Water Act); 40 C.F.R. Part 136 (specific guidelines establishing test protocols for such monitoring); 40 C.F.R. 60.46
(specific compliance demonstrations for new source performance standards under the Clean Air Act).


19 In U.S. law, such “generic” provisions range from Constitutional constraints on unlawful searches and seizures or mandatory self-incrimination all the way to Justice Department regulations and policies relating to exercises of prosecutorial discretion or to compliance with professional attorney ethics standards. See U.S. CONST. amend. IV; U.S. CONST. amend V. See also Memorandum from Larry D. Thompson, Assistant Attorney General, to Heads of Department Components, United States Attorneys, January 20, 2003, available at www.usdoj.gov/usao/eousa/foia_reading_room/usam/title9/crm00161.htm (last visited April 9, 2004) (memorandum designed to include “a set of principles to guide Department prosecutors as they make the decision whether to seek charges against a business organization”). See also The McDade Amendment, 28 U.S.C. § 530B (providing that the U.S. government attorneys are subject to state requirements and federal court rules governing attorney conduct “to the same extent and in the same manner as other attorneys in that State”); 28 C.F.R. Pt. 77 (implementing regulations for McDade Amendment).

20 For the most part, this article presumes that the enforcing authority is governmental in nature. Citizens suits and certain quasi-enforcement roles for lenders or consumers are discussed briefly in section “Citizen Suits and Other Enforcement Approaches,” infra.

21 For a discussion of the range of enforcement approaches see Jon D. Silberman, Does Deterrence Work? Evidence and Experience Say Yes, But We Need to Understand How and Why, 30 ENV. L. REP. 10523 (July, 2000). See also Deterrence vs. Cooperation, supra note 11 at 1181; The Role of Deterrence, supra note 10 at 1; Robert A. Kagan & John T. Scholz, The “Criminology of the Corporation” and Regulatory Enforcement Strategies, in ENFORCING REGULATION 67 (Keith Hawkins et al. eds.).

22 See Wesly A. Magat & W. Kip Viscusi, Effectiveness of the EPA’s Regulatory Enforcement: The Case of Industrial Effluent Standards, 33 J.L. & ECON. 331 (1990) (detailing significant effects that EPA’s actions to enforce water pollution regulations have on compliance rates and pollution levels). See also Wesly A. Magat & W. Kip Viscusi, The Effectiveness of EPA’s Regulatory Enforcement: The Case of Industrial Effluent Standards, Study Conducted by the Center for the Study of Business Regulation, (1987) [hereinafter EPA’s Regulatory Enforcement] (study evaluating the relationship between EPA enforcement activity and both pollution levels and compliance rates, using results from monitoring reports required by the Clean Water Act).

23 One example of reporting of emissions and discharges is the Toxic Release Inventory, which is required under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. §11022. See also Arnold W. Reitze, Jr. & Steven D. Schell, Self-Monitoring and Self-Reporting of Routine Air Pollution Releases, 24 COLUM. J. ENVTL. L. 63 (1999).

24 Decisions will have to determine the frequency and scale of monitoring, whether all, a portion, or only problematic results will be reportable to government, whether and for how long records must be maintained. See The Role of Deterrence, supra note 10 at 1; UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, PRINCIPLES OF ENVIRONMENTAL ENFORCEMENT, Chapter 6, available at www.nece.org/environmentalprinciples.html [hereinafter PRINCIPLES] (last visited April 9, 2004).

25 Self-monitoring can involve the perception or the reality that the regulated industry may have a conflict of interest about the results of such monitoring, especially when it could have the effect of proving violations of law or even the need for further regulation. Reliability and credibility can be enhanced through mandatory certification of results by responsible company officials, required use of government, independent or specified laboratories, mandating use of good laboratory practices or other quality control techniques, and similar mechanisms. See EPA’s Regulatory Enforcement, supra note 22. See generally PRINCIPLES, supra note 24.

26 Provisions for significant consequences for any falsification or hiding of monitoring results can strengthen the governmental hand, as can requirements for some kind of independent oversight and observation by third parties. See PRINCIPLES, supra note 24.

27 While a broad range of public policy considerations inform decisions about the extent and nature of public release of monitoring results, one factor is the extent to which such information can supplement governmental oversight of the activity and empower citizen involvement in compliance and enforcement. For discussion of citizens’ suits see infra Section II.B.4. See also Sidney M. Wolf, Fear and Loathing About the Public Right to Know: The Surprising Success of the Emergency Planning and Community Right To Know Act, 11 J. LAND USE & ENVTL. L. 217 (1996). For a discussion of “spotlighting” as a regulatory strategy, see Cass Sunstein, Informational Regulation and Informational Standing: Akins and Beyond, 147 U.PA. L.REV. 613 (1999). See also Echeverria & Kaplan, Passions Procedural ‘Reform’: In Defense of Environmental Right to Know, GEO. ENVTL. L. & POL’Y INST. (2002). For a discussion about corporate disclosure and the investor or stockholder’s ability to find information, see John W. Bagby et al., How Green Was My Balance Sheet? Corporate Liability and Environmental Disclosure, 14 VA. ENVTL. L.J. 225 (1995).

28 Different considerations regarding fairness may be influenced by whether the regulated activity involves entirely commercial enterprises or whether individual or private citizens are regulated. For commercial settings, it may be optimal to authorize access to facilities where regulated activities are conducted while in the case of homes and similar situations, entry might reasonably be restricted to situations where there is probable cause to believe that violations are occurring.

29 Of course, the system of issuing such credentials must itself have integrity and safeguards. An additional means to build confidence in government inspectors and investigators is through general, often government wide laws and approaches to promote professionalism and ethics, to prevent conflicts of interest, and to detect and punish bribery and other abuses.

30 There can be important synergies between, for example, customs and environmental officials, occupational safety and environmental investigators, etc. However, institutional and structural barriers often impede cross-fertilization. See James V. DeLong, New Wine for a New Bottle, 72 VA. L. REV. 399, 408-09 (1986) (providing the example that the proposed regulation of exposure to vinyl chloride in the 1970s would have required the coordination among five agencies under fifteen statutes). Legislative directives, or even encouragement, can help overcome such barriers. See, for example, requirements in FIFRA that EPA consult with, variously, the Department of Agriculture and the Department of Health and Human Services. 7 U.S.C. § 136(d).

31 For example, import licenses could require reporting to both customs and environmental officials. See also ARMS CONTROL ASSN., EXPORT/IMPORT DATA 1999: AN ALPHABETICAL GUIDE TO U.S. EXPORT CONTROLS AND U.S. IMPORT RESTRICTIONS (1999) (stating that export license applications are subject to regulatory review for any number of reasons).

32 Compare Clean Air Act, 42 U.S.C. § 7413(a)(4) (general provisions for administrative compliance orders) with § 7413(b) (civil judicial enforcement, including permanent or temporary injunctions). Similarly, compare Clean Water Act, 33 U.S.C. § 1318(a)(3) (authorizing compliance orders) with § 1318(b) (civil actions, including permanent or temporary injunctions).

33 See United States v. South Florida Water Management District, 847 F.Sup. 1567, 1573-74 (S.D. Fla. 1992) (discussing the court’s authority to enter a consent decree).

34 The emphasis in this section has been upon the role that lawmakers can play in providing effective legislative mechanisms for the use of compliance orders. Obviously, the preparation of compliance orders is, itself, a form of law drafting and is subject to many of the same considerations of language, clarity and related factors which apply to the initial drafting of the applicable requirements. This aspect of lawmaker is discussed at
greater length, infra at section III.A., in connection with the role of judges as law-makers, and particularly their role in crafting effective injunctive relief. The principles applicable to judges in that context are equally applicable to the crafters of administrative orders.

35 See James T. Carney, Rule 65 and Judicial Abuse of Power: A Modest Proposal for Reform, 19 Am. J. Trial Advoc. 87, 87-92 (distinguishing between preliminary and permanent injunctions in terms of their nature, duration, purpose, and effect, particularly that preliminary injunctions lack specific time restrictions but are typically temporary, while permanent injunctions are typically indefinite). For general injunctive procedures under U.S. law, see Fed. R. Civ. P. 65(a) (preliminary injunction); Fed. R. Civ. P. 65 (injunctions); Fed. R. Civ. P. 56 (summary judgment); Fed. R. Civ. P. 59, 60, 62 (judgment rules).

36 Such refusals and challenges may be motivated by a simple unwillingness to comply or by a sincere belief that the order is not proper based on the facts or the law.

37 Such an approach could provide for an intermediate appeal within the administrative agency, perhaps to an administrative tribunal whose functions are separate from the enforcement arm of the agency. See United States Administrative Procedures Act, 5 U.S.C. § 554(d) (provision that the adjudicating agency official not be responsible to or subject to the officials engaged in enforcement functions).

38 See General Electric Co. v. Envtl. Protection Agency, 360 F.3d 188 (D.C. Cir. 2004) (holding that while the plain language of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) prohibits federal courts from reviewing challenges to removal or remedial actions under the statute, General Electric still can sue in federal court to challenge the constitutionality of that provision of the statute). But see also McClellan Ecological Seepage Situation v. Perry, 47 F.3d 325, 327 (9th Cir. 1995); Schalk v. Reilly, 900 F.2d 1091, 1094 (7th Cir. 1990); Voluntary Purchasing Groups, Inc. v. Reilly, 889 F.2d 1380, 1390 (5th Cir. 1989); for examples of courts declining to review challenges to specific EPA orders and actions under the same provisions.

39 For examples of some conditions that the federal courts may attach to probation, see 2002 Federal Sentencing Guidelines, Chapter 5-Part B-Probation, available at www.uscc.gov/2002guid/5b1_3.htm (last visited April 9, 2004).


41 For a discussion of deterrence theory see Deterrence vs. Cooperation, supra note 11 at 118 (critically examining the assumptions underlying the reform movement and suggesting that instead of discarding the current enforcement approach based on the traditional deterrence-based civil enforcement, there should be movement towards a system of environmental enforcement grounded in deterrence theory and which integrates the constructive features of a cooperative model); Jon D. Silberman, Does Environmental Deterrence Work? Evidence and Experience Says Yes, But We Need to Understand How and Why, 30 Envnl.L.Rev. (Envl. L. Inst.) at 10523 (2000) (summarizing EPA’s traditional deterrence-based approach to enforcement); Michael P. Vandenbergh, Beyond Elegance: A Testable Typology of Social Norms in Corporate Environmental Compliance, 22 Stan. Envtl. LJ. 55, 63-7, 118-20 (2003) (discussing the standard deterrence model). For a comprehensive analysis of the literature of regulatory compliance, see Timothy F. Malloy, Regulation, Compliance, and the Firm, 76 Temp. L. Rev. 451 (2003).

42 Some U.S. environmental statutes expressly identify economic benefit derived from the violation as a factor in setting of penalties. See, e.g., Clean Water Act, 33 U.S.C. § 1319(d) and (g)(3). Under EPA policies, EPA fines in civil enforcement cases have two components, (1) the violator’s economic gains from non-compliance and (2) “a punitive ‘gravity-based’ penalty based on the seriousness of the offense.” Since 1984 EPA has used the BEN computer model to calculate economic benefits. An economic benefit can occur through “delaying required pollution control measures, avoiding required pollution control expenditures, or gaining an illegal competitive advantage such as selling a product at below market prices.” Environmental Protection Agency, Calculation of Economic Benefits Obtained by Violators under Review, in NEWSLETTER VOL. III #11 (November 1996) (available at http://yosemite.epa.gov/EE/Epalib/nwlet.asf0/716462ebcb29fe852556a3d0064db7?OpenDocument) (last visited April 1, 2004). For a judicial discussion of the economic benefit factor, see U.S. v. Smithfield Foods, 191 F. 3d 516, 526 (4th Cir. 1999).

43 See discussion of order authorities supra Section “Compliance Orders.”

44 For a detailed discussion comparing administrative and judicial enforcement in the U.S. and Dutch systems see D.J. Van Zeben & M.E. Mulkey, Choosing Among Criminal, Civil Judicial, and Administrative Enforcement Options: A Comparative Discussion of United States and Netherlands Experience, available at http://www.jnec.org/2ndvdol1/vzeben.htm (last visited April 1, 2004) [hereinafter Choosing].

45 Compare the statutory penalty criteria of the U. S. Clean Water Act, which enumerates five factors plus “such other matters as justice may require,” CWA 33 U.S.C. §1318(d) and the criteria of the Toxic Substances Control Act, which enumerates four factors relating to the violation and an additional four factors relating to the violator along with “such other matters as justice may require.” Environmental agencies may elect to publish detailed penalty policies. For general information about the EPA’s penalty policies, see EPA, CIVIL PENALTY POLICIES, available at http://cfpub.epa.gov/compliance/resources/policies/civilpenalty (last visited April 9, 2004). For an example of policies at the state level, see STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION, CIVIL PENALTY POLICIES, available at http://dep.state.ct.us/efp/policies/civpenpol.pdf (last visited April 9, 2004). Enforcement agencies also could be legislatively required to publish more detailed penalty policies or schedules of typical penalties, and there could also be requirements for publication of all penalty cases in some systematic way.

46 See supra note 42 (discussing role of economic benefit in U.S. environmental penalty law and policies and the EPA computer model to calculate economic benefit). For more information on recapturing economic benefits see David B. Spence, The Shadow of the Rational Polluter: Rethinking the Role of Rational Actor Models in Environmental Law, 89 Cal.L.Rev. 917, 937 (2001) (stating that EPA’s penalty policies are intended to represent the economic benefit of noncompliance, but some courts hesitate to apply these penalty policies and “the application of civil penalty policy...by administrative law judges is yet more uneven”).

47 Pursuant to section 4 of the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. 2461, as amended by the Debt Collection Improvement Act of 1996, 31 U.S.C. 3701, each U.S. federal agency is required to issue regulations adjusting for inflation the maximum civil monetary penalties that can be imposed pursuant to such agency statutes. The most recent EPA regulations implementing these provisions are codified at 40 C.F.R. Parts 19 and 27. See also Clean Air Act, 42 U.S.C. 7651(j)(c) (2000) (requiring annual adjustments for inflation of penalties in that section).

48 If crimes are categorized, as, e.g. felony and misdemeanor, then it may be necessary to state which categories are applicable to which violations. With the increasing complexity of both environmental and criminal laws, more specification by lawmakers becomes necessary. See generally Martin Harrell, Why Eight Plus Six Means Prison for Environmental Criminals, 14 Tul. Envtl. L. J. 197, n.1, n.35 (2000) (noting that the U. S. Sentencing Guidelines’ offense calculation is similar for environmental felonies and misdemeanors, only differing on the grounds that a misdemeanor conviction would carry a maximum penalty of one year prison term while a felony conviction would carry a prison term greater than one year).

49 E.g., Clean Air Act, 42 U.S.C. § 7413(b) (civil penalties) and (c) (criminal penalties); Clean Water Act, 33 U.S.C. § 1319(d) (civil penalties) and (c) (criminal penalties). For a broad range of information about environmental crimes in U.S. environmental law, see Ronald J. Burns &
50 See Choosing, supra note 44 (noting that Dutch civil courts were available for use by the government enforcement authorities only when the government can identify a cause of action based on private law, such as tort or contract. Therefore, the primary monetary sanction available in civil courts was the recovery of costs expended by the government in response to a negligent or otherwise tortious act by a polluter). For a discussion of the dominant role played by criminal environmental enforcement in the Netherlands, see Gisèle Van Zeben, Enforcement of Environmental Legislation Under Criminal Law by the Public Prosecutions Department in the Netherlands, available at www.inece.org/3rdvol1/pdf/zeben.pdf (last visited April 9, 2004).

51 Of course, in legal systems that include the ultimate sanction of loss of life (capital punishment), certain environmental violations of the most egregious and deliberate sort, with extreme results, might be subject to this ultimate sanction.


55 See Choosing, supra note 44 (noting that Dutch administrative law had no mechanism for imposing penalty sanctions for past environmental violations, but that administrative tools such as license revocation and facility shutdown can provide significant sanctions for past violations).

56 The U. S. pesticides law, for example, has provisions for the termination of licenses to sell or distribute pesticides. See FIFRA, 7 U.S.C. §136d (providing for orders to Stop Sale and Use of pesticides); FIFRA, §136k(a) (providing for seizure and confiscation of pesticides when certain conditions are met) FIFRA §136k(b). The Toxic Substances Control Act provides a mechanism for the seizure and condemnation of chemical substances or products manufactured, processed or sold in violation of the Act. TSCA, 15 U.S.C. § 2616(b).

57 See supra, notes 22 and 23.


60 For example, the U.S. Clear Water Act citizens’ suits may be brought by “any citizen on his own behalf” and “citizen” is defined as “a person or persons having an interest which is or may be adversely affected.” CWA 33 U.S.C. §1365 (a) and (g).

61 For example, U.S. Endangered Species Act citizen suits may be commenced “to enjoin any person . . . alleged to be in violation” ESA, 16 U.S.C. § 1540(g) while the Clean Air Act provision provides that in citizens’ suits, courts have jurisdiction to “enforce such a . . . standard . . and to apply any appropriate civil penalties.” CAA, 42 U.S.C. § 7604 (a).

62 Most of the U.S. environmental statutes’ citizen suits provisions authorize suits against any person alleged to have violated provisions of the Act and against the implementing Agency based on an allegation of failure to perform non-discretionary duties. See, for example, CAA, 42 U.S.C. § 7604(a); RCRA, 42 U.S.C. § 6972(a).


64 See, e.g., Thomas C. Grey, Judicial Review and Legal Pragmatism, 38 Wake Forest L. Rev. 473, 478 (2003) (providing a history of the debate between formalists and progressives, including such figures as Langdell, Llewellyn, Marshall, Cardozo, Holmes, Scalia, Bork and Easterbrook, among many others).

65 See e.g. BENJAMIN CARDozo, THE NATURE OF THE JUDICIAL PROCESS at 16-17, 113-115, 129 (1921) (describing the duty of the judiciary to fill in legislative gaps and create a cohesive body of law); Roger Traynor, statues Revolving in Common-Law Orbits, 17 Cath. U.L. Rev. 401, 402 (1968) (“the hydra-headed problem is how to synchronize the unguided missiles launched by legislatures with a going system of common law”).

66 Defined as “an issue that has been definitively settled by judicial decision.” BLACK’S LAW DICTIONARY (7th ed. 1999).

67 Defined as “the doctrine of precedent, under which it is necessary for a court to follow earlier judicial decisions when the same points arise again in litigation.” BLACK’S LAW DICTIONARY (7th ed. 1999).

68 Even though France, which operates under the code system, does not expressly allow judges to decide a case based on precedent, prior decisions are becoming more persuasive. See THE FRENCH CIVIL CODE ART. 5(c)(2) (French judges “are forbidden, when giving judgment in the cases which are brought before them . . . to decide a case by holding it was governed by a previous decision”). But see John Bell, Comparing Precedent, 82 Cornell L. Rev. 1243, 1248 (1997) (book review)[hereinafter Comparing Precedent] (noting that although precedent is not considered binding in civil law countries, it is still very important in France, where lawyers extensively discuss cases in their briefs).

69 See James L. Oaks, The Judicial Role in Environmental Law, 52 NYU L. Rev. 498, 512 [1977][hereinafter The Judicial Role] (explaining that Congress has given the courts a very significant role in environmental law, and arguing that the court must recognize this duty and act upon it).

70 See Monsanto Co. v. Acting Admin’r, U.S. E.P.A., 564 F.Supp 552 (D.C. Mo. 1983), (reversed by Ruckelshaus v. Monsanto Co., 104 S. Ct. 2862 (1984)) (district court holding the consideration of data submitted by producer in connection with application for pesticide registration pursuant to Federal Insecticide, Fungicide, and Rodenticide Act caused unconstitutional taking of producer’s property; Supreme Court rejected the “takings claim”).

71 This is a basic element of U.S. law. See 5 U.S.C. 702 (providing a person “adversely affected or aggrieved by agency action . . . is entitled to
judicial review thereof’). See also Chevron, U.S.A. Inc. v. NRDC, 467 U.S. 837 (1984) (holding that a court must uphold any reasonable administrative interpretation of a statute unless that is clearly contrary to legislative text or intent).


73 See e.g. The Judicial Role, supra note 69 at 514 (discussing the great service that courts provide to environmental law by clarifying the often hyper-scientific language that agencies use which “makes environmental decisions more comprehensible to those who must ultimately pay the costs of implementation”).

74 While in the short term, judicial identification of limitations to the enforceability of legal requirements may appear to limit or constrain enforcement, it can have the effect of motivating law drafters to establish clearer and more enforceable requirements.

75 See John T. Scholz, Cooperation, Deterrence, and the Ecology of Regulatory Enforcement, 18 LAW & SOC’Y REV. 179 (1984) [hereinafter Cooperation] (discussing the link between the willingness to cooperate by regulated firms and their confidence that the system will address other intragenerics).

76 Obviously, other elements of the society, including those engaged in activities that may contribute to environmental degradation, must also operate in a trustworthy and upright manner if environmental protection programs are to succeed. The prospect for such behavior, however, is inextricably tied to the quality and ethic of the society at large and of the government who wield its collective power.


78 See e.g. Portland Cement Association v. Ruckelshaus, 486 F.2d 375 (D.C. Cir 1973) (court had to balance competing interests of industry groups (who thought that new standards were too stringent) and environmental groups (who thought the standards not stringent enough)); Ethyl Corp. v. EPA, 541 F.2d 1 (D.C. Cir. 1976) (industry in opposition of regulation of lead contents in gasoline, while the environmentalists were in support of regulation).


80 In the U.S. system, constitutional torts are actions brought against governments and their officials and employees for violation of federal constitutional rights. Tens of thousands of these actions are filed each year in federal court. Almost all are brought against state and local governments and their officials and employees pursuant to 42 U.S.C. § 1983. A few such cases are brought against federal officials, relying on the decision in Bivens v. Six Unknown Named Agents, 403 U.S. 388 (1971). For a thorough treatment of constitutional torts, see SHELDON NAHMOD ET AL., CONSTITUTIONAL TORTS (Anderson Pub. Co. 1995).

81 For a discussion of constitutional torts, see supra note 80.

82 See Cooperation, supra note 75.

83 See The Judicial Role, supra note 769 at 507 (explaining that there is often an additional sense of urgency in environmental law, and for that reason it behooves the courts to handle cases quickly).

84 For an understanding of the legal framework for reporting of U.S. judicial decisions, see Banks v. Manchester, 128 U.S. 244, 253-54 (1888) (Supreme Court ruled that judicial decisions were the property of the people and therefore could not be copyrighted); Marci A Hamilton & Clemens G. Kohnen, The Jurisprudence of Information Flow: How the Constitution Constructs the Pathways of Information, 25 CARDOZO L. REV. 267, 289 (2003) (providing historical perspective on the law of reporting court decisions).

85 For an example of such a study, see William P. Adams & Mark Motivans, Using Data from the Federal Justice Statistics Program, 16 FED. SENT. R. 18, 18 (2003). This article discusses the Federal Justice Statistics Program, which obtains data from numerous sources, and then compiles the data to assess trends and provide comprehensive information about the federal criminal justice program Id. Among the groups that provides these data is the Administrative Office of the U.S. Courts. Id.

86 See Comparing Precedent, supra note 68 at 1248 (noting that although precedent is not considered binding in civil law countries, it is still very important in Germany (where almost every decision makes reference to precedent) and France (where lawyers discuss cases extensively in their briefs)).

87 See Otto J. Hetzl, Instilling Legislative Interpretation Skills in the Classroom and the Courtroom, 48 U. PITT. L. REV. 663 n.76 (1987) (suggesting that lack of law school instruction in statutory drafting stems from a lack of faculty expertise in that subject); Lance W. Rook, Laying Down the Law: Canons for Drafting Complex Litigation, 72 OR. L. REV. 663, n.11 (1993) (discussing link between unclear drafting and lack of drafting instruction in law schools); Robert F. Williams, Statutory Law in Legal Education: Still Second Class After All These Years, 35 MERCER L. REV. 803 (1984) (describing the overall lack of statutory drafting classes in law schools around the United States). The Georgetown University Law School, for example, does offer such a class, entitled Legislative Drafting Seminar. Information about this class available at www.law.georgetown.edu/curriculum/tab.courses.cfm?status=Course&courseNumber=312 (last visited April 9, 2004). The George Washington Law School also offers such a class, entitled Legislative Analysis and Drafting, available at http://www.law.gwu.edu/acad/400426.asp (last visited April 4, 2004). One suspects their location in Washington, D.C. to play a role in this curriculum. Despite the rich mix of course offerings at U.S. law schools, this kind of course title rarely appears.

88 For examples of international legislative drafting aids, see International Legislative Drafting Institute, available at www.law.tulane.edu/cdo/index.cfm?id=inst&main=ildi.htm (last visited April 9, 2004) (two week summer program that focuses on legislative drafting that has graduated drafting personnel from 75 jurisdictions worldwide); The World Bank Group, Drafting Techniques, available at www4.worldbank.org/legal/legalreform_dt_ul.html (last visited April 9, 2004) (providing links to different drafting aids, including online drafting resources, drafting references, and information about drafting legislature in countries such as Mongolia, South Africa, Sweden, China, and more); Online Drafting Manuals and Aids, available at www.ili.org/id/manuals.htm (last visited April 9, 2004) (providing legislative drafting manuals for Australia, China, India, the UK, and different jurisdictions within the United States).


92 There has been a concerted effort to organize structures through which judges can network, and learn about, international issues in environmental development while implementing judicial reform projects in Latin America.
law. These groups include The European Training Network (“ETJN”) (homepage at www.etjn.net); The United Nations Environmental Programme (“UNEP”), which has held symposia for judges about the role of law in sustainable development (homepage at www.unep.org, last visited April 9, 2004); and the International Network for Environmental Compliance and Enforcement (“INECE”), which has held meetings for judges world wide (homepage at www.inece.org, last visited April 9, 2004).

See Andrew Allan, A Comparison Between the Water Law Reforms in South Africa and Scotland: Can a Generic National Water Law Model be Developed from These Examples?, 43 Nat. Resources J. 419, 484 (2003) (explaining the South Africa environmental court, which can hear claims on all environmental matters); Brett C. Birdsong, Adjudicating Sustainability: New Zealand's Environment Court, 29 Ecology L.Q. 1 (detailing the specialized, expert court that focuses entirely on resolving environmental issues in New Zealand); Sean D. Murphy, Does the World Need a New International Environmental Court?, 32 Geo. Wash. Int'l L. & Econ. 333, 333 (2000) (discussing proposals for an international environmental court). Within the United States, at the local level, some counties have set up specialized environmental courts. See Westchester Starts Environmental Court, 3/16/2001 N.Y.L.J. 4, (col. 4) (detailing the implementation of a specialized court in Westchester, NY, staffed with experts, that deals solely with civil environmental cases); Larry E. Potter, The Environmental Court of Memphis, Shelby County, Tennessee: The Past, the Present and the Future, 29 Ga. L. Rev. 313, 316 (1995) (describing the specialized environmental court in Memphis).


See The Judicial Role, supra note 69 at 512-13 (describing the role of generalist United States federal judges in adjudicating environmental issues).

For information about the international environmental networks of judges, see supra note 92.

For an overview of the concept of the Real New World Order, as espoused by Anne-Marie Slaughter, see Anne-Marie Slaughter, Global Government Networks, Global Information Agencies, and Disaggregated Democracy, 24 Mich. J. Int'l L. 1041 [hereinafter Global Government] (2003); Anne-Marie Slaughter, A Liberal Theory of International Law, 94 Am. Soc'y Int'l L. Proc. 240 (2000); Anne-Marie Slaughter, The Real New World Order, Foreign Aff., Sept.-Oct. 1997, 183. These papers detail the growth of international networks of government institutions that cover complete disciplines, such as economics or law.


102 INECE’s website explains “INECE is a network of government and non-government enforcement and compliance practitioners from over 100 countries. INECE’s goals are: raising awareness to compliance and enforcement; developing networks for enforcement cooperation; and strengthening capacity to implement and enforce environmental requirements.” http://www.inece.org/. To that end, INECE holds meetings and workshops, creates networks, and drafts rules and papers.


104 See Penny J. White, Judging Judges: Securing Judicial Independence by Use of Judicial Performance Evaluations, 29 Fordham Urb. L.J. 1053, 1064-68 (2002) (describing the various judicial evaluation indices, including bar and media polls, state evaluation systems, and the ABA Guidelines for the Evaluation of Judicial Performance); James Andrew Wynn, Jr., Judging the Judges, 86 Marq. L. Rev. 753, 769 (2003) (describing state (Alaska, Colorado, Utah and Arizona) evaluation systems that use the opinions of litigants, lawyers, police officers, jurors and court personnel to measure each judge’s ability in areas such as “integrity, impartiality, legal knowledge, and administrative skills”). There is also a wealth of law review literature that assesses specific courts based on various factors. See e.g. Laura Krugman Ray, Judging the Justices, 76 Temp. L.Rev. 209, 209 (assessing the Rehnquist Court based on factors such as quality of written opinions, ability to produce coherent jurisprudence and overall deportment). For a collection of articles evaluating the topic of judicial independence and accountability, see 61-Sum Law & Contemp. Probs. 1 (1998) (an issue composed entirely of articles addressing this topic).

105 See, e.g., Daniel A. Farber, Is the Supreme Court Irrelevant?, 81 Minn. L. Rev. 547, 547 (1997) (positing that the United States Supreme Court has shied away from deciding important environmental issues and as a whole has contributed only minimally to the discipline).