I. INTRODUCTION

States universally claim access to authority and control over events and persons. States exercise power within their territories primarily to maintain and promote public order, protect their assets and wealth, and ensure the public safety. The end result of these actions is law. The operational element of law involves combinations invoking cooperation, reciprocity in treatment and behavior, and dispute management and settlement.

The primary challenge that all states face, regardless of the values they prize demands at least a minimal showing of reasonableness in the enforcement of law. But reasonableness is a difficult, complex standard and in some respects a future-oriented goal. Wide-spread abuse, often institutional and government supported, is of course familiar. Our overall approach to regulation, under these conditions, presupposes that human beings will act pursuant to the fundamental notions of collective self-interest and with the aim to achieve common objectives. However, experiments in recent decades with socialism that professed comparable notions and failed indicate little hope for anticipating a collective self-interest in the environment as such.1

1. On the underlying pressures that would seemingly impose themselves upon us and lead to if not compel the adoption of collective interests, compare HAROLD SPROUT & MARGARET SPROUT, TOWARD A POLITICS OF THE PLANET EARTH 14 (1971). "The ecological way of seeing and comprehending envisages international politics as a system of relationships among interdependent earth-related communities that share with one another an increasingly crowded planet that offers finite and exhaustible quantities of basic essentials of human well-being and existence." Id.
The most pressing issues raised in the regulatory process are, foremost, the strategic issues because they involve the legal order and its constitution, its allocation of authority and powers, and the authority the state commands. These concerns take the forefront of all other concerns with state relations and activities of other states whenever they arise in the common arena of global interaction and interdependence. These are not simply isolated claims of sovereignty, but are claims upon each other to exercise exclusive authority and control over their decisions of government; claims associated with respect to jurisdiction and law making.

Thus, the same test should be employed whether the events to be controlled are the environment, the interaction of individuals, regulation, or the application of standards of reasonableness with regard to that law. As stated by McDougal and Schle, "And for all types of controversies the one test that is invariably applied by decision makers is that simple and ubiquitous, but indispensable, standard of what, considering all relevant policies and all variables in context, is reasonable as between the parties." 2

In global processes, in particular, we are concerned with this fundamental constitutive element in state relations. This is the element of a global community because states that deny such a community, even in the loosest form, are adopting law almost exclusively to achieve their own objectives. This adoption would include hegemony over other states and the assimilation of all objectives under power, especially coercion. The problem under scrutiny, i.e., law enforcement, is narrowed down to more effective patterns when the law to be enforced is domestic law. It is, therefore, to our advantage to assimilate domestic law into the international or global law processes and make it an instrument in enforcing law at that level wherever possible.

These notions offer us, at best, tenuous conceptual frameworks and mechanisms in return for following the social order processes or the legal processes that support them. Nevertheless, the enforcement of law among states, as well as within states, has been claimed by individual states. We have become aware that it is through the law applying and law enforcing powers of states, often operating to regulate activities on the territories of those states or upon the citizens and others under their jurisdiction and control, that we are to be assured of effective control over activities on a global scale. It is too early to expect states to enter into treaties or establish institutions that will take over these tasks and, of course, deprive them of their sovereignty.

There is no central organization to which states can turn; no world government in which the enforcement powers are vested. The global

2. MYRES S. MCDougAL ET AL., STUDIES IN WORLD PUBLIC ORDER 778 (1960).
Almond community is assimilating many international environmental law prescriptions and engaging in countless conferences and meetings to make those prescriptions effective. The effectiveness of international environmental law requires the exercise of authority, and even force, to ensure controls commensurate with the prescriptions adopted. Additionally, the force invoked for the purposes of enforcement of social order prescriptions is largely found operative through the instruments of municipal public orders.

Carried to the extreme, the breakdown in nation states will aggravate all of the problems of legal regulation that the global community faces because law and its forcible enforcement go hand in hand. Part of the problem rests in the day to day decisions that must be built upon and decisions that support community policy which underlies the global legal order. Part of this problem lies in the difficulties of promoting collective action in the common interest. Another part rests in the need to strengthen the constitutive order, a constitution making effort, essential to impose the authority and control to make the global legal order effective, and ensure the enforcement of the standards adopted by the global community. In addition to these problems are those that are emerging from the rapidly growing body of scientific and technological knowledge at our disposal. Because so much of this knowledge relates to scientific resources, and because such knowledge affords us a greater and even synergistic reach into these resources, the problem is aggravated by the risks of hostile use of newly uncovered and formidable sources of destruction. These sources of destruction threaten to get out of control, spilling and dispersing destruction on a random basis as part of our supply of lethal weapons.

3. Mancur Olson, to this effect, is cited by Jan Schneider:
   It is not in fact true that the idea that groups will act in their self-interest logically from the premise of rational and self-interested behavior. It does not follow, because the individuals in a group would gain if they achieved their group objective, that they would act to achieve that objective, even if they were all rational and self-interested. Indeed, unless the number of individuals in a group is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, ration, self-interested individuals will not act to achieve their common or group interests. In other words, even if all the individuals in a large group are rational and self-interested, and would gain if, they acted as a group to achieve their common interest, or objective, they will still not voluntarily act to achieve that common or group interest.


4. Cf. RONALD BAILEY, THE TRUE STATE OF THE PLANET (1995). The various authors in this book argue that wealth, technology, and the human being may have an impact on the environment, but they are not all bad for the environment, that there is a stabilizing force leading
Against these perspectives, and the dynamic change in the public order among states, we are compelled to re-examine, almost continuously, the change in the legal order and legal competencies at our disposal to maintain order and the security of order. The demands for security and the demands for increased environmental protection through the enforcement instruments and capabilities of the municipal public orders, leads us to the linkage between the environment and the security of public order.

The peoples of the world have become increasingly aware that security and environment are closely linked. Chopal, Chernobyl, COSMOS 954, and other incidents suggest that even indirect links are beginning to show an impact upon policy. The perspectives of linkage and of security, both increasing in strength, are revealed in the trend which shows that there is a gradual movement towards an unwillingness to tolerate dangerous or harmful conditions in the environment, particularly if these conditions arise from human activities. Because environmental problems and impacts cross transnational boundaries, the tolerances of the citizens or residents of a given state demand regulations of transnational and extraterritorial environmental impacts. Both domestic and global states and their citizens are concerned with harm, interference, and the reach of the environment which extends over their territories.

The decision and policy making processes of governments indicate that decisions which employ the democratic process are most likely to be found in relatively small regional groupings of political units. President Thomas Jefferson was popular in his day for his writings in presupposing the rural community and the rural towns as the key elements in the colonial social order of a democratic state.

Notwithstanding the continuing controversies and the various choices relating to the most desirable means of social control, the control and regulation over the environment at the present time is most likely to be successful if we first support and strengthen the municipal regimes for regulating the means to protect the environment. This support calls for clarified prescription of the regulatory scheme and for prompt, timely, and effective enforcement of its regulations.

We can draw upon these municipal regimes as partners in a larger, global effort and draw upon their extensive experience in the business of regulation. States, even in a loosely formed cooperative enterprise, are likely to be secure in their policies and actions to support or adopt decisions on a municipal level that they can be certain will be implemented to ameliorated equilibria, and that resources can be replaced, even if we do not always replace them in kind. Id.
on a global scale. But even in these efforts at feeling their way in to scientifically sound attempts at regulation, due regard must be exercised as to the decision process itself. We are forced to ask these questions: how far should the decisions be vested in the marketplace, how far should regulation go in minimizing or penalizing the abuse from such decisions affecting the environment, and how far should regulation go in taking over the decisions itself?

The problems that must be reached through a regulatory regime may spill over beyond the environmental damage caused by human beings to the damage caused by nature. We have yet to clarify how far we can regulate against the damage that may arise from armed conflict even if the weapons and attacks are limited to the conventional attacks. In seeking to appraise these conditions our decisions are corrupted further by tendencies of decision and policy makers, who often lack the scientific skills and knowledge about the problems that concern them. This leads all who are concerned to look to a pseudo-science to reveal that damage to the ozone layer, damage to the high seas, and to the environment. The environmental damage can be traced and predicted and thus produce the data necessary for scientific and technological features in the regulatory process. The data, like the claims of the states within the global community, reflect competition for resources, the integrity of the state and its influence and power, and finally, the security of a sound economy. As the Director of Environment at the World Bank recently stated in his foreword to the book by Trolldalen declares:

The book [by Trolldalen on International Environmental Conflict Resolution] also focuses on the fact the nations have developed different ways for managing competition for natural resource utilization as well as for responding to the effects of environmental degradation. Evidence suggests, however, that many such ways are being strained by accelerating competition for increasingly scarce resources and the resulting conflicts that are emerging. Existing resource management policies at many local, national and international levels simply do not meet the demands of rapidly growing populations and sustainable development needs.¹

Some of this dispute shifts to the differences between developed and undeveloped states. The developed states argue in order to maintain their progress in benefiting from global resources some damage to the environment is inevitable; however, most damage is not severely harmful, when balanced against the benefits and when measured over a long period of time. The undeveloped states insist that they must have the right to adopt enterprises that may damage the environment, even severely, in order to catch up with the technological and economic progress of the developed states. But states can proceed jointly with the regulation of human activities involving the commons throughout the world, including all of outer space. The commentaries on this subject are legion.

It is possible that the common objectives of a joint decision process, or a process in which many participate, may be that simply of stability, and order that this, and no more, is the objective. It would frustrate our efforts here to reach an adequate regulatory regime among states to suggest that states collectively must reach the identical or same result common objectives may be sufficient. Compare Justice Jackson in *Lauritzen v. Larsen*:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction.

*Id.* The same formula has been used with regard to radioactive particles arising from the testing of nuclear weapons in the limited test ban treaty.

6. *See* Jon Martin Trolldalén, *International Environmental Conflict Resolution: The Role of the United Nations,* UNITAR (1992). The author reviews the various means for reducing conflict, emphasizing in particular those that involve cooperative communities among the participants rather than defer to the adversarial, and often hostile, tribunals for adjudication or arbitration, or the tireless efforts of mediators or conciliators when they lack authority to prescribe or implement their advice. *Id.*


International or maritime law in such matters as this [(i.e., involving the refusal of the U.S. Supreme Court to permit the application of United States statutory protection under the Jones Act to a Danish seaman injured upon a Danish ship in Havana Harbor)] does not seek uniformity and does not purport to restrict any nation from making and altering its laws to govern its own shipping and territory. However, it aims at stability and order through usages which considerations of comity, reciprocity and long-range interest have developed to define the domain which each nation will claim as its own. Maritime law, like our municipal law, has attempted to avoid or resolve conflicts between competing laws by ascertaining and valuing points of contact between the transactions and the states of governments whose competing laws are involved. The criteria, in general, appear to be arrived at from weighing of the significance of one or more connecting factors between the shipping transaction regulated and the national interest served by the assertion of authority. It would not be candid to claim that our courts have arrived at satisfactory standards or apply those that they profess with perfect consistency. But in dealing with international commerce we cannot be unmindful of the necessity for mutual forbearance if retaliations are to be avoided; nor should we forget that any contact which we hold sufficient to warrant application of our law to a foreign transaction will logically be as strong a warrant for a foreign country to apply its law to an American transaction. 9

9. Lauritzen, 345 U.S. at 582. In the same case, Justice Jackson expounds upon the remarks cited in the text of this article with further clarification, indicating a development not unlike that which we might expect in international environmental law:

Respondent places great stress upon the assertion that petitioner's commerce and contacts with the ports of the United States are frequent and regular, as the basis for applying our statutes to incidents aboard his ships. But the virtue and utility of seaborne commerce lies in its frequent and important contacts with more than one country. If, to serve some immediate interest, the courts of each were to exploit every such contact to the limit of its power, it is not difficult to see that a multiplicity of conflicting and overlapping burdens would blight international carriage by sea. Hence, courts of this and other commercial nations have generally deferred to a non-national or international maritime law of impressive maturity and universality. It has the force of law, not from extraterritorial reach of national laws, nor from abdication of its
The problem raised by controlling the environment necessarily draws our attention to the decision and policy making processes within the states and among them. Myres McDougal and his associates have shown the path is toward shaping, even though incrementally and gradually, the public order of states. Their writings seem to favor positive efforts at improving cooperation. This enterprise in many ways constitutes a major process of learning adopted by governments. Key to these perspectives is the recognition that we do not yet have a world community, adequate in terms of decision making competence, to regulate human activities affecting the environment. Hence, with regard to law and control:

Clearly, systems of public order differ not only in territorial comprehensiveness but also in the completeness of arrangements in terms of the different value processes regulated, and in the internal balance of competence for decision inclusive of the entire area in question and that for decision relating exclusively to component areas within it. To the extent that there is universal international law some prescriptions are inclusive of the globe; other prescriptions recognized self-direction by smaller units. Regional international law has a corresponding separation between region-wide prescriptions and sub-regional units.

sovereign powers by any nation, but from acceptance by common consent of civilized communities of rules designed to foster amicable and workable commercial relations.

Id. at 581-82.

10. McDougal et al., supra note 2, at 14, 15, 16, 961. A German publicist, Dr. Theo Sommer, took issue with the visionary projection of a world governed under global order and under its controls imposed for security and safety. He expressed his views in the vocabulary of a politician:

Even world federalists like Robert Hutchins were forced to admit: “One world in the grip of a tyrant would be worse than many worlds. In a situation where there are many worlds, there is at least a chance of escaping from one into the other.” In the countries of the East, however, there was never the slightest inclination to entrust security to an international organization in which the tune was called by the monopoly-capitalist states. It never crossed Stalin’s mind to sacrifice his lofty ambitions to the idea of One World - unless that world was to be a communist one. . . . However beneficial the peacekeeping missions were in individual cases, during the period of East-West conflict they could not obscure the fact that the world organization had failed in its primary task of ridding the world of the scourge of war. . . . For the time being, the world remains divided in two: there is a zone of peace, democracy, human rights, civil order, and prosperity; and there is a zone of discord, of authoritarian regimes, where human rights are denied, where turbulence reigns, in some cases anarchy. “One world for all” is the long-term aim. Yet it remains to be seen whether a single world state can ever arise from the present world of many states.

Similarly, nation states like the United States distinguish between the inclusiveness of federal authority and the proper domain of the internal states. 

With these perceptual realities before us, our approach is most likely to be enlightened and moved toward the desired cooperative regime if we start by doing what we can with the smaller political units, i.e., with the states throughout the world. Our objectives will be to provide a general approach to the overall objectives, policy and law, and law in terms of principles wherever recourse to the more precisely formulated rules is not possible or not desirable. The overarching objective is that of human dignity:

Our overriding aim is to clarify and aid in the implementation of a universal order of human dignity.... The essential meaning of human dignity as we understand it can be succinctly stated: it refers to a social process in which values are widely and not narrowly shared, and in which private choice, rather than coercion is emphasized as the predominant modality of power. 

The problem is global in nature because harm to the environment necessarily involves harmful impacts that cross transnational borders and entails the great uninhabited areas of the globe referred to as the "global commons." These commons are found on the high seas, in outer space, in the polar regions, and by some in the great deserts. The environmental problems in the areas just discussed are problems that are shared, or are felt, by numerous states.

The regulation of human activities that involve harmful impacts upon the environment raises major questions concerning the political will to take the steps and provide the funds to minimize environmental damage that is most likely to result in harm to human beings and the ecologies they seek to preserve. Resolution through regulation calls for shaping the decision and policy processes to channel human activities, to define those that are harmful, to provide guideposts and criteria relating to permissible or appropriate conduct where the environment is involved, and so on.

11. Id.
12. Id.
14. Id.
15. Id.
Although we have had substantial experience in the regulatory process involving countless human activities, the process for protecting the environment can be reduced to fundamental and workable principles for the environment once singled out. The extensive amount of law and regulatory efforts connected with regulation, whether it takes place domestically within states or among them, does not need the repetition of the countless articles on this subject. A key element of this effort is to clarify who the participants are in affecting and regulating the activities involving the environment, what their perspectives and objectives might be, and what options might be available to reach an optimum process both for conserving and protecting the environment. Human activities cannot escape their link to environmental surroundings.

The outcome of such a process inevitably involves the inherent element found in state interaction, to wit, the continuing dynamic flow of claims and counterclaims of states or their citizens. This process may ultimately converge toward the shared global or international law, aimed specifically at protecting the environment, which will be marked by variations in the approaches taken. Hence, caution should be exercised with regard to our expectations of the evolution of international law from municipal legislative and regulatory practice.

The principles may also be identified as criteria affording standards for judging action to be taken, or for judging action that has been taken and is in issue between the claimants in a law suit or other fora involving the settlement of disputes. This process of claims extends our appraisals beyond those that look to the undertakings themselves. The effectiveness of law is our key to the usefulness of law and its value as an instrument of the social order. The effectiveness of law, or of the decisions that amount to law, is seen in part in the effectiveness of the enforcement of law. However, we can go a little further. It is also seen in the effectiveness of the law on state conduct, even where enforcement or coercion are not involved to ensure that effectiveness.

II. CRITERIA

To establish the terms of reference of regulation, criteria are examined in this article, which are formulated as standards or guidelines for regulating activities that may affect the environment, or for distinguishing activities that materially impair the environment from the activities whose impact is *de minimis*. The criteria proposed below are provided on a tentative basis to provide an opportunity for criticism and constructive development of a regulatory scheme. They are open to
debate, clarification, or comment to arguments that would modify, refine, or reject them.

The criteria proposed here are synonymous with guidelines. The terms are ambiguous and interchangeable. However, our long experience with principles, maxims of action, standards, and so on, suggest that we would need all the paraphernalia of the decision making apparatus to make modern decisions workable in the larger context of interaction among states and their institutions. Without that apparatus, criteria treated as principles are likely to lack the necessary operational and applicational precision of decision makers of states to make them effective or enforceable. As guidelines, the criteria offer us an opportunity to gain recognition and a gradual coherent acceptance of objectives that with continuing convergence can lead to customary activities, custom, and customary international law itself.

Familiar uses of criteria includes the “just war doctrine,” modernized by former Secretary of Defense Weinberger to provide moral content to the decisions to commit United States military forces abroad. Then with further refinements, in doctrinal form, by former Secretary of State Shultz, to preempt, if necessary, major threats to the United States and its “interests.” Similarly, we can turn to analogies made by Sun Tzu in his “art of war,” which articulates principles in the form of “estimates,” “strategies,” and the like. Additionally, the United States-Soviet Accords

17. Id.
18. Id.
19. SUN Tzu, THE ART OF WAR (S.B. Griffith trans., 1963). This text includes the general principles and the “gloss” or commentary added by other military commanders of ancient China. Sun Tzu also provides us with a large number of principles and standards dealing with the specific activities involving warfare. As with Weinberger, he infuses the moral dimension, the major dimension of morale and sustaining power and will of the people, into the principles. The “just war” thinking and doctrine that was adopted by Weinberger and Sun Tzu are attempts to attain control over situations threatening public order by resort to force “as a last resort.” Id. This argument presupposes that the military commander is able to make such judgments, especially during the heat of battle. Eckhardt, in the Sabrosky-Sloane text takes this point of view by illustrating the application of principles within the context of military force. As a result the author provides us with how, analogously, we would invoke principles to protect the environment:

[When a country breaches international law by aggression which violates the sovereign rights of another state, the injured state is justified, as a last resort, in using force for self protection. In seeking permission “to kill people and to break things,” it will use the internationally recognized standard of “self defense.” It will attempt to act collectively within the United Nations or within a regional framework, although on rare occasions it may act unilaterally. The aims of the aggrieved state will be stated domestically with specificity. Execution of this “political warrant to wage war” will
of 1961\textsuperscript{20} and 1962\textsuperscript{21} to control nuclear weapons show the use of general principles, modified in subsequent drafts to provide more specific controls. The Accords provide valuable examples of the approach that is taken here with regard to the environment, in which general guidelines, criteria, and principles are reduced to very specific provisions with regard to military forces and weapons.\textsuperscript{22}

III. DRAFT GUIDELINES

A.

States shall enact and enforce legislation to protect their own environment, regulate activities, and prevent harm or impacts from their

be by professionals who are guided by internationally recognized rules. The goal of using violence is preservation of the state and a return to a peaceful international order.

\textsc{sabrosky} \& \textsc{sloan}, \textit{supra} note 16, at 4.

20. For a useful assessment with the Accords in the appendix, see Andrew Martin, \textit{Legal Aspects of Disarmament}, BRIT. INST. INT'L. \& COMP. L. (Supp. 7) (1963). Various innovations were attempted in the accords, including the use of stages to achieve the overall objectives, the adoption of general or abstract principles, and the development of the precise rules or standards to be adopted under the guidance of the general principles. It should be noted, however, that the U.S.-Soviet Accords tend to unite as one the principles and the objectives sought by the application of those principles. From the Joint Statement of the 1961 Accords, the objectives are expressed as follows:

The United States and the U.S.S.R. have agreed to recommend the following principles as the basis for future multilateral negotiations on disarmament and to call upon other states to cooperate in reaching early agreement on general and complete disarmament in a peaceful world in accordance with these principles.

1. The goal of negotiations is to achieve agreement on a program which will ensure that (a) disarmament is general and complete and war is no longer an instrument for settling international problems, and (b) such disarmament is accompanied by the establishment of reliable procedures for the peaceful settlement of disputes and effective arrangements for the maintenance of peace in accordance with the principles of the United Nations Charter.

The principles include:

5. All measures of general and complete disarmament should be balanced so that at no stage of the implementation of the treaty could any state or group of states gain military advantage and that security is ensured equally for all.

6. [A]ll disarmament measures should be implemented from beginning to end under such strict and effective international control as would provide firm assurance that all parties are honoring their obligations.

7. Progress in disarmament should be accompanied by measures to strengthen institutions for maintaining peace and the settlement of international disputes by peaceful means. [An International peace force is then proposed to be armed commensurate with the hostilities that might be faced].

\textit{Id.} This Joint Statement provides a basis for the proposal on environment and indicates how such proposals and criteria were attempted through a disarmament, without success, in the past. Therefore, much depends upon the global community and its support. \textit{Id.}

21. \textit{Id.}

22. \textit{Id.}
activities upon the environment affecting other states. Such legislation shall extend to the environment of the territories under their jurisdiction or control, and to all activities that might impair or harm those environments or the environments of other states, or the common environments of outer space, the high seas, the polar regions, and the global deserts.

COMMENT: This standard can, by way of consent among states, be projected to regulate activities that are extraterritorial in nature. The major premise is that environmental problems tend to be peripatetic. States do not and cannot confine the problems or the harm they create to that associated directly with their own territories, or that directly overhead. Experience with implementing standards under municipal systems as directed by the International Labor Organizations suggests that the laws of nation states and their regulatory practice may differ. However, the primary expectation of harmonizing laws is to reach common objectives of cooperation, prevention of harm, protection, and conservation.

With this in mind, it is possible to build on this and subsequent criteria to provide the guidelines to those who would look to a comprehensive control over all human activities that might harm the environment. This control includes the environment of individual states as well as the environment of others, including that of the global commons. The guidelines are expressed in concepts that include territorial and extraterritorial authority. The United States, for example, has adopted environmentally protective legislation relating to the acts of the Federal agencies abroad, including not only those occurring on the territories, but also those in locales such as the military bases located in other states.

But while this criteria does not define legal harm to the environment. General principles of harm, accountability, responsibility, and liability are part of our jurisprudence. They can be tapped in the customary procedures. However, a case by case analysis can be problematic in the development of a regulatory scheme. Nonetheless, the term harm can be defined by the relevant participants involved with environmental impacts from the general practice and principles adopted among states in the global community. The criteria can include a definition of harm, or at least the harm that is expected to fall under the control of the regulatory regime.

Furthermore, the criteria does not define the term environment. An appropriate definition either for strengthened guidelines or for precise rules of regulation can be taken from existing municipal legislation. Conversely it can be formulated by choosing the relevant elements of the municipal legislation of differing states. Also, a general definition covering environment in a comprehensive way can be adopted, accompanied in the legislative provision by specific environmental
features. In the United States there are separate, but associated, provisions of protection for clean water, clean air, radioactive, and other dangerous materials.\textsuperscript{23}

The proposal is tenuous in one major sense: states in their real world interactions may refuse to enact legislation even to cover their own territories, let alone activities in foreign territories. States have the additional and essential problem of enforcement. Where activities are within their jurisdiction or control they can legislate and enforce that legislation. The problem grows more complex if their assertion of control overlaps with that of other states. This may be resolved by treaty or international agreement, as in the drug trade, or by an international organization, as in the powers delegated to the World Trade Organization made part of the recent General Agreement on Tariffs and Trade. Possibilities for intensifying the regulatory process might include the adoption of an international process for filing reports in the nature of environmental protection and control impact statements. This adoption would follow the practice of states using such impact statements in a variety of contexts.

B.

States or their citizens that engage in activities that harm or are likely to harm the environment of other states or cause harm to the citizens of other states by causing damage to the environment shall be responsible for restoring those harmed to the status quo ante by compensation, or other forms of acceptable relief if it is not possible to restore them to the status quo ante, and also for taking such corrective steps as are required under community policies and standards.

Harm to the environment includes harm to the environment affecting other states or their citizens as well as harm to the common environment that is shared among states or not within the jurisdiction or control of any of them.

COMMENT: This criterion may be made effective by adopting the general principles of state responsibility drafted by the International Law Commission.\textsuperscript{24} Enforcement to ensure the assumption of responsibility, and of accountability and liability among states for the harm they have caused is perhaps too difficult a problem to be resolved at this time. It would require states to adhere to the decisions or judgment of independent tribunals or panels of experts or to fact-finding entities that would establish


\textsuperscript{24} See generally IAN BROWNLIE, STATE RESPONSIBILITY (1983). The draft principles of the International Law Commission are included in the Annex.
their responsibility, and then establish the restoration, compensation, and the like to be imposed. Accordingly, this criterion can be given clarification by a form of gloss. It can include in its comments, or as a separate annex to the entire set of provisions, the principles of state responsibility as adopted in the International Law Commission, or a set of principles specifically designed for the purposes of the environmental standards.

C.

In order to establish comprehensive and flexible controls against harm to the environment, states shall establish an Environmental Control Agency, vested with sufficient powers, authority, and control to ensure protection to the environment and to undertake prevention of activities that are likely to cause harm. The Agency shall adopt and provide for policies, programs, and their implementation to reduce or eliminate harm that might affect the environment.

COMMENT: The adoption and creation of an international organization such as the Agency proposed here will require an exercise of the will of states to jointly manage and control activities relating to the environment. This criterion is, therefore, recommendatory in nature or prospective in the sense that the timing for such an organization and its controls may need to await the development of trust and confidence among states to act jointly. They will also need to have at their disposal the competencies among personnel in the organization that will make the institution acceptable to states at large. The assumption is that a comprehensive and fully satisfactory system of regulation and control is not likely to be attained unless there is an institutional arrangement to provide the monitoring, fact-finding, investigatory, data exchange, reporting, and perhaps even the dispute settlement functions.

The adoption of institutions to regulate activities affecting the environment will be slow because states are reluctant to adhere to decisions imposed by others, including international organizations of which they are a member. There is reluctance even where other states are subject to the same decisions, as the demands on France to cease nuclear weapons testing have recently shown. Even though there were great pressures following the second World War to presuppose strong powers in the Security Council of the United Nations, the United Nations Charter would not have been adopted unless the major states retained the right to veto resolutions or decisions of the Council that were contrary to their own policies. We are compelled to make progress in such matters by moving in gradual steps, i.e., as the global community itself gives signs of a more pervasive spirit of cooperation.
Experience of various agencies suggest that the delegation of the sovereignty of specific functions such as those relating to the environment can occur on a step-wise basis. For example, the International Atomic Energy Agency discovered in the course of developing nuclear power and energy that it was regulating against the development of design grade nuclear materials.25 Also, the anticipated future experience of agencies such as the World Trade Organization is now part of the General Agreement on Tariffs and Trade.26

Experience also reveals that while states may be reluctant to put into words their plans for future endeavors, they are likely to be persuaded to act consistently with community standards when these standards appear in the decisions or arguments of tribunals, such as the international courts, and others who are under implicit responsibilities or obligations. However, states will be aware that if the international organization can function, notwithstanding their rejection of a program or decision, the organization may impose upon their claims of exclusive control under their demands for sovereignty. Hence, environmental controls at this level may be a matter of compromises combined with the effectiveness of undertakings among states.

D.

States in fulfilling their responsibilities under these criteria shall adopt the following principles:

(a) the overriding principle of state cooperation applicable to exchange of assistance, technical information, and know-how, and support of all kinds to ensure through joint efforts the minimization of environmental harm;

(b) the principle of disclosure, with the responsibility of reporting on a timely basis the presence of dangerous materials and dangerous activities that are likely to cause harm or lead to the impairment of the environment, or cause harm to others lawfully using the global commons, including the high seas and outer space;

(c) the principle of reciprocal assistance and of reciprocally supportive interaction with others pursuant to the duty to enforce municipal environmental laws and apprehend those who have violated such laws;


(d) the principle of supportive judicial assistance [relating to the enforcement of law, the judicial proceedings relating to the enforcement of law; the transfer of evidence; testimony of witnesses; and so on] to provide for assistance in connection with judicial proceedings or adjudications concerned with the enforcement of each other's environmental laws or in connection with other dispute settlement activities adopted by the disputants to resolve disagreements, disputes, or issues involving the environment;

(e) the principle of extradition and return, i.e., extradition or the willingness to impose under their own legislation the appropriate prosecution and penalty against wrongdoers involved in willful damage to the environment.

COMMENT: These principles will require further elaboration in a separate article which would elaborate the general principle of cooperation among the participants. Some assumptions have been made. For example, that states will be willing to provide each other with assistance and cooperation as required in this principle, that the criminal provisions for violating environmental laws will be enacted and enforced again with the assistance of others, that the participants will abide by principles relating to the prompt reporting and exchange of data concerning harmful substances or activities, including those caused by nature as well as by people in space, and that full assistance will be provided for those involved in judicial proceedings or proceedings before other tribunals or in other fora.

E.

Disputes, disagreements, and the like shall be resolved in peaceful ways including, but not limited to, adjudication and the alternatives for adjudication with a view to the restoration of trust and confidence among the parties with regard to the claims they have made regarding the environment, harm to the environment, or promoting the environmental conditions.

COMMENT: This constitutes a further extension of the principle of cooperation, and recommends the adoption of alternative dispute settlement measures. These, including mediation, conciliation, fact finding, monitoring, good offices, and the use of friendly interventions. This differs from adjudication and arbitration because they are not adversarial or confrontational in nature and because they rest upon the principle of cooperation. A provision similar to this has been adopted in Article 33 of the United Nations Charter promoting cooperation in general
among states with regard to the objectives of the United Nations.\textsuperscript{27} States whose activities involve the environment, and who are engaged in joint ventures or enterprise with other states, or who have incurred responsibility and liability for harmful acts affecting the environment undertake to restore the trust and confidence amongst themselves. The common objective is to promote the environment through cooperative attitudes. To promote this principle states should be encouraged to enter into agreements for alternative dispute resolution which will encourage them to continue their joint enterprise without delay and remain unaffected by the delays of resolving disputes.

F.

Activities and materials including natural phenomena causing, likely to cause, or about to cause harm to the environment shall be reported on a timely basis to other states and to the public at large.

COMMENT: This principle supports and adds strength to the principle of disclosure stated earlier. Reporting can be established through the Secretary-General of the United Nations, or through a separate authority. It is evident that this provision calls for a continuous monitoring action. Those involved in activities affecting the environment adversely will report on whether their materials are harmful or are materials that may, upon initial use, appear to be harmful, but that prove not to be harmful during their use. Such reports are to extend to activities, or failure to act, that have led to harm to the environment.

G.

Undertakings pursued under these criteria and principles shall be performed in good faith by the participants with a view toward ensuring that the environment will serve the global community at large, and that activities involving the environment, including those activities that subsequently, even if unforeseeably affecting the environment, will be conducted with the utmost due care and conducted to ensure protection and conservation of resources.

COMMENT: At an early stage the participants are likely to enter into treaties and international agreements incorporating principles such as those indicated in the above list. Those proposed here are not likely to be adopted in the form in which they are drafted because states are unwilling to reject their sovereign claims to the actions that are required of them. This provision puts a duty of foreseeability upon those involved, and

\textsuperscript{27} U.N. CHARTER art. 33.
includes the standard of due care and utmost good faith in meeting obligations.

H.

If any state or any individual under the jurisdiction or control of a state has reason to believe that its activities are likely, whether imminent or not, to cause harm to the environment, it shall immediately notify the Environmental Control Agency and the appropriate offices of governments.

COMMENT: Notification of imminent harm, or harm in general, is important in some aspects of control over activities. Those about to dispose of nuclear waste might be among those whose activities are likely, even on an imminent basis, to endanger others through their impacts on the environment. Those engaged in the use of explosive devices are likely to find themselves in situations where the environment, even if localized, may be endangered. Notification should be to those who can provide as wide a coverage and on as urgent a basis as possible.

I.

Those involved in armed combat shall take precautions of the utmost due care to ensure that their military activities, weapons, exercises, and the threats of their weapons shall avoid the imposition of harm to the environment, and to assume responsibilities as soon as feasible should harm occur to correct the harm that has been caused, through restoration to the status quo ante, or by assistance including funding to others who undertake such restoration.

COMMENT: This provision goes beyond the usual war provision law that tends to exempt the belligerents from responsibilities to the global social order. Environmental harm caused in, or during, armed conflict of any kind is presently regulated to ensure no harm or minimal harm to the environment. The Geneva Protocols of 1977 have a provision that prohibits harm to the environment during armed conflict.\(^\text{28}\) The states that are party to the Environmental Modification Techniques Convention undertake as their responsibility or obligation that environmental modification techniques shall not be used in a hostile manner to cause harm to another state that is party to the Convention. Similarly, there are

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protections in other agreements such as the Outer Space Treaty of 1967\(^{29}\) and the Moon Treaty.\(^{30}\) The next step in protections under international law calls for treaties and agreements that extend, as these proposals do, into cleaning up the damage caused by the use of weapons or engagement in war.\(^{31}\) The provision considered here can be supplemented by provisions relating to the research, testing, and development of weapons, either old or new, and by provisions relating to military exercises, and so on. Such agreements are not likely to win the support of many states, or in practice, to ensure the protection of the environment from the obvious impact of warfare.

The typical claim is that of necessity. States act through necessity to preserve their public order or to defend themselves, and states that have caused damage by such actions are excused from the harm they have caused. If these stumbling blocks can be overcome, then international law will advance to ban warfare that has been leaning toward destruction and attacks that are indiscriminate, or subject to increased use of weapons of mass destruction, and toward the growing tolerance as to indiscriminate

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31. The destruction to the environment and, in particular, the atmosphere caused by the bombing of Nagasaki and Hiroshima, and by the hydrogen bomb testing of the major states is not fully known. All wars tend to carry destructive force that has some impact on the environment. During World War II, according to the United States Strategic Bombing Survey, a major attack on Tokyo led to more deaths in a six-hour period than those that occurred in similar period at any time in the recorded history of warfare:

Gerald Curtis LeMay's subsequent mission report emphasized that the object of the attack "was not to bomb indiscriminately civilian populations." But the destruction that first windy night was in fact indiscriminate to the point of atrocity. nearly seventeen square miles of the Japanese capital burned to the ground with at least a hundred thousand people killed and hundreds of thousands injured.


Though not providing us the authority for his remarks, the author mentions the total bombing destruction of sixty three Japanese cities, and a million Japanese civilian deaths. Hiroshima and Nagasaki survived to become atom bomb targets because they had not been on the earlier target lists. General LeMay is cited as recognizing that if the United States had lost the war, he "would have been tried as a war criminal." This remark of course must be taken in the proper context: political leaders, military commanders, and countless others would probably have been tried by Japan and Germany or promptly executed according to their military practice of the time. And many would have been executed for crimes or subjected to purported war crimes that might not provide the due process protections we expect with regard to prosecution of crimes. Several high level leaders of the Western states insisted upon summary execution of the Nazi war criminals. *Id.*
weapons and attacks. Tolerances of this kind liberalize use of force in peacetime, because they undermine public support by revealing an absence of support from a public too cynical to believe that war, once started, can be effectively humanized, or guided by the still emerging criteria of an international humanitarian law.

To gain public support states can refine their official statements by narrating their meaning. Lawyers are frequently taught that in trial practice one of their main tasks is to prepare and tell a story that is more convincing than the story told by their adversaries.

As the recent atom bomb debates indicate, the story of hostile adversaries will be a story that they share with regard to: threat, deterrence, and preemption in certain attacks, i.e., when the attacking state decides that its vital interests or survival is involved. Rhodes advises that a doctrine of preemption had become part of the United States “story” with regard to war excusing acts that were taken at Hiroshima and Nagasaki. These were identified as legitimate during war time because such strikes did not exceed those achieved with conventional napalm weapons. Also, because the strikes were taken to destroy an intolerable war capability of the adversary, reaching for “strategic” purposes, even into major strikes at the military industrial support couched in the civilian population. Furthermore, the doctrine of preemption was adopted where an adversary’s threatening conduct is clearly established by our intelligence to enable us to infer the beginning of a first strike, entitling an attack to disarm the adversary to deny that strike. Guidance and control over the stories adopted and continuously refined among nations may be a possible means for ensuring relations that make up the content of that story falling into place and shaping future decisions and policies.

IV. CONCLUSION

Because guidelines both reflect past state practice and are aimed at future practice, we can expect that other guidelines may be added as the program of municipal regulation and international regulation continue to interact. However, there are limits upon what the United States can achieve with its own resources, or even when it attempts coalitions with other states. It is a truism that the United States should not commit funds or assume undertakings unless, in doing so, it foresees that it can modify, reverse, or block environmental harm or damage, or unless it is compelled

32. Id.
33. Id.
34. Id.
to react to crises or emergencies that may affect it severely. Nevertheless, if it intends to commit funds, it should monitor the relation of the environmental objectives and the funds committed, including those funded by the United States and those by others.

Similarly, the United States should not assume a disproportionate share of the financial obligations, especially in light of the increased stake of other major economies throughout the world. Finally, the United States should inform and secure the support of the American people of such actions, and provide them with a convincing picture that the most appropriate measures have been taken to prevent harmful impacts as well restoring the situation as close as possible to that which had existed before the damage had occurred.

To some extent, these policies reflect the need to fund environmental protections and to maintain the regulatory apparatus for controls through fees or licenses charged to those whose activities will affect the environment. This approach would then strengthen the element of the user-pays principle. The costs may be high, but where unmanageable costs for protecting the environment run hand-in-glove with the program to be undertaken, it would then be obvious that this would need to be taken into account before the venture proceeds and the activity would need to be reviewed as to whether it is a desirable program.