CHAPTER 9: TRADE IN HAZARDOUS WASTES AND TECHNOLOGIES

Any discussion of hazardous waste disposal in international law would have to begin with the Basel Convention. This Convention is reprinted in the Appendix to this Anthology. The first essay in this Chapter is a helpful guide to the Basel Convention.

The most important deficiency of the Basel Convention is its failure to impose substantive liability and enforcement mechanisms. This deficiency and its implications are discussed in the second essay. The question whether the Basel Convention can be made to work for developing nations is explored in the third essay. The Chapter ends with two opposing views regarding state liability for the exportation of hazardous technology.

A. Transboundary Shipments of Hazardous Wastes

1. The Basel Convention Regime

In response to the growing worldwide awareness of the problem of international traffic in hazardous wastes, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (the "Basel Convention"), elaborated under the auspices of the United Nations Environment Programme (UNEP), was adopted in 1989. This treaty, which entered into force on 5 May 1992, constitutes the first attempt at comprehensive regulation of international transport and disposal of hazardous wastes on a global level.

Certain aspects of environmental pollution by hazardous wastes are addressed by existing treaty regimes. In accordance with the sectoral approach to environmental protection, still predominant in international environmental law, these regimes aim for separate regulation of the protection of each sphere of the environment against pollution: the air, the marine environment, and continental waters. In the field of protection of the marine environment against pollution, international law has been codified by the 1982 United Nations Convention on the Law of the Sea (UNCLOS). Treaties are in place, on both global and regional levels, to restrict and control marine pollution by waste substances. The regimes regulating the protection of international watercourses and the control of transboundary air pollution also have some relevance for the issue. The quality of the different regimes varies significantly. Moreover, they do not provide a harmonious regulation of the problem of transboundary movements and disposal of hazardous wastes.

The issue of international traffic in hazardous wastes, in fact, shows the limitations of the sectoral approach to environmental protection. The different spheres of the environment are closely linked: detrimental effects of international waste traffic can affect each one of them, possibly passing from one into another. A comprehensive regulatory system, extending to every sphere, and including control of the source of the detrimental effects, is therefore necessary.

Since transboundary movements of hazardous wastes are not limited to certain regions, but often take place on a worldwide scale, the concept of regulation exclusively on a regional level, as adopted for the protection of marine and coastal areas and the pollution from land-based sources, cannot provide a satisfactory solution of the problem. There remains the possibility of a global umbrella treaty under which regional agreements, taking into account specific regional situations, could be concluded. The usefulness of this option is limited, however, due to the inherent danger of differing regional standards facilitating waste exports to regions where the regulations are least strict.

A regime for the control of transboundary movements of hazardous wastes must therefore be comprehensive and global, establishing uniform international obligations and standards. If the possibility of the conclusion of regional treaties under the global regime is provided, sufficiently high and detailed standards should be set, from which the regional treaties should not be allowed to derogate. This is, in principle, the approach taken by the Basel Convention.

The Basel negotiations proved to be extremely difficult and contentious. This was due mainly to the great political sensitivity of the issue, which intensified the difficulty of accommodating the aims of the States with widely diverging situations and interests. During the mid-1980s the political discussion of the issue of international transports of hazardous wastes in general, and that of illegal transboundary traffic in such wastes in particular, had gathered momentum, reaching its culmination with widely publicized media reports on incidents involving the illegal dumping of toxic wastes from industrialized nations in the Third World countries in 1988. These incidents prompted an international outcry against such practices and led to increasing awareness of the issue on the national and international levels. The growing interest in the issue is reflected in the number of States represented at the sessions of the Working Group, which increased from 24 at the organizational meeting to almost 80 at the last session, and in a similar increase in the number of organizations participating in the proceedings as observers.
Due to these developments, the focus of public opinion during the negotiation process on the Basel Convention was almost exclusively on the "North-South" aspect of the problem: the threat posed to the environment of ill-equipped Third World States by the illegal import of hazardous wastes from industrialized nations. The fact that the vast majority of international waste transport takes place between industrialized nations was widely ignored. The elaboration of the Basel Convention was seen by many primarily as an opportunity to put a stop to illegal international waste traffic from North to South. A substantial number of developing countries, led by member States of the Organization of African Unity (OAU), regarded the deliberations as an opportunity to demonstrate their solidarity in refusing to tolerate the use of their territories as dumping grounds for toxic wastes from the rich States of the industrialized world. Their demand for a complete ban on all transboundary movements of hazardous wastes worldwide was strongly supported by a number of environmental non-governmental organizations. On the other hand, many industrialized States, focusing on the option of controlled waste traffic, were not prepared to agree with proposed measures which would put too many restrictions on the trade in wastes and recyclable materials among industrialized States. Disagreement between developed and developing countries also arose on other key issues.

At the opening of the Basel Conference, a statement was made on behalf of the President of Mali, then Chairman of the OAU, to the effect that the African States were not prepared to sign the Convention, which they considered too weak, and that they would decide on their final position after further discussions within the framework of the OAU. A number of other States, including important industrialized States such as the Federal Republic of Germany, the United States, the United Kingdom, and Japan, also deferred their decision on signature, for exactly the opposite reason. This meant in effect that there was considerable danger of the Basel Convention remaining an ineffective declaration of intentions, should all these States ultimately decide against becoming parties to it. It also shows how precarious the agreed compromise was. A number of the Convention's provisions, particularly in the areas which were subject to substantive disagreement during the negotiation process, are the result of last-minute compromise. This accounts for the complexity of the wording or the lack of precision in some provisions.

a. Structure and Characteristics of the Basel Convention

The regime established by the Basel Convention is based on the following principles: the generation of hazardous wastes must be reduced to a minimum; where it is unavoidable, the wastes must be disposed of as close as possible to the source of generation. In a number of instances, export of hazardous wastes is prohibited absolutely: hazardous wastes may not be exported to Antarctica, or to States which are not parties to either the Basel Convention or a treaty establishing equivalent standards, or to parties which have banned all imports of such wastes. In all other cases, transboundary waste movements must conform to the provisions of the Convention: they are permissible only if they present the best solution from an environmental viewpoint, if the principles of environmentally sound management and disposal are observed, and if they take place in conformity with the regulatory system established by the Convention.

Due to disagreement on some points during the negotiation process, these principles are not followed consistently throughout the Convention; they have been weakened or modified in some instances.

b. General Obligations

(1) Minimization of generation and transboundary movement of hazardous wastes

Parties are required to take the appropriate measures to ensure the reduction of the generation of hazardous wastes to a minimum. This obligation is, however, not absolute; sociological, technological, and economic aspects may be taken into account (Article 4, Paragraph 2(a)). Parties must cooperate in the development and implementation of new low-waste technologies with a view to eliminating, as far as practicable, the generation of hazardous wastes (Article 10, Paragraph 2(c)). Each party must endeavor to ensure the availability of disposal facilities located within it; exports have to be minimized (Article 4, Paragraphs 2(b) and (d)). Hazardous wastes may be exported only if the State of export does not have the technical capacity and facilities to dispose of them in an environmentally sound manner (Article 4, Paragraph 9(a)); or if the wastes are required as raw material in the State of import (Article 4, Paragraph 9(b)); or in accordance with additional criteria, to be determined by the States parties (Article 4, Paragraph 9(c)). Article 4, Paragraph 13 obliges parties to review periodically the possibilities of reducing the amount and/or the hazard potential of hazardous wastes which are exported, especially to developing countries.

(2) Environmentally sound management of hazardous wastes

Parties must require that hazardous wastes subject to transboundary movement are managed in an environmentally sound manner, whatever the place of their disposal (Article 4, Paragraph 8); the Convention thus incorporates the principle of non-discrimination. The obligation to ensure environmentally sound management of hazardous wastes is allocated primarily to the generating State; it may not be transferred to the States of import or
transit (Article 4, Paragraph 10). The State of generation may not allow the export of hazardous wastes if it has reason to believe that their environmentally sound management and disposal would not be guaranteed in the prospective State of import (Article 4, Paragraph 2(e)). Likewise, a State has to prohibit the import of hazardous wastes into its territory if it has reason to believe that they would not be managed in an environmentally sound manner (Article 4, Paragraph 2(g)).

The crucial notion of "environmentally sound management" is defined only in very general terms (Article 2, Paragraphs 2 and 8). For the purposes of the Basel Convention, it means "taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes." More specific definition is delegated to the conference of the parties at its first meeting (Article 4, Paragraphs 2(e) and 8).

A number of provisions, although not elaborating the definition, give some guidance for the management of hazardous wastes in accordance with the Convention's aims. Each party is required to establish an authorization system for persons handling hazardous wastes (Article 4, Paragraph 7(a)), and to ensure that every hazardous waste movement is accompanied from start to finish by a movement document containing the information specified in Annex V(B), to be signed by each person who takes charge of the wastes (Article 4, Paragraph 7(c); Article 6, Paragraph 9). Parties must also establish requirements for packaging, labeling, and transport in conformity with relevant international rules, standards, and practices (Article 4, Paragraph 7(b)). Although recognized international standards in these fields exist, and work is currently carried out in various international bodies to incorporate the requirements of the Basel Convention into existing legal instruments, a sufficiently detailed and comprehensive definition of the term "environmentally sound management" is needed to avoid a major loophole in the Basel Convention. Resolution 8, adopted by the Basel Conference, calls for the establishment of a technical working group to elaborate, for submission to the first conference of the parties, draft technical guidelines for the environmentally sound management of hazardous wastes. In October 1991 an informal expert group met for preliminary work on the elaboration of relevant guidelines. The formal working group will be convened shortly.

(3) Nature of the general obligations

The provisions of Article 4 have the character of a general framework. While providing guidance for the conduct of States in the context of hazardous waste management, they do not contain absolute obligations. States are required to take "appropriate measures" to achieve these aims; the exact nature and extent of such steps are left open. In addition to the definition of environmentally sound management, the provisions also leave open a number of other important questions, such as the extent of the generating State's duty to ascertain the adequacy of disposal facilities in the prospective State of import, and the allocation of the burden of proof for the permissibility of export. Nevertheless, they do set important global standards for the protection of the environment against adverse effects of hazardous wastes.

c. Restrictions on Transboundary Movements of Hazardous Wastes

(1) Waste traffic between parties

The sovereign right of every State to ban the import of hazardous wastes for transit or disposal is expressly referred to in the Preamble. Any party exercising this right must inform the other parties, through the secretariat of the Convention, of its decision (Article 4, Paragraph 1(a); Article 13, Paragraph 2(c)). No State party may permit hazardous wastes to be shipped to a party which has prohibited their import (Article 4, Paragraph 1(b)). The parties must also prohibit the export of hazardous wastes to a group of States, belonging to an economic and/or political integration organization, the national legislation of which prohibits such imports (Article 4, Paragraph 1(c); Article 9, Paragraph 1).

(2) Waste traffic between parties and non-parties

After a lengthy and arduous debate, the negotiators agreed on the adoption of the concept of limited ban, which does not allow parties to the Basel Convention to trade in hazardous wastes with non-parties. Article 4, Paragraph 5 of the Convention stipulates that parties may not permit the export of hazardous wastes to a State which is not a party to the Convention, or the import of hazardous wastes from a non-party State. Transit of hazardous wastes through non-party States is not included in this prohibition; if carried out in accordance with the relevant provisions of the Convention, it is therefore not prohibited (Article 4, Paragraph 5, e contrario; and Article 7).

The concept of limited ban is modified by Article 11, which accords parties the right to enter into multilateral, bilateral, or regional agreements on transboundary movements of hazardous wastes with other parties, and also with non-parties, provided that such agreements "stipulate provisions which are not less environmentally sound" than those of the Basel Convention. If this condition is met, the provisions of the Basel Convention do not affect transboundary movements carried out in accordance with such agreements. The secretariat of the Basel Convention must be informed of any such agreement entered into by a party either before or after the entry into force of the
Basel Convention.

The inclusion of Article 11, and its wording, were subject to disagreement. After the introduction of the concept of a limited ban, a number of States proposed its deletion, since they saw it as a weakening of that concept. Consensus could, however, not be reached on this point, or on a proposed requirement for agreements concluded under Article 11 to be consistent with the provisions of the Basel Convention. The wording “not less environmentally sound,” adopted as a compromise solution, is problematical: since that term is not appropriately defined, it allows for a wide interpretation of the standards to be adopted by these treaties.

(3) Absolute prohibition of exports to Antarctica

The Basel Convention provides for a prohibition of hazardous wastes exports to the area south of 60 degrees South latitude, whether or not such wastes are subject to transboundary movement as defined by the Convention (Article 4, Paragraph 6).

d. The Scope of the Basel Convention

(1) Wastes covered by the Basel Convention

The question which wastes should be included in the scope of the Basel Convention was subject to considerable debate. The Convention adopts the concept of the OECD draft agreement on hazardous wastes, which provides for a core list of wastes to be covered, supplemented by a provision allowing every State to determine, by national legislation, additional hazardous wastes.

“Wastes” are defined by the Basel Convention as substances which are subject to disposal (Article 2, Paragraph 1). The disposal operations covered by this definition are listed in Annex IV of the Convention (Article 2, Paragraph 4). In addition to operations which lead to final disposal of the wastes, such as landfill, incineration, or release into a water body, the definition also includes recycling operations.

A waste is included in the scope of the Basel Convention if it is subject to transboundary movement, and belongs to one of the following two categories: hazardous wastes, i.e., wastes covered by Annexes I and III, or defined as hazardous by the national legislation of one or more of the parties involved; and “other wastes,” which means household wastes and residues arising from their incineration (Article 1, Annexes I to III).

This distinction is purely terminological. There is no substantive difference between the two categories of wastes in the provisions of the Convention. The latter category was included during the final stages of the drafting process, as a compromise between two opposing groups of negotiating States. The first group insisted on the inclusion of household waste and incinerator ash in the scope of the Convention; the second objected to defining these wastes as hazardous, arguing that they are not generally recognized as such.

Paragraph 4 of Article 1, excluding “wastes which derive from the normal operation of a ship, the discharge of which is covered by another international instrument,” was included during the final stages of the drafting process. It is based on a proposal by the representative of the International Maritime Organization (IMO), and its objective is to make a clear distinction between the substances regulated by the Basel Convention and those regulated by the International Convention for the Prevention of Pollution from Ships (MARPOL Convention).

(2) Territorial scope

During the negotiations, there was considerable disagreement concerning the territorial areas to which the provisions of the Basel Convention should apply. This was particularly important for the position of transit States in the context of the Convention’s regulatory system. States which did not want to see that system applied to transit of hazardous wastes through the airspace or territorial sea of third States objected to the use of the term “territory,” since they feared that it could be interpreted to include those areas. The resulting compromise language is not very clear. In the final text of the Convention, the term “territory” is replaced throughout with “area under the national jurisdiction of a State,” which is defined as “any land, marine area or airspace within which a State exercises administrative and regulatory responsibility in accordance with international law in regard to the protection of human health or environment” (Article 2, Paragraph 9). This term, though precisely defined, is not used in the definitions of the States of export, import, and transit. “State of transit,” for example, is defined in Article 2, Paragraph 12 as “any State, other than the State of export or import, through which a transboundary movement of hazardous wastes is planned or takes place.” Equivalent wording is used in the definitions of the States of export and import (Article 2, Paragraphs 10 and 11). It was adopted after the experts failed to reach agreement on a specification of the parts of each State’s territory to which the regulatory system should apply. The wording of Article 2 therefore leaves open the question whether or not the regulatory system applies to waste transporters through the territorial sea and the airspace of transit States, or to activities in other areas over which a State exercises control, such as the EEZ and the continental shelf. More guidance is given by Article 4, Paragraph 12, which provides:

Nothing in this Convention shall affect in any way the sovereignty of States over their territorial sea
established in accordance with international law, and the sovereign rights and the jurisdiction which States have in
their exclusive economic zones and their continental shelves in accordance with international law, and the exercise
by ships and aircraft of all States of navigational rights and freedoms as provided for in international law and as
reflected in relevant international instruments.

In accordance with this provision, transit State rights may be exercised only to the extent that they are not in
conflict with the regime established by the international law of the sea and other relevant international rules.

The inclusion of a provision was discussed which would have extended the obligations of a State party to
vessels flying its flag or aircraft registered in its territory, and prohibited the export of wastes from a party on vessels
or aircraft registered in a non-party. This provision was intended to eliminate the use of flags and registrations of
convenience for the purpose of avoiding the application of the Basel Convention's regulatory system. Agreement
could, however, not be reached on this article, and it was eventually deleted on the grounds that due to the inclusion
of the concept of a limited ban, it was not necessary to deal with flags of convenience. This argument is indeed
convincing if both the exporting and importing State are parties to the Convention. In that case, the provisions of the
Basel Convention apply to the movement, regardless of the status of the flag State. If, however, a shipment of
hazardous wastes generated in non-party State A is transported from that State to non-party State B, by a shop flying
the flag of party State C, the provisions of the Basel Convention are not applicable, despite the fact that C is a party
to the Convention. The inclusion of the provision on flags convenience would have covered this situation: State C
would have had the obligation to prohibit the transport of hazardous wastes between two non-parties by a ship flying
its flag. It remains to be seen to what extent this omission will provide a loophole.

e. The Prior Informed Consent Procedure

As noted above, any transboundary movement of hazardous wastes which is not, in principle, prohibited, and
which is in conformity with the general obligations, must be carried out in accordance with the Convention’s
regulatory system (Article 4, Paragraphs 1(c) and 2(f)). This system, also referred to as the prior informed consent
procedure ("PIC procedure"), is regulated in Articles 6 and 7 and in Annex V(A) of the Convention. States parties
must designate at least one competent authority which is responsible for administering the PIC procedure (Article 2,
Paragraph 6; Article 5, Paragraph 1); they must inform one another, through the secretariat, about the agencies they
have entrusted with this function (Article 5, Paragraphs 2 and 3; Article 13, Paragraph 2(a)). The duties of the States
involved, as outlined below, must be carried out by their competent authorities.

(1) The position of the States of export and import

The State of export has the duty to notify the prospective States of import and transit of any intended
transboundary movement of hazardous wastes. The State of export can either provide this information itself or
require the generator or exporter to do so, through the channel of its competent authority. The information to be
provided must be sufficiently detailed to enable the authorities of the States of import and transit to assess the nature
and the risks of the intended movement; it is specified in Annex V(A). Among other things, the reason for the
export, the exporter and the generator, the site and process of generation, the nature of the wastes and their
packaging, as well as the intended itinerary, the site of disposal, the disposer, and the method of disposal must be
specified (Article 6, Paragraph 1). In accordance with Paragraphs 6 to 8 of Article 6, the export State may, with the
prior approval of the States of import and transit, allow the use of a general notification for shipments of wastes
having the same characteristics and the same transport route, for a maximum period of 12 months.

The State of import must respond to the notifier in writing, consenting to the movement with or without
conditions, denying permission for the movement, or requesting further information. In its reply, the State of import
must also confirm the existence of a contract between the exporter and the disposer, which specifies the
environmentally sound disposal of the wastes. Copies of the import State's final response must be sent to the
competent authorities of all States involved in the transaction (Article 6, Paragraphs 2 and 3(b)).

The State of export may not allow the movement to commence until the notifier has received the importing
State's written consent, along with the confirmation of the existence of the contract (Article 4, Paragraph 1(c);
Article 6, Paragraphs 2 and 3). The Convention gives no time limit for the response by the importing State. Since the
consent of the importing State has to be explicit and unconditional, a movement may not be permitted to commence
if no response is given by that State. After the completion of the disposal operation, the exporter and the exporting
State must be informed accordingly (Article 6, Paragraph 9).

This regulation is very detailed; however, some points are again left open. Thus, there is no requirement for
the State of export to verify the contents of the contract concluded between the exporter and the disposer; the
transaction may commence on the basis of mere confirmation of its existence. The requirement for the contract to
specify the environmentally sound disposal of the wastes does not provide much guidance, since, as mentioned
above, that term is not appropriately defined in the Convention.
Earlier drafts of the Basel Convention contained an obligation to send copies of all notifications and the final responses to the Convention secretariat. Since a number of countries did not agree to that provision, it was finally replaced by Article 15, Paragraph 4, which constitutes a carefully worded compromise. That Article requires the provision of copies to the secretariat only upon request by a party which considers that its environment may be affected by the movement in question. This last-minute change has led to a considerable restriction of the secretariat's monitoring function in the context of the PIC procedure.

(2) The position of the State of transit

The rights of transit States with respect to the PIC procedure were one of the most contentious issues during the negotiation process. The relevant provisions are based on a last-minute compromise; the wording is accordingly involved and complex. One group of States, composed mainly of developing countries, wanted to accord transit States the same rights as are given to import States. They were opposed mainly by industrialized States, which maintained that this would contradict the navigational rights and freedoms as guaranteed under international law, in particular the right of innocent passage and the right of overflight. Numerous proposals were put forward and discussed in an effort to reconcile these two conflicting aims. The following regulation was eventually adopted.

(a) Party transit States. After receiving the notification, a party transit State must “promptly acknowledge to the notifier receipt of notification” (Article 6, Paragraph 4, first sentence). No deadline is given, but the term “promptly” indicates a short time limit. Since no assessment, decision-making, or major administrative procedure is necessary, it is reasonable to assume that the acknowledgement should be provided within a few days. The transit State must then respond to the notifier within 60 days, on the same terms as the importing State, and the movement of hazardous wastes may not be allowed to commence before the written consent of the transit State has been received (Article 6, Paragraph 4).

Unlike the State of import, a transit State which is a party can waive the requirement of prior written consent, either generally or under specific conditions. Notice of such a decision must be given to the other parties through the secretariat. If a State party has waived the requirement of prior written consent for transit movements, the State of export may allow the movement to proceed through that State if it has received no response within 60 days after the receipt of a notification given by the State of transit (Article 6, Paragraph 4). Thus, the concept of tacit consent applies in the case of a State party having waived its right to explicit consent for transit movements.

(b) Non-party transit States. Curiously, the Basel Convention’s regulation of the rights and duties of non-party transit States is only fragmentary. Article 7, which deals with this issue, merely provides that Paragraph 2 of Article 6, regulating the import State’s response to the notification, applies mutatis mutandis to non-party transit States. Reference to the other paragraphs of Article 6 which regulate the position of import States is, however, lacking. The circumstances of the adoption of Article 7 seem to point to the conclusion that it was adopted in this fragmentary form because no agreement could be reached on a more comprehensive provision. This is often the case in treaties on highly political issues, when the negotiators expressly or tacitly avoid clear wording in the interest of reaching an agreement in spite of considerable differences of opinion. Interpretation of the provisions in question is not easy, since the rules of Article 31 of the Vienna Convention on the Law of Treaties cannot readily be applied to a situation where no clear meaning was intended by the negotiating parties. The analysis of the subsequent practice of States parties is considered to be the most conclusive indication in this situation.

Since the Basel Convention was only recently entered into force and practice has not yet developed, this approach cannot be taken. An attempt can, however, be made to apply the teleological interpretation method. In the light of the general aims of the Convention, as outlined above, what would be the most reasonable regulation of the position of non-party transit States?

In accordance with the aims of the Convention, any form of transboundary waste traffic between parties and non-parties should be considered the exception. If it does take place, standards no lower than those of the Basel Convention should apply. Accordingly, it is reasonable to assume that the position of non-party transit States should correspond at least to that of the States parties involved. Since the references made by Article 7 is not to Article 6, Paragraph 4, which applies to party transit States, but to a provision applying to import States, it can be assumed that the provision of non-party transit States should correspond to that of import States rather than to party transit States. Bearing in mind also the Convention’s restrictive attitude towards traffic with non-parties, it must therefore be assumed that non-party transit States do not have the option of substituting tacit consent for explicit consent, as have party transit States.

This would lead to the conclusion that transit States which are not parties to the Convention have the same rights as importing States.

f. Illegal Traffic and Duty to Reimport

(1) Illegal traffic
Transboundary movements of hazardous wastes carried out in contravention of States' obligations stipulated by the Basel Convention are denoted by the term "illegal traffic" (Article 2, Paragraph 21; Article 9). Article 4, Paragraph 3 contains the fairly rhetorical statement that the parties consider illegal traffic to be criminal. Paragraphs 1(a) to (d) of Article 9 list specific contraventions of the PIC procedure which render a movement illegal, and Paragraph 1(e) contains the general clause "[any transboundary movement] that results in deliberate disposal (e.g., dumping) of hazardous wastes or other wastes in contravention of this Convention and of general principles of international law."

The definition of illegal traffic and the allocation of responsibility to States in this context were two of the very contentious issues during the negotiation process. Some States generally opposed the concept of placing responsibility for illegal traffic on the State itself, while others insisted on its inclusion. Developing States in particular maintained that the State of export should bear exclusive responsibility for illegal traffic, a viewpoint considered unacceptable by some industrialized States. As with other contentious issues, the wording as adopted is the result of a compromise.

The Basel Convention obliges its parties to adopt and enforce national legislation for the prevention and punishment of illegal traffic (Article 4, Paragraph 4; Article 9, Paragraph 5), i.e., States must adopt and implement legislative measures to ensure compliance with the PIC procedure, and other relevant provisions, by persons under their national jurisdiction. The Convention goes on to regulate the responsibility of States in the event that illegal traffic does occur (Article 9, Paragraphs 2 to 4). In this instance, the State of export is responsible for the actions of the exporter and the generator, and the State of import is responsible for the actions of the importer and the disposer. The State responsible for the action leading to an illegal movement has the obligation to ensure the disposal of the wastes in question, in accordance with the provisions of the Convention, by reimportation into the State of export or otherwise, within 30 days of receiving information about the illegal movement. The State responsible must ensure that the disposal is arranged by the operator(s) at fault, or failing that, by itself (Article 9, Paragraphs 2 and 3). Thus, the Convention places responsibility on the State directly, without requiring an omission on the part of the State.

If the responsibility cannot be assigned either to the generator or exporter or to the importer or disposer, the States involved in the movement must cooperate in ensuring the environmentally sound disposal of the wastes. In this case, no specific time limit is given; the disposal has to be arranged "as soon as possible" (Article 9, Paragraph 4).

The situation where both the exporter (or generator) and the importer (or disposer) have contributed to the illegality of the transaction is not directly addressed by Article 9. It can, however, be assumed that this situation is covered by Paragraph 4 of that provision: the exporting and importing States are jointly responsible for the illegality and therefore have to cooperate in the disposal of the wastes. An earlier proposal to allocate exclusive responsibility to the exporting State except in cases where the importer (or disposer) alone is at fault, was rejected.

Finally, Article 9, Paragraph 5 obliges parties to cooperate in the implementation of the illegal traffic provisions. Since illegal traffic mostly involves persons operating under the jurisdiction of more than one State, this may prove very important. The parties may also request the Convention secretariat to assist them in identifying cases of illegal traffic. This is one of the few duties of the secretariat which go beyond mere coordinating and monitoring. In addition to providing the requested assistance, the secretariat must immediately circulate any information it has received on illegal traffic to the parties concerned (Article 16, Paragraph 1(I)).

2) Duty to reimport

Article 8 applies where transboundary movement of hazardous wastes has commenced in compliance with the PIC procedure, but cannot be completed in accordance with the terms of the contract between the exporter and the disposer. In this case, the State of export must ensure the reimport of the wastes by the exporter, if alternative arrangements for their environmentally sound disposal cannot be made, within 90 days from the time the exporting State and the secretariat have been informed. The States concerned can also agree on a different period of time.

The provision does not specify the cause of the impossibility of compliance with the contract. The wording "cannot be completed in accordance with the terms of the contract" is open to interpretation. Clearly, any action which renders the movement illegal in accordance with Article 9 is excluded from this definition. It is, however, not clear whether Article 8 is limited to cases of force majeure, or whether it also covers impossibility due to errors on the part of persons or State authorities involved (e.g., prior consent given on the basis of an erroneous assumption), or changes in the relevant circumstances after consent was given, or unforeseen action by a third party. Since Article 4, Paragraph 10 of the Convention prohibits transfer of the exporting State's fundamental obligation to ensure environmentally sound management of the hazardous wastes to the importing State, one can argue that the main duty to ensure safe disposal remains with the exporting State in the event of impossibility, whatever its cause. Article 8 must then apply to every case of impossibility which is not covered by Article 9.
An Assessment of the Basel Convention

By addressing the necessity of protecting the global environment against the adverse effects of hazardous wastes, establishing global standards for waste management, and calling for exchange of information between States and mutual assistance in technical fields, the Basel Convention contains elements of a global approach towards environmental protection. Nevertheless, it basically follows the traditional approach: its regime is based primarily on the concept of mutual rights and obligations of sovereign States towards one another, rather than on a global responsibility for the protection of the world's environment. This approach is best illustrated by the term "transboundary": that term, by definition, requires the involvement of at least two States; any operation involving hazardous wastes which is not "transboundary" is not covered by the scope of the Basel Convention (Article 1, Paragraph 1; Article 2, Paragraph 3).

Thus, with the exception of Antarctica, the global commons are not protected as such against contamination by hazardous wastes under this Convention. Beyond observing the general obligation to endeavor to reduce waste generation, make available disposal facilities, and adopt measures to prevent pollution by hazardous wastes, States are also more or less free as regards activities involving hazardous wastes in their own territory. In addition, the sovereign right of States to decide whether or not they accept hazardous waste imports is expressly recognized by the Basel Convention and supported by the PIC procedure, even though it is modified by the principle of non-discrimination, and by obligations to abide by international standards established by the Convention. While this approach may be appropriate for a large number of the situations addressed by the Basel Convention, it also entails, by its very nature, a number of weaknesses.

With regard to the quality of the legal regime established by the Basel Convention, some critics maintain that since it does not ban all transboundary movements of hazardous wastes, it is bound to fail entirely in its objective to curb international waste traffic; instead, it legitimizes such traffic. On the other hand, it has rightly been pointed out that a complete ban would not be appropriate since it would prevent transboundary waste disposal even in cases where it presents the best solution from an environmental viewpoint; it would, for example, preclude the establishment of joint disposal facilities by neighboring industrialized countries.

There appears to be a consensus among most of the writers addressing the issue that even though the Basel Convention is far from providing a perfect solution to the problem of transboundary movements of hazardous wastes, it does address most of the relevant issues and is therefore a step in the right direction; that its effectiveness depends on the effective and timely regulation of the issues still left open, as well as on adherence by as many States as possible, and on strict implementation and enforcement by States parties.

This seems a fair assessment. It might be added that the Basel Convention, in its present form, represents the maximum degree of consensus that was politically possible at the time of its adoption; as illustrated above, the negotiators' capability to compromise had to be stretched to the limit in order to reach agreement. Thus, the adoption of a treaty which provides substantive regulation of the issue must be considered an achievement in itself. With the incorporation of the PIC procedure, the concept of a limited ban, the allocation of responsibility to States for illegal transactions, the duty to reimport, and the duty to provide technical assistance to developing countries, the Basel Convention goes far beyond the usual minimum commitment to monitor the state of the environment and exchange scientific information.

The Convention's main weakness appears to be the use of many imprecise and vague terms which are open to interpretation; the obvious example of this is the absence of a valid definition of "environmentally sound management." Another problem is the fact that a number of points on which agreement could not be reached are left open, thus deferring the decision on their regulation.

Two weaknesses might be mentioned specifically. First, contrary to the intentions of some negotiating States, the Convention secretariat was not given many substantive supervisory functions; with few exceptions, its function is limited to coordinating and monitoring. The absence of supervisory competences in the PIC procedure, in particular, may prove to be a major weakness. The effectiveness of the PIC procedure will thus depend strongly on the extent and quality of its implementation at the national level; it is therefore too early to decide whether it will provide effective control, or merely additional bureaucracy, as claimed by some.

Second, Article 11, allowing separate agreements with non-parties to the Basel Convention, entails the danger of weakening the concept of a limited ban or even jeopardizing the aim of ensuring compliance with the Convention's standards by all parties, particularly since it is impossible to verify the quality of such agreements and States' compliance with them. On the other hand, Article 11 opens the possibility of the adoption, under the umbrella of the Basel Convention, of regional agreements which are more stringent than the Basel Convention. With the recent adoption of the Bamako Convention under the auspices of the OAU, a first step in this direction may have been taken.
The Basel Convention also contains commitments and directives for its further elaboration, some of which are currently being implemented under the guidance of the interim secretariat. They include the periodical reconsideration of a ban on hazardous waste traffic, the adoption of a liability protocol and of technical guidelines on environmentally sound waste management, and the option of assigning additional functions to the Convention secretariat and establishing new subsidiary bodies. The Basel Convention thus provides a sound basis for the further development of international law in the relevant field.

2. Prospective Liability Regimes

The global trade in hazardous wastes is a multibillion-dollar industry, of which the U.S. import and export of precious metals waste and scrap alone tops a billion dollars annually. When hazardous wastes move from state A to state B for disposal or recycling, mismanagement can cause significant damage in state B or in transited state C, either during the movement or after disposal or recycling in state B. For instance, between August 1987 and May 1988, five ships transported 3,800 tons of wastes from various European countries and the United States to Koko, Nigeria, in a deal arranged by an Italian trader with a Nigerian national, who received $100 a month for storing the wastes in a dirt lot. When local residents fell ill, the Government of Nigeria investigated, and found falsely labeled, leaky drums containing hazardous wastes. After diplomatic wrangling, Italy arranged for two ships to pick up the wastes. Refused entry to various ports, the ships eventually returned the wastes to Italy where they were repackaged for disposal. Persons involved in the clean-up of the site in Nigeria suffered chemical burns, nausea, vomiting of blood and partial paralysis, and some crew members of the ships fell ill as well.

Over the past decade, the risk of environmentally unsound management prompted international efforts to regulate the movement of these wastes, through national laws, regional instruments and conventions, and most recently a global convention, the Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal, which entered into force on May 5, 1992. The Basel Convention requires parties to adhere to a notice-and-consent procedure prior to allowing the transboundary movement of hazardous and certain other wastes, and further obliges parties to deny the movement if they have reason to believe the wastes will not be handled in an environmentally sound manner. Fifty-two countries signed the Basel Convention and, as of September 1993, some forty-one had become parties.

A key next stage in this regulatory process is the establishment of a liability regime to deter mismanagement of hazardous wastes both during and after their transboundary movement, and to provide compensation for adverse effects they may have on human health and the environment. The Basel Convention provides for the adoption of a protocol on liability rules and procedures, and the issue will be at the forefront of the meeting of the parties in March 1994, and thereafter. To date, none of the various analyses of the Convention itself has considered the most appropriate approach for supplementing it with a liability and compensation regime. The underlying thesis of this article is that the special nature of the hazardous waste trade—particularly the infancy of its regulatory regime, the effect of raising the costs of legitimate waste disposal, and the disparate attitudes of states—must be taken into account in constructing a successful regime. The first step is for states, international organizations and nongovernmental organizations to determine the types of mismanagement that can be expected under the Basel Convention. Then the goals of a liability and compensation regime must be identified and clarified.

The primary goal of a liability and compensation regime should be to reinforce observance of the standards and procedures of the Basel Convention. In creating such a regime, there is a temptation to focus on rules oriented toward redress after environmental damage has occurred, at the expense of rules oriented toward preventing it. The Basel Convention appropriately attempts to create standards and procedures for preventing environmental harm ab initio. It is critical at this early stage in the life of the Convention that states make every effort to ensure that these standards and procedures are fully implemented. They can do so by designing the liability and compensation regime to attack illegal trafficking, meaning trade under the jurisdiction of the parties to the Convention that is operated outside its regulatory regime.

The goal of obtaining compensation from generators or exporters of hazardous waste for all adverse environmental or human health effects that may occur is too ambitious. The effort should focus on what can realistically be achieved, with widespread adherence, in a reasonable time. Further, compensation for all adverse effects is undesirable because it would increase the price differential between lawful and illegal trafficking and thus encourage treating these wastes in the most environmentally harmful way—by surreptitious dumping. It would also discourage importing countries both from taking their consent to imports of wastes seriously and from adopting domestic measures for sound management of those wastes. One could construct the liability regime to provide certain affirmative defenses to a generator or exporter if the importing state or its nationals is at fault, but this approach would invite much more complicated litigation than is normally sought in strict or absolute liability.
regimes.

a. Six Prospective Liability Regimes

The current interest in developing liability regimes for the transboundary movement of hazardous substances makes it advisable to decide which approach, among many, holds the most promise of success. A variety of approaches have been used in international law to foster liability and compensation. This section explores six of them, starting with the easiest to negotiate and implement, and proceeding to the most difficult. In practice, these regimes need not be mutually exclusive; indeed, the later regimes build upon characteristics of the earlier ones.

It will nevertheless be seen that hard choices must be made. The simpler regimes risk failing adequately to address the problem of deterring misconduct and compensating for damage. The sophisticated regimes are hard to achieve on a global level because the complicated issues involved entail extensive negotiation and a greater commitment of resources. Once these prospective regimes are described and analyzed, the following section will advance essential elements to be taken into account in selecting the one best suited to the hazardous wastes trade.

*Status Quo Regime.* The easiest approach to formulating the regime in question—because it would not require a new international agreement—would be to rely on current mechanisms for the redress of claims, both domestic remedies (transnational litigation) and intergovernmental remedies (intergovernmental negotiation/litigation). Each will be considered in turn.

Transnational litigation. The main characteristics of the transnational litigation approach are reliance on existing domestic remedies and out-of-court settlements by private litigants. Injured parties would pursue compensation in domestic or foreign courts (wherever there is jurisdiction over the subject matter and the defendant) based on civil remedies available for either pollution damage generally or damage specifically from the release of hazardous wastes. Where judgments rendered in the courts of one state need to be enforced by the courts of another, the injured party will need to rely on existing international or national mechanisms for the enforcement of civil judgments. If procedural obstacles impede obtaining or enforcing a judgment, the injured party in theory could pursue its claim by having its government raise the matter diplomatically with the government of the defendant (or other governments as appropriate).

The wild card in this approach is the effect of the entry into force of the Basel Convention itself. Once fully implemented, the regulatory aspects of the Convention, including assistance to countries to improve their waste management, might cut back considerably on damaging incidents giving rise to claims. For instance, when it was brought to UNEP’s attention in September 1992 that some European firms and a national of Somalia had concluded a deal for the annual shipment of a half million tons of hazardous waste to war-ravaged Somalia, the secretariat of the Basel Convention (acting in an “interim” capacity pending entry into force of the Convention) intervened and successfully aborted the plan.

Further, the Convention obliges the parties to “take appropriate legal, administrative, and other measures to implement and enforce the provisions of this Convention, including measures to prevent and punish conduct in contravention of the Convention.” The parties must also “introduce appropriate national/domestic legislation to prevent and punish illegal traffic.” As countries become parties to the Convention, they may alter their domestic laws so that procedural and substantive obstacles previously experienced by claimants are avoided. For example, the implementing legislation proposed by the Bush administration would have provided extensive civil and criminal remedies for illegal exports and imports of hazardous wastes. Finally, the extensive reporting and dissemination of information required by the Convention, for which the secretariat serves as a central clearinghouse, will create greater transparency in the international hazardous waste trade, allowing the public and nongovernmental organizations to pressure states and exporters into adopting better management practices. It may be necessary to convince countries that these new measures will prove inadequate before they will agree that a liability regime is necessary.

Intergovernmental negotiation/litigation. Rather than rely solely on transnational litigation, in which private litigants are the primary actors, the current “status quo” also allows for intergovernmental negotiation and litigation, in which states are the primary actors for resolving claims that arise from private activities. Unless the matter can be resolved through negotiation, the prospects for such a regime are not good; international law is highly inconsistent in providing prompt, adequate recovery for injured claimants, and reliance on governments to act can politicize the claim to the detriment of the claimant.

*Soft Law Regime.* A “soft” law approach to liability would promote more effective use of transnational or intergovernmental litigation through a nonbinding multilateral declaration or statement of guidelines. The idea would be to identify the problems in securing and enforcing local judgments (e.g., poorly developed environmental laws, jurisdictional problems, *forum nonconveniens*) and then to persuade governments to agree to correct these problems and to commit themselves to intergovernmental dispute resolution. On the basis of such a declaration,
governments could respond in whatever fashion is appropriate under their domestic system, such as by seeking changes in municipal laws and regulations, filing amicus briefs, or pursuing in good faith the diplomatic settlement of cases unresolved by local courts. A declaration on liability relating to the hazardous wastes trade would "flesh out" the liability provision of the Cairo Guidelines.

The greatest strength of this approach is also its greatest weakness: the lack of formality. Since these instruments are not legally binding, governments take them less seriously than treaties both in negotiating and in concluding them. Sometimes they are negotiated by technical experts (rather than diplomats), in which case they may be substantively sound but lack the thorough evaluation that brings full support by governments. At other times they are the product of hastily organized meetings of government ministers, in which the emphasis is less on doing something useful than on simply "doing something." Even when countries undertake nonbinding commitments enthusiastically and in good faith, they do not necessarily translate into actual changes in governmental or private behavior. Their nonbinding character also keeps many governments from involving their legal staffs in drafting such instruments, yet these experts are best able to phrase the text for meaningful effect on internal law. And, in the final analysis, even well-drafted soft law instruments do not impose legal obligations on states for which other states can hold them accountable.

**Transnational Process Regime.** Efforts to strengthen local remedies could be formalized in a legally binding instrument, such as a protocol to the Basel Convention. The protocol could be "process" oriented, meaning that it would not establish substantive standards to be applied by courts, but would seek to minimize or eliminate difficulties relating to subject matter and in personam jurisdiction, forum non conveniens, choice of law and enforcement of judgments.

To take a simple example, the protocol could obligate party A to permit party B’s national to sue for compensation in A’s courts for damage from a transboundary movement of hazardous wastes that is somehow associated with party A (e.g., its national generated or transported the waste). The claimant would be permitted to sue, and to appeal any adverse decision, on the same terms as a legal entity of party A. Further, party B itself, in its governmental capacity, would be permitted access to party A’s courts for damage to party B’s property. Provision could also be made for the expedited exchange of information, on-site inspection of the damage by authorities of party A, and governmental consultations at the request of either party. An approach like this is taken in the Convention on the Protection of the Environment between Denmark, Finland, Norway and Sweden (the 1974 Nordic Convention).

The problem of the "penniless plaintiff" could be dealt with by establishing an international fund, to be administered by the Basel secretariat, to finance needy claimants in pursuing their claims. The fund would need to be carefully structured to avoid abuse; the claimant should be required to demonstrate the prima facie existence of a valid claim to an administering body and to reimburse the fund if the claim is successful. Such a fund will be discussed in more detail below.

The primary drawback of a process regime derives from the significant substantive differences in national laws worldwide. If the approach of the 1974 Nordic Convention is applied globally, claimants from party A may find that they can recover in party B’s courts (assuming application of party B’s substantive law) millions of dollars for a toxic spill, while claimants from party B suing in party A’s courts (assuming application of party A’s substantive law) are limited to damages no greater than a small set amount. Moreover, a national of party A that exports hazardous waste to party C may enjoy a competitive advantage over a national of party B that also makes such exports to party C, because suits in party A result in lower damages (hence lower operating costs) against its exporters. Any regime that purports to be uniform, but in fact fosters inequality in trade competition, is unlikely to be accepted, and if accepted, is unlikely to be successfully implemented. One solution might be a choice-of-law rule that allows claimants of party B suing in party A’s courts to have party B’s more favorable law applied.

Alternatively, a liberal approach to in personam jurisdiction could permit claimants of party B to remain in its courts and apply its law (or proceed to the forum with the most favorable law). These solutions might work, but they would further complicate the regime. The first puts great faith in the ability and willingness of national courts to apply foreign law, which in this area may be unfamiliar to them. The second solution may find resistance from states hostile to or unfamiliar with "long-arm" statutes; states are often reluctant to expose their nationals to the vicissitudes of adjudication in foreign courts, where both procedural and substantive rules may differ considerably. If this second solution is used, it may be necessary to incorporate protections against abuse, such as allowing party A’s courts to inquire into whether due process was afforded the defendant, and perhaps limiting the nature and extent of damages that may be awarded.

Although the 1974 Nordic Convention shows that a process-oriented regime is workable for countries with similar traditions, asymmetries in recovery for environmental damage can arise even between countries with similar
traditions, such as the United States and Canada. For instance, most states regard loss of life or property as compensable, but states vary considerably in awarding damages for depletion of environmental resources or loss of profits from activities dependent on the environment. While this lack of symmetry is tolerated in a "status quo" regime, countries may not be willing to institutionalize it in a binding agreement. On the other hand, if the regime is designed to be asymmetrical—for instance, to ensure access by developing country nationals to the courts of developed countries because of an asymmetrical flow of hazardous wastes—then countries may accept it.

Negotiated Private Law Regime. An approach often envisioned for an international environmental liability regime is the establishment of a binding agreement specifying a body of liability law enforceable in domestic courts against private individuals. Indeed, most multilateral environmental liability agreements of the past few decades contain wholly or primarily private law regimes committing states to apply uniform liability rules to private parties under national law. Ideally, in addition to covering jurisdiction over foreign generators and carriers and the recognition of foreign judgments, a negotiated private law regime on transboundary movements of hazardous wastes would set forth clear, internationally recognized liability standards—such as on standing, burden of proof, available damages, and limits on recovery—and requirements for compulsory insurance or other financial guarantees. Once negotiated, the protocol would pass into national law through either self-execution or implementing legislation. The advantage of this regime is that it would minimize concern about the disparity in national laws, which can prevent a state from either embracing enforcement of foreign judgments in its courts or opening its courts in an asymmetrical fashion.

"Channeling" liability to just one entity—such as the original generator—would establish that this party alone could be held strictly liable, normally subject to certain limits on its exposure. True channeling would also release all other entities from liability so as to identify the defendant with more certainty, avoid complicating cross-litigation and allow that entity to obtain appropriate insurance (whose cost could be passed along, at least in part, to other entities in the chain). Though artificial, this channeling would be convenient since it simplifies the action to be taken by victims and avoids the unnecessary multiplication of insurance policies or other financial guarantees for the other entities.

One single-entity approach is to channel liability to the operator or owner of the facility that produces or uses the hazardous substance. This approach makes sense when a single actor is the primary player in the potential transboundary harm. Thus, the liability regime for nuclear energy was built on the idea that the transboundary harm was most likely to arise, not from the carriage of nuclear materials, but from the operation of the nuclear facility. Liability was channeled to the operator, the party that also happens to benefit the most from the activity. For hazardous wastes, however, the premises are not the same. Transboundary harm is most likely to arise from actions of either the carrier or (perhaps most likely) the importer or disposal/recycling facility. While the generator certainly benefits from passing along the wastes, benefits accrue as well to other entities in the chain (particularly the importing country in the case of recycling), at least if the export is legal. If liability is channeled to the generator, there is little incentive for either the carrier or the disposal/recycling facility to manage the wastes properly. Furthermore, while both nuclear materials and hazardous wastes can be harmful, the field of nuclear energy is exceptional for both its potential for catastrophic harm and the role of states in operating the installations. That situation may incline states toward exposing their operators to channeled liability.

Liability could also be channeled to the carrier of the goods (or shipowner). This approach is taken in most conventions relating to the carriage of dangerous goods, such as the 1969 CLC and the 1989 ECE Convention on carriage of dangerous goods, and is contemplated in the draft HNS Convention. The transboundary movement of hazardous wastes may involve more than one carrier; if there are multiple carriers, liability would be channeled to whichever one was in operational control of the wastes at the time they were released into the environment. If the release occurred after their delivery to the disposal/recycling facility, liability would fall on the facility. This scheme echoes the notion commonly expressed in environmental law that the "polluter" should be the one to "pay," which stimulates proper management by each entity in the chain of control.

There are, however, disadvantages to this approach. First, among the key players in the hazardous waste trade are brokers, who themselves never obtain control of the wastes but profit from arranging the transaction. It would make sense to hold them accountable as well. Second, it may not be appropriate to impose sole liability on the disposal/recycling facility once the wastes arrive at their destination. Importers in countries with poorly developed regulatory regimes may have been paid well enough to accept the wastes, but not to deal with their consequences. Third, it may not be fruitful to treat the movement of hazardous wastes like the carriage of dangerous goods (such as oil) that have a high positive value. The negative value of the wastes arguably turns the normal rules upside down and suggests that the generator should be the focus of liability since it can best avoid producing the wastes in the first place. However, it should be kept in mind that wastes destined for recycling may have positive value.
On the international level, true channeling—by which legal actions can be brought only against the designated target—is difficult to establish, for it requires participating countries to foreclose suits under their domestic legislation that might otherwise be initiated. While this constraint has been accepted for nuclear liability, it has proved difficult to incorporate in other regimes. For instance, while the 1969 CLC concentrates liability on the owner of the vessel, it bars legal action only against some of the other entities involved.

The second basic option would impose liability primarily on one entity (e.g., the party that possessed the hazardous wastes at the time of their release into the environment), but would impose it secondarily on some other entity (e.g., the generator of the wastes). This option would allocate the costs of compensation initially to the entity in the best position to prevent the damage, but would allow for a fallback if the primary entity cannot be located, is insolvent, or is incapable of providing full compensation. The availability of secondary liability increases the likelihood of full compensation for victims and may help discourage the generation of hazardous wastes. While no international convention now follows this approach, the idea of “layering” sources of compensation appears in both the oil pollution and nuclear damage regimes: claimants first exhaust redress against a responsible entity and then have recourse to additional funding mechanisms. The disadvantages of this option are that increasing the number of potential defendants may inhibit the acquisition of insurance and drive up the costs of litigation. These shortcomings are more readily apparent with respect to the third option.

Under the third option of joint and several liability, a claim could be brought against any generator, exporter, carrier, importer or disposer, and perhaps even any broker, that was associated with the wastes that caused damage to the claimant. That entity would be liable for the full amount of the damage, even if its contribution to the transboundary movement was only partial. The claimant would enjoy maximum flexibility in suing those entities that have the most readily available financial resources and that can be identified and located.

Significant disincentives, transaction costs and inequities might arise under joint and several liability; in this regard, the U.S. experience with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is instructive. CERCLA authorized the response by government or private entities to releases of hazardous substances into the environment and then specified the parties liable for the costs of the response. U.S. courts interpret CERCLA as calling for strict joint and several liability, unless the defendants can show that the harm was somehow divisible. Thus, once a response action has been taken to clean up a site, the Environmental Protection Agency (or other appropriate entity) may sue a wide range of entities (owners and operators of waste sites, generators, carriers) for the full cost of the cleanup, regardless of the fault of any given defendant, subject to limited defenses. If the claim succeeds, the defendant may seek contributions from others; courts often allocate contributions on the basis of the volume of waste they contributed to the sites.

In using joint and several liability, CERCLA was expected to deter the mismanagement of wastes from cradle to grave and to foster the aggressive cleanup of existing waste sites, because it provided the opportunity to sue just about anyone involved in causing the hazardous waste release for the full cost of the cleanup. Yet, while the fear of liability under CERCLA probably deters some undesirable releases, the extent of deterrence is unclear. Of greater concern is that the liability scheme may be hindering cleanup of waste sites and wasting scarce resources. Although some 3,400 disposal or treatment facilities in the United States are suspected of having released hazardous wastes into the environment, as of June 1992—more than a decade after the enactment of CERCLA—cleanup measures addressed to all sources of contamination were in place at only 43 facilities. The wide range of potential parties has been criticized for resulting in massive litigation and cross-litigation, and the commitment of extensive resources to restoring sites to pristine condition at the expense of more serious problems. The ability to claim against an entity that is only partially responsible for the damage has discouraged the negotiation of settlements, leaving claims languishing in courts for years, and has created a sense of unfairness, since the entity with the “deep pocket” is often the one sued. Moreover, it is argued that, while incentives are created for everyone in the chain, the incentives for each are lower than under direct channeling precisely because each entity knows that it alone will not obtain the benefits of any precautions it takes.

The weaknesses of a CERCLA-like regime would probably be exacerbated in the transnational setting. Although in theory they, too, would be exposed to liability, importers might be less inclined to handle wastes properly if they believed that any suits by local authorities or nationals would be brought against foreigners, either because the foreigners were perceived as deep-pocket sources or because there was political or economic pressure not to harm local industries. This concern is particularly relevant if the judiciary is not independent or the importing facilities are government owned or operated. Further, the “unfairness” of joint and several liability may be heightened when the potentially responsible parties are operating under different regulatory systems. For instance, it seems unfair for a generator to be held fully accountable for harm primarily or exclusively due to inadequate monitoring or regulating by the importing government, which consented to the import in the first place. If the
exporter took steps to ensure that the importing entity would lawfully dispose of the wastes, the exporter should be able to rely on enforcement of certain minimal standards by the importing state (e.g., standards in the Basel Convention).

The difficulty of obtaining speedy settlements and judicial decisions might be aggravated by cross-litigation involving numerous transnational entities operating across the globe. For instance, as the trade in hazardous wastes grows, over time a recycling facility could receive scrap metal from sources in dozens of countries and from hundreds of generators. Suit against just one of those generators could result in the impleading of many others in various jurisdictions, spawning massive litigation fees that divert funds from the cleanup.

Determining which entity should be exposed to liability is only one of many complex issues to be resolved in a negotiated private law regime. Other issues—such as whether liability should be absolute, strict or based on fault; the permissible exceptions in the case of strict liability (e.g., no liability for releases of hazardous wastes due to an act of war); the financial limitations, if any, on liability; and the types of recoverable damages—can drag out negotiations.

A further layer of intricate issues arises if the negotiated private law regime seeks to ensure that, once a judgment is rendered, there are funds to satisfy it. Consider, for example, the practical difficulties associated with requiring generators or exporters of hazardous wastes to maintain insurance. In the United States, insurance for owners and operators of hazardous waste facilities to compensate third parties for damage or injury has become difficult to obtain and, when available, is very costly. A key reason is that the wide-ranging approach of strict, joint and several liability has complicated assessment of the risks involved in generating the wastes. This uncertainty is increased when wastes are exported to other national jurisdictions, under other regulatory regimes. Obviously, the availability of compulsory insurance at competitive and reasonable rates is inextricably linked to the standard of liability and limits of compensation provided for in the protocol. If generator or exporter liability is strict, with no financial limits, and is engaged even if the importer or disposer in a foreign country acts negligently in managing the wastes, it is difficult to see how the risk can be insured at all. Part of the solution may lie in the use of financial guarantees other than insurance, but again, if liability is wide ranging, such guarantees may also be unrealistic.

Further issues arise as to whether governments are expected to police these guarantees to ensure their availability and adequacy.

Rather than rely on the acquisition of insurance or financial guarantees by the responsible entity, a negotiated private law regime could seek to impose secondary liability on the government with jurisdiction over the responsible entity if the latter cannot pay the judgment. This might be attractive to those seeking to force states fully to internalize the costs of actions undertaken by themselves or their nationals. Yet this approach opens up a further set of issues as to whether the government would be responsible absolutely, strictly, or on the basis of some showing that it was negligent in its own duties (e.g., to ensure the availability of adequate insurance); whether the government would waive sovereign immunity from suit in its own or foreign courts under the same law applied to the entity, or whether the matter would be resolved on a separate track, such as diplomatically or through a claims process under public international law; whether actions against a government could be brought only by other governments or by private individuals as well; and whether state liability would encourage entities to underinsure or to act less responsibly knowing that a government stands behind them. Further, assuming that the movement occurred with the knowledge and consent of the governments of both the exporting and the importing states, it would be necessary to decide whether both should be exposed to secondary liability and, if so, how to apportion that liability. While a government may consent to liability for transboundary movements of hazardous wastes it conducted, it may be less inclined to accept the role of deep pocket, even on a secondary basis, for movements conducted by its nationals.

All else being equal, a negotiated private law regime that imposes a very strict standard (e.g., unlimited, strict, joint and several liability with compulsory insurance) on all transboundary movements of hazardous wastes will increase the potential cost of conducting that trade lawfully. In doing so, it may help decrease both the generation and the export of such wastes. More likely, though, it will encourage illegal trafficking, since exporters will expect the cost of the trade to be lower if the prospects of identifying the entity responsible for the damage are low. The exporter can bring about this result by not complying with any requirements for notice, consent or documentation with respect to the shipment.

*International Fund Regime.* While a negotiated private law regime is a complicated undertaking, once it is completed its operation would essentially be left in the hands of private litigants and national courts. A further step would be to engage an international organization in some aspect of the transnational litigation process. In theory, the Basel secretariat, for example, could furnish information to potential litigants about the local laws of the state in which the defendant is found and the existence, if any, of a process or negotiated private law regime. A more
significant form of involvement would be a supplemental "international fund" regime, in which a "fund authority" performed certain key functions. These functions could be (1) providing funding to an individual or the state when a responsible entity cannot be identified, is not capable of fully compensating the claimant, or is not liable for fully compensating the claimant; (2) providing funding for a claimant to pursue transnational litigation and immediate, emergency cleanup activities, which would be reimbursed if a claim for damages succeeds; and/or (3) providing funding to an individual or a state for all damages, including costs of cleanup, which the authority would then recoup by itself pursuing a claim against the responsible entity. The fund could derive from payments by either governments or major transnational waste management companies and could be administered by the Basel secretariat subject to oversight by parties to the Convention.

An example of an international fund regime is the 1971 International Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage. The International Oil Pollution Compensation Fund pays compensation when the shipowner is financially incapable of meeting its obligations or the damages exceed the owner's liability limit under the 1969 CLC. The fund will not pay compensation in certain situations, such as when the discharge is due to an act of war or to acts of the claimant intended to cause damage. There is a maximum the fund will pay for a single incident, which does not vary by tonnage but does take the shipowner's liability into account. The fund is supported by pro rata contributions from persons (including governments), at installations within the parties' territory, that receive seaborne crude and heavy fuel oil in annual quantities exceeding 150,000 tons. Thus, the source of contributions into the fund ("shippers" or cargo owners) is not the same as those initially liable under the 1969 CLC (shipowners), which spreads the risks of liability. States are obligated to ensure that these contributions are paid, which means imposing sanctions on delinquent shippers.

The oil fund is governed by an "Assembly" of parties to the Convention, which meets annually; administrative functions are performed by a secretariat. The fund is a legal entity capable of suing and being sued in the national courts of the parties. Thus, claimants bring suit against the shipowner and, should they believe recourse to the fund may be available, against the fund as well (the latter actions must be brought in courts competent to hear actions against the shipowner). Judgments against the fund, with limited exceptions, are recognized in the courts of other parties. As of 1992, the fund had been involved in some sixty cases of oil pollution damage.

Current efforts to construct international liability regimes for hazardous wastes are taking this "supplemental fund" approach. For example, the IMO's draft convention on the carriage by sea of hazardous and noxious substances initially imposes liability on the shipowner for their release from a ship. However, if the damage exceeds what the owner can pay, the claimant may bring a claim against an international fund based on contributions from governments and shippers. Likewise, documents prepared under the auspices of UNEP for the parties to the Basel Convention propose that the liability and compensation regime consist of an international fund supplementing a civil liability regime. States and private entities subject to liability under the protocol would contribute to the fund, which would be administered by a separate fund authority capable of suing and being sued in national courts. Claimants could seek compensation from the fund when the private entities subject to liability cannot be identified or are insolvent.

Obviously, to establish such a regime, major exporting countries will need to be convinced that they, or their major transnational waste companies, should contribute to the fund. Important decisions must also be made on the methodology of contributions, financial limits on payments from the fund, whether it will cover damage that occurred prior to its establishment, and whether only certain types of damage should be compensated to protect its viability (e.g., no damages for loss of business profits).

A further challenge arises if the fund is to help finance emergency cleanup operations or (more dramatically) disburse funds for all damage and then itself pursue claims against the potentially responsible parties. Presumably, before receiving funds, a claimant must somehow establish that the damage is related to a transboundary movement of hazardous wastes covered by the Basel Convention. For this purpose, the administering authority must either establish panels of experts to determine that emergency funding is appropriate or use local courts to this end. The latter is perhaps the best way to minimize overhead for the administering authority but may also cause delay in payments.

The difficulty of ensuring the appropriate distribution of funds for cleanups cannot be overstated; in this regard, the U.S. experience under CERCLA is again instructive. CERCLA created a fund--the "Superfund"--of not more than $8.5 billion for the cleanup of hazardous wastes that threaten public health, property and the environment. The fund is financed primarily through a per gallon tax on the production of raw chemical products ("feed stocks"), supplemented by other smaller revenues. The objective was to make cash resources available for quick cleanups, which is particularly useful where the responsible parties are insolvent or are delaying payment through litigation. Yet, to ensure that payments from the fund would be made only in meritorious situations, it was necessary to
establish a lengthy and bureaucratic certification process, involving site evaluations, studies, cost-benefit analyses, public comment and contract bidding. This process entails enormous administrative expenses that divert scarce resources from cleanups.

**Intergovernmental Arbitral Regime.** The regimes discussed above (except the first) call for action by governments to facilitate transnational litigation by private parties. In those cases, the role of governments is limited to creating an international instrument and would not extend to the actual litigation for damages unless the government itself pursued a claim in local courts based on direct damage to state property. For a full-blown "intergovernmental arbitral regime," an international protocol would require governments to act as claimants and defendants through some form of intergovernmental dispute resolution.

For instance, in the 1972 Convention on International Liability for Damage Caused by Space Objects, the state that launches a space object, procures the launch, or from whose territory the object is launched is absolutely liable to pay compensation for damage caused by the space object on the surface of the earth or to aircraft in flight. The fact that private individuals or entities launched the space object is irrelevant. If two or more states are associated with the launch, they are jointly and severally liable. Exoneration from liability is permitted to the extent that the claimant state (or its nationals) contributed to the damage by gross negligence or an intentional act or omission. Procedures are established for the negotiated settlement of claims, but if this solution is not possible, the concerned parties "shall establish" a claims commission at the request of either the claimant or the launching state. The Convention then specifies how the members of the commission are to be selected and its work conducted, and states that its decisions shall be final and binding "if the Parties have so agreed"; otherwise, they will be "recommendatory."

Under an intergovernmental arbitral regime, states whose environment or nationals have suffered from the harmful effects of exported hazardous wastes could bring a claim against the state in which the waste originated, the state with jurisdiction over the entities in operational control of the wastes at the time of their release, or the state in which the wastes were being disposed of or recycled. The protocol could establish the forum for adjudication and the procedures for states bringing a claim before it. For instance, resort could be had to the International Court of Justice, or some form of claims tribunal, such as one consisting of three arbitrators, with one appointed by each of the parties and the third by the other two. Alternatively, special "panels of experts," nominated by the parties to the Basel Convention, could be entrusted with fact finding and deciding disputes. The advantages of such panels include expedited treatment of claims and consistency in expert decisions; a disadvantage is their cost.

While the intergovernmental arbitral regime might avoid detailing the rules that the adjudicating authority is to follow, the protocol at least would need to indicate the source of law to be looked to in adjudicating the claim. The liability of the defendant state could be premised on three sources of substantive law: its obligations under the Basel Convention; general principles of international law for transnational damage brought about by its nationals; and principles of law of one or more of the parties to the dispute.

Rather than just establish a forum for adjudication and the source of law to be used, the international liability protocol could explicate the substantive liability rules to be applied, as was done in the Convention on space objects. Such a regime would avoid the concerns regarding the differing substantive norms among countries, but would entail many of the complicated issues of negotiating uniform substantive rules. Negotiation of the Convention on space objects took years and was driven by heightened political and military security concerns during the Cold War, concerns with no bearing on hazardous waste. Even if the liability protocol were limited to establishing a forum for adjudication and identifying the source of law to be applied, problems would arise regarding the indeterminacy of the substantive law to be applied, the inefficiency of the process, and the lack of identity between the interests of the claimant and the claimant's government.

b. Elements for a Successful Liability Regime

A widely accepted and effective liability regime for the transboundary movement of hazardous wastes is conceivable under each of the above regimes, although, as noted, each has relative strengths and weaknesses. However, important elements peculiar to the hazardous wastes trade point to the best approach to realizing an effective liability regime. These elements are: the liability regime should complement the newly created international regulatory regime governing the hazardous wastes trade to help avoid mismanagement ab initio; the liability regime should be grounded on a sound data base that identifies weaknesses in the international regulatory regime; the liability regime should differentiate between trade conducted within and outside the regulatory regime; and the liability regime should seek to accommodate a wide variety of political, economic and environmental interests.

**Legal Trade vs. Illegal Trade.** A liability regime to supplement the Basel Convention must take into account the difference between transboundary movements of hazardous wastes conducted by parties (and individuals under
their jurisdiction) within the framework of the Convention (legal trade) and movements conducted outside that framework (illegal trade), such as those without notice to, or consent by, the importing state. Why this is so relates to the involvement of the importing state in the movement and the incentives imposed on the exporter through the liability regime.

Assuming that damage from such movements usually occurs in the territory of a state being transited or importing the wastes, if the movement falls under the Convention, those states expressly consented to the movement, with full knowledge of the type and volume of the wastes, and the contractual terms for their disposal or recycling. Thus, the injured states were aware of the risks and, for whatever reason, consented to their creation. This fact alone distinguishes the transboundary movement from activities normally giving rise to claims for strict or absolute liability, for in this instance the originating state is not acting alone in the creation of the risk.

Permitting the importing or transited states to take advantage of certain liability schemes, such as one that channels strict liability to the generator in the exporting state, could have several negative consequences. First, it would minimize the significance of the importing and transited states' decisions to accept the movement; if we wish to make states take their consent seriously, they should be held accountable, at least partially, for its consequences. Second, it would not encourage these states to establish and enforce effective regulations governing the movement of hazardous wastes within their territory. The awareness of an importing state that any damage from the movement of wastes to its disposal facility will be compensated by entities outside its jurisdiction (either in the exporting state or an international fund) will diminish its incentives to prevent the damage in the first place.

Third, permitting the transited or importing state to escape liability would run afoul of a principle basic to law and economics: the party who can avoid the harm at the least cost normally should be responsible for doing so. In this case, the transited or importing country controls the ports of entry to its territory, can regulate the conduct of those within its jurisdiction, and can inspect disposal and recycling facilities in its territory. It is thus in the best position to take steps (or to ensure that its nationals take steps) to prevent damage at the least cost. It has been noted with regard to pollution of the marine environment—the most developed of all branches of international environmental law—that the comparative evaluation of each state's control from the point of view of prevention is crucial to allocating international liability.

By contrast, transboundary movements of hazardous wastes outside the framework of the Basel Convention normally proceed either without consent by importing or transited states, or without consent based on accurate information. In that case, a liability regime should focus on the failure of the exporter to provide notification (or accurate notification) of the movement, and perhaps on the failure of the exporter's government to develop an adequate regime to prevent such movements. The least-cost avoider now is not the "importing state," but the exporter.

Differentiating between legal and illegal trade is also important when establishing a liability regime to create incentives for exporters; costs should be imposed on exporters' actions differentially on the basis of their relative desirability. Illegal trafficking in hazardous wastes is more harmful to the environment than legal trafficking, since the latter is at least governed by a regulatory regime that aspires to environmentally sound management. Thus, to promote desirable behavior, the costs imposed on the exporter for illegal trafficking should be higher than the costs imposed for legal trafficking. Yet the basic international regulatory regime raises the cost of lawful trade in hazardous wastes, thereby fostering evasion of the regulatory regime, or illegal trafficking. To counteract this deleterious effect, international society should increase the costs to the exporter of illegal trafficking, which can be done, at least in part, by increasing the exporter's likelihood of exposure to damages (compensatory and punitive) if caught.

**Taking Consensus Seriously.** The realities of international relations cannot be ignored in establishing an international liability regime. The reason the prospective liability regimes were described in the previous section in ascending order of difficulty to achieve was to indicate that hard choices must be made about what is ideal and what is achievable. In a perfect world, governments might espouse all transnational claims of their nationals and see that they were resolved expeditiously and fairly. Alternatively, governments might ensure that such claims could be resolved in local courts, pursuant to well-understood standards and rules that provided prompt, adequate and effective compensation. However, the international community's record in accomplishing these tasks has been very uneven. While some liability conventions focusing on extraordinary events (e.g., nuclear accidents, oil spills, the launch of space objects) have been developed, there are no global liability conventions addressed to more common incidents of pollution damage. Many of the liability conventions that do exist have not gained wide adherence. Even the 1969 CLC, which has numerous parties, suffers from the lack of adherence by the largest consumer of oil carried by sea, the United States. Therefore, the negotiators of a liability regime for hazardous wastes must strive to accommodate the fundamental concerns that key blocs of countries may evidence during the negotiation, as well as
during the process of ratification and implementation. The key reason the 1969 CLC attracted a large number of parties (albeit not the United States) was that it offered benefits for both states involved in the shipping of oil and states concerned about damage to the coastal environment. The shipping states obtained caps on liability that could be covered by insurance, while the coastal states obtained access to resources for preventive and rehabilitative measures.

In the case of hazardous wastes, major exporting countries (such as the developed countries) may want no regime at all, viewing it as posing an unnecessary impediment to trade and the threat of large payments by either themselves or their nationals to other countries and their nationals. Exporting countries will be concerned about the procedural and substantive standards applied by foreign courts and the inequity of targeting their generators or businesses instead of other entities involved in the transaction. Unless the exporting country is also an importing country interested in obtaining redress for its own citizens, it may see little advantage in a protocol that presents considerable impediments to trade currently conducted in accordance with the Basel Convention, or that requires significant changes in domestic legislation. Nevertheless, just as it was in their interest to accept the Convention itself, so will exporting states regard it as in their interest to join a liability regime that preserves the hazardous wastes trade to the mutual satisfaction of exporting, importing and other states, regardless of their economic strengths and weaknesses.

Major importing countries will fear damage to their environment and therefore will favor the establishment of a liability regime. Moreover, they will favor a regime that covers damage long after the wastes have been disposed of or recycled, rather than only during the actual transboundary movement. They will also, however, desire to maintain what is presumably a beneficial trade in hazardous wastes for disposal or recycling. Consequently, they will not join a regime that imposes costs on the trade sufficient to shut it down or substantially reduce the revenues currently obtained from it.

Countries not engaged in the waste trade, yet confident that their internal regulatory system is adequate to prevent illegal imports, may be indifferent to the creation of a liability regime. Countries not engaged in the waste trade and not assured of their ability to prevent illegal imports (such as many developing countries) will want a strict, broad-based liability regime, which will ensure that all costs for damage to human health or the environment are imposed on exporting countries, their nationals or the international community through an international fund. Further, they will favor mechanisms that provide for early cleanup, without delays for transnational or international litigation, or the identification of a responsible party. Countries damaged in the past may want the regime to cover retroactive damages.

These viewpoints cannot all be satisfied by any one liability regime. A proposed solution must thread its way between these various concerns to reach common ground for an effective regime that will be acceptable to a wide variety of states.

With these elements in mind, this article suggests that the best achievable liability regime would accomplish the following:

(1) encourage exporting entities to adhere to the notification requirements of the Basel Convention;
(2) encourage exporting, transited and importing states to take seriously the notification-and-consent requirements of the Convention;
(3) encourage parties to the Convention to implement internal laws and regulations that comport with its requirements for the environmentally sound management of hazardous wastes;
(4) avoid inhibiting trade lawfully conducted under the Convention, to encourage participation by major exporting states; and
(5) severely inhibit unlawful trade conducted outside the Convention, to encourage participation by states that cannot themselves prevent the entry of such wastes.

To realize these objectives, the following "two-track" approach to a liability regime is proposed, with certain variants noted. On one track, damage from the transboundary movement of hazardous wastes conducted within the framework of the Basel Convention would be addressed under a "status quo" regime. Risks of environmental damage are posed by such movements, but these risks are willingly entered into by the exporter, the importer and the importer's government, presumably for economic gain. Thus, states considering whether to consent to the transit or import of hazardous wastes would need to assess the risks involved and the likelihood of recovery under existing domestic and transnational mechanisms if damage occurs. When these mechanisms are deemed inadequate, the importing state may choose (1) to avoid the risk entirely by banning the import, which under the Basel Convention requires the exporting state to deny its export; (2) to reduce the risk by restricting either the quantity or the quality of the import; (3) to control the risk by enhancing its internal monitoring and regulation of waste management; (4) to transfer the risk by requiring the importer or exporter to obtain adequate insurance, or by itself obtaining insurance;
movement of hazardous wastes. Rather, it targets a specific weakness in the Basel Convention in the belief that it

This approach is limited in ambition; it does not seek to clean up all sites of damage from the transboundary

illegal trafficking is highlighted as a special problem meriting special treatment.

Pollution ab initio is promoted by encouraging exporters to operate within the Basel Convention since they are not

channels of transboundary movements prior to entry into force of the Basel Convention if they violated the domestic notice-and-consent

requirements of the importing and exporting countries existing at that time.

Second, states would be obliged to eliminate jurisdictional and admissibility barriers in their courts to claims

brought against their exporters for damage from an illegal export of hazardous wastes. Access would be available to

vindicate claims by foreign nationals or by a foreign government acting on behalf of itself or its nationals.

Utilization of the exporting state’s courts is a burden to the victims and may create prejudice in favor of the exporter,

particularly if it is state owned or operated. Yet such use is calculated to secure jurisdiction over the exporter and its

assets, and to encourage exporting states to join the liability regime since they will not be subjected to unfamiliar

substantive or procedural laws of other states. Moreover, to the extent that a primary concern regarding the illegal

export of hazardous wastes is the flow from developed to developing states, the law of the former may award fuller

compensation for environmental damage. To ease the burden on victims, their government may bring suit on their

behalf.

Third, states would be obliged to ensure that, under their domestic law, the standard of liability applied by the

judicial or administrative proceeding will be strict, unlimited and channeled to the exporter of the state of origin in

the first instance, and to the generator in the second instance. Channeling strict liability to the exporting entity

provides it with strong incentives to bring the exports within the framework of the Basel Convention. Failure to

initiate the process of acceptance and monitoring of exports by transited or importing states properly engages the

responsibility of the exporting entity, regardless of whether the eventual damage is to some degree the fault of

another entity. Identifying a single responsible party in the first instance will prevent excessive litigation costs and

hasten settlements. Only when the exporter is insolvent, cannot cover the damage, or cannot be identified could

recourse be had against the generator. This secondary measure will increase the likelihood of recovery and give the

generator incentives to be sure to use a financially sound, responsible means for the disposal or recycling of its

wastes. Without this secondary measure, the incentives would be to establish sham exporters.

Finally, judgments would be enforceable against the assets of the exporter (or secondarily the generator) in the

courts of any other party to the protocol. Certain limited exceptions will likely be necessary, such as allowing the

enforcing court to inquire into whether the judgment was obtained by fraud, whether the defendant received fair

notice and opportunity to present a defense, or whether the judgment is inconsistent with an earlier judgment

involving the same cause of action and the same parties.

This two-track approach addresses each of the elements discussed in the previous section. Prevention of

pollution ab initio is promoted by encouraging exporters to operate within the Basel Convention since they are not

exposed to the level of liability imposed on those that operate outside the regime. Further, this approach encourages

importing countries to take seriously the act of consent to lawful movements of wastes and to develop internal laws

for the sound management of those wastes since they cannot rely on recovery through an international regime or

international fund. Illegal trafficking is highlighted as a special problem meriting special treatment.

This approach is limited in ambition; it does not seek to clean up all sites of damage from the transboundary

movement of hazardous wastes. Rather, it targets a specific weakness in the Basel Convention in the belief that it
will promote a rapidly achievable regime. Such a regime can be expected to appeal to a wide variety of states. States engaged primarily in exporting hazardous wastes will find it attractive because they will have established a "safe harbor" for their exporters; by following the requirements of the Basel Convention for notice and consent, exporters will not be exposed to an international liability regime, although they will continue to be subject to current municipal and international laws regarding transboundary damage generally. Exporters that do not operate within the framework of the Convention will be exposed to extensive liability, but exporting states parties to the Basel Convention have agreed that such persons are engaging in criminal activities and deserve to be held accountable. Exporting states will feel comfortable exposing the exporters to liability if the likelihood of abuse of legal process is curtailed by placing the resulting actions in the courts of those states. They will also approve of the fact that the regime does not inhibit international trade in transnational waste, but attacks illegal trafficking, an endeavor all states support. Further, they will favor its encouragement of all states involved in legitimate trade in hazardous wastes to adopt appropriate internal regulations to ensure the environmentally sound management of such movements.

Importing and transited countries would prefer a broader-based liability regime containing absolute or strict, joint and several liability, with no ceilings on compensation, applicable to damage from all imports (whether legitimate or illicit). Nevertheless, they might find equitable the argument that, by consenting to the import of hazardous wastes, they assume a risk that should not be ameliorated by an extraordinary liability regime. States not engaged in the international waste trade should find the regime attractive because the only damage likely to occur to them is from illegal trafficking; thus, hazardous wastes surreptitiously brought into the country would be subject to a clearly defined and enforceable liability regime. While those states might prefer the liability regime to provide for use of their own courts for suits against foreign exporters, such suits could still be brought outside that regime if the local court can obtain jurisdiction over the foreign exporter and its assets. The alternative approach will remain attractive, however, by breaking down barriers to suits against the foreign exporter in its own courts and establishing a standard of strict liability channeled directly to the exporter.

In some respects, this two-track approach is (perhaps subconsciously) already embedded in transnational liability regimes. Several of the negotiated private law regimes discussed above contain differential liability treatment depending on the behavior of the potentially responsible entity, presumably to encourage good behavior. For instance, the 1969 CLC imposes strict liability on the shipowner but subjects this liability to financial caps unless the pollution results from the shipowner's "actual fault or privity." Moreover, if the shipowner creates a fund sufficient to cover the limits of its liability, the claimant cannot claim against any other assets of the shipowner, e.g., through the arrest of its vessels. Thus, the potentially responsible entity is encouraged through different levels of exposure to participate responsibly in the regime.

The two-track approach is not free from problems. Wastes lawfully exported from state A to state B that cause harm to nontransited state C (which has not consented to the transboundary movement) are not covered by the negotiated private law regime. Damages cannot be recovered when the waste trade was illegal and the responsible exporter cannot be identified. If data on incidents of damage from the transboundary movement of hazardous wastes reveal that these are major concerns, the proposal may need to be modified, perhaps through the establishment of an international fund. The proposal, however, is calculated to achieve a consensus quickly, which more elaboration may jeopardize.

A more significant problem is to ensure that the distinction between legal trade and illegal trade is clearly defined. If they are not clearly distinguished, the incentives to join the regime described above may not materialize. The Basel Convention provides a sound basis for developing this distinction. Article 9(1) defines "illega traffic" as any transboundary movement of hazardous wastes or other wastes:
(a) without notification pursuant to the provisions of the Convention to the transited or importing states;
(b) without the consent of those states;
(c) with consent obtained from states through falsification, misrepresentation or fraud;
(d) that does not conform in a material way with the documents; or
(e) that results in deliberate disposal (e.g., dumping) of hazardous wastes or other wastes in contravention of the Convention or of general principles of international law.

The first four points should be relatively easy for a court to establish. Both notifications—which contain specific information set forth in Annex V(A), including the name of the exporter, the nature of the wastes and their volume—and consents are transmitted through government channels. The information to be provided on the movement document is set forth in Annex V(B), including the means of transport, the nature of the wastes, their volume and any special handling requirements. Point (c) bears an element of subjectivity and will be reliant on national law concepts of falsification, misrepresentation and fraud unless some type of international standard can be
developed in the protocol. Since the corresponding national standards vary considerably (e.g., whether fraud arises strictly, through negligence or only with specific intent), the development of an international standard might prove useful. The simplest might be a showing by the defendant that the transboundary movement did not conform in a material way to the notification given under Annex V(A). Under both points (c) and (d), the protocol should state whether the fraud or nonconformance must be materially connected to the damage that occurred. For instance, if an exporter notifies that it is shipping one hundred liters of one type of dioxin, but in fact exports one hundred liters of two types of dioxin, should this trigger liability under the protocol even if the damage did not result from the difference in dioxins? The last point, (e), is perhaps the most difficult; when the exporter complies with all aspects of the Convention and the importer deliberately dumps the waste, it does not seem appropriate in light of the above analysis to hold the exporter liable. Nevertheless, this issue does not seem to be an insurmountable obstacle to the conclusion of an effective international protocol. Further, since the claims will be adjudicated in the courts of the exporting state, the likelihood of abuse by claimants is low.

As stated above, this approach to a liability regime is open to variations, which can and should be considered, particularly once a sound data base is developed. For instance, the protocol could provide for enhanced cooperation among law enforcement agencies in detecting, monitoring and exchanging information on illegal trafficking, as well as obtaining evidence and witnesses for judicial or administrative actions. Such cooperation is now possible under the terms of the Basel Convention, but greater detail could be provided in a liability regime and would highlight the special problem of illegal trafficking.

It may be that the protocol in some way must deal with legal traffic as well. If so, options other than a full-blown liability regime should be considered, so as to preserve the differential treatment of legal and illegal trade. The protocol could oblige states that trade with one another to conclude more expansive, bilateral liability regimes that fit their legal systems. The United States and Canada have devised sophisticated, institutionalized procedures for resolving mutual environmental problems, such as the International Joint Commission (IJC) associated with the U.S.-Canada Boundary Waters Treaty. The IJC investigates, monitors, and serves as an arbitral tribunal for problems regarding environmental, particularly water, pollution.

Another option would be for the protocol to oblige states to establish internal institutions to decrease the likelihood of damage from legal traffic in hazardous wastes. For instance, several countries with well-developed environmental regimes have found that mechanisms for engaging the public in environmental affairs can help further the goals of regulatory and liability regimes. Through public participation, the potential costs of importing hazardous wastes are better integrated into governmental decisions; citizens are apt to challenge assertions of safety by those with economic interests in the waste trade. Thus, an international protocol could require parties to enact and implement public-oriented procedures, such as community right-to-know programs and environmental impact assessment plans. Such initiatives in international instruments are not unprecedented; for example, both Agenda 21 and the ECE Convention on Environmental Impact Assessment recognize public participation as a critical element in the pursuit of sustainable development.

Finally, parties to the Basel Convention could be obliged to ensure that their exporters are armed with a specified amount of insurance or other financial guarantee before engaging in the trade, so that claims pursued outside the protocol for damage from legal trade will at least not be frustrated by the inability to satisfy favorable judgments against a potentially responsible entity.

3. Notice and Consent Regimes and the Rule of Law

The Basel Convention of 1989, designed to regulate the transboundary transportation and disposal of hazardous wastes, illustrates the impact the economic gap between rich and poor nations has on international environmentalism. A noticeable difference of perspective between the two groups of nations emerged during the Convention negotiations. This difference, along with other economic and political factors, hampered the adoption of a meaningful and effective response to the hazardous waste shipment problem. The Organization of African Unity, echoing the views of Greenpeace, declared that no African countries would ratify the Basel Convention because it reinforces the irresponsible dumping of toxic waste on the Third World.

The wide economic gap between the industrialized, waste generating exporter nations and the poorer, waste importer nations accounts for their different perspectives on the hazardous waste transportation and disposal question. Even though their dire economic situation creates a strong incentive for the importation of hazardous waste, the developing countries sought a total ban on the trade of hazardous waste primarily because they lack sufficient management and disposal infrastructures and resources to handle the waste properly. The developing countries argued that inadequate capital resources, technology limitations, and weak government structure, coupled with strong financial incentives, would make them the dumping ground for industrialized countries and endanger the
health and safety of their populations.

The industrialized, developed countries favored regulation over prohibition. The United States, for example, strongly opposed prohibition, characterizing the transboundary shipment of hazardous waste as a free trade issue and arguing that prohibition would burden individual liberty and conflict with free trade and freedom of contract. The real reason for opposing the ban, however, was obviously the economics of hazardous waste traffic. Rising costs of hazardous waste management and disposal, stringent legal constraints, political pressure, and lack of suitable disposal sites make domestic disposal in the United States and other industrialized countries untenable. Meanwhile, a rather desperate need for foreign currency, along with weak governmental and legal structures, make poorer countries extremely attractive disposal sites.

In a larger context, the Basel Convention debate illustrates the impact of poverty on international environmentalism. Poverty and the level of economic development affect international environmentalism in at least two broad respects. First, because of limited resource bases and dire human needs, the poorer countries cannot afford to invest much on environmental protection. Thus, environmentalism receives a low priority and health and safety risks, such as those associated with hazardous waste imports and disposal, are overshadowed by basic human needs.

A less obvious connection between poverty and international environmentalism is the relationship between economic development and quality of government. Generally, poorer nations are characterized by autocratic, nonliberal regimes and the absence of the rule of law. Although the relationship between economic performance, governance, and the rule of law is subject to some dispute, the hazardous waste transboundary shipment phenomenon establishes a reasonably strong correlation between economic development and governance.

The role of economic disparity in international hazardous waste traffic is well documented, and it should suffice here to list the salient factors. First, the allure of money is by far the most important explanation for the increase in the movement of waste from industrialized to developing countries. Hazardous waste has become a commodity and a source of badly needed hard currency for many poor countries. Revenues derived from a single shipment of hazardous waste may be more than the average developing country can expect to earn annually through trade and other traditional sources. In one highly publicized case, the government of Guinea-Bissau was reported to have reached an agreement to dispose of toxic waste from Great Britain and Switzerland for $600 million, an amount far in excess of Guinea-Bissau's gross national product (GNP).

For the waste exporter, it is cheaper to export waste to a developing country than to dispose of it domestically. Stringent environmental regulations and disposal requirements, coupled with increased public environmental consciousness and activism, have driven the cost of domestic disposal beyond the financial capability of waste generators.\(^6\)

Second, in waste importing nations, the attraction of easy money engenders corruption, laxity in the enforcement of environmental regulations, and outright criminal activity. Rather than paying the national treasury of a waste importing nation for receiving waste, waste exporters often compensate individual government officials, including heads of state. Waste exporters are thus able to "make a better deal" by tempting government officials with the offer of personal benefits. The absence of government accountability and ineffective criminal law enforcement usually allow the waste exporters to operate unrestrained. The Koko Island incident in Nigeria, where a resident agreed to dump over 2,000 drums of Italian polychlorinated biphenyl (PCB) in his backyard for a mere $100 a month, illustrates the extent of the risks that developing countries may be willing to incur simply to earn a little badly needed money.

Third, the hazardous waste trade is characterized by deception and fraud. Because governments and individuals who import such waste lack the technology and expertise to independently evaluate the toxicity of the waste they agree to dispose, the deception goes undetected. In one highly publicized case of illicit trafficking of hazardous waste, toxic incinerator ash from Philadelphia languished on the high seas aboard the Khian Sea for over a year before being unloaded in Haiti as "fertilizer." Even after the Haitian government was alerted to the true contents of the waste and ordered its removal, some of the ash was apparently left behind without the government's knowledge. In the Koko Island case, the toxicity of the fraudulently labeled waste drums was not discovered until ten months after the dumping when the contents began leaking and local residents became sick.

Effective disposal of hazardous waste is also impeded by the lack of technology in developing countries. An effective disposal program requires an understanding of the nature and degree of waste toxicity and the availability of the most efficient and least harmful disposal method. Both elements require personnel with specialized scientific knowledge and testing and disposal equipment, which many poor developing countries cannot afford. Nigeria, for example, had to seek technical assistance from Great Britain and the United States to assess the damage and monitor the clean-up of the dump site on Koko Island. Haiti required similar assistance.
Fourth, poverty affects the priority that a government gives to environmental policy. Until very recently, international environmental efforts were resisted by governments in developing countries who viewed them as a form of "ecoimperialism" and as a conspiracy against economic progress in developing countries. This suspicion resulted from a common perception in developing countries that environmental degradation is an inevitable by-product of economic development, which in turn fueled the conspiracy theory that the proponents of environmentalism somehow do not want economic progress in developing countries.

In addition to the tension between environmentalism and economic development which pervades environmental debate in industrialized countries as well, developing countries give low priority to environmental issues simply because of financial constraints. The United States Department of Defense, for example, estimates that by 1993 it will cost nearly $2 billion to clean abandoned hazardous waste sites on military installations alone—an estimate that has grown quickly and may now be as high as $10 billion. Developing countries simply do not have that kind of money, and for many, the expenditure of scarce resources on environmental protection would seem hard to justify in view of other more pressing, basic human needs.

Poverty itself has been described as a form of environmental pollution in the sense that the very poor, the overwhelming majority in many developing countries, rely almost exclusively on their natural resources for survival. Increased pressure on natural resources leads to deforestation, soil erosion, and declining agricultural production, and creates a perpetual cycle of poverty and further environmental degradation. Superficially, of course, this is partly a population problem, but it seems apparent that the population of many developing countries appears excessive only in relation to their abysmal economic performance.

The concepts of governance and the rule of law connote a number of different and sometimes contested ideas, and it seems appropriate to try to define the sense in which they are used in this essay. Governance refers to the distribution and use of political power in a society. The distribution of power involves questions of who possesses power, how power is shared, and whether external restraints on the exercise of power exist. In a broad sense, the use of power is concerned with political institutions and structures and their decision-making processes. Good governance is generally defined as a power-sharing scheme in which power is not concentrated in any one institution or individual, but is exercised in accordance with clearly defined guidelines and objective restraints. In addition, good governance encompasses efficient use of resources, a broad-based power structure, and avenues for redress of government abuse.

Political legitimacy, loyalty toward and acceptance of a government's authority by its citizens, is also considered an essential element of good governance. In short, good governance contains the basic elements of a liberal democratic society.

The rule of law is an essential element of good governance. Although there are disagreements regarding the specific meaning of the concept of the rule of law, there is consensus on its broad outline. The rule of law is, above all, a political ideology; not ideology as a pejorative term of dogmatism, but in the purely descriptive sense of a particular world viewpoint.

It represents the concept of limited, nonarbitrary power: the idea that government derives its power from the governed and is thus limited to whatever power is granted to it and is accountable to the governed for the way it utilizes power. Furthermore, the governed have a right to participate in the process of government and to select and remove those who wield power through an open public process.

To underscore the notion of limited, nonarbitrary government, the rule of law requires that government power be exercised only in accordance with predetermined, non-retroactive, objective, and clearly defined rules. These rules fulfill the accountability requirement, and they become the validating basis for any power that the government exercises. To serve these various purposes, rules have to be well-defined and published in an identifiable source.\(^7\)

The rule of law also encompasses separation of power, the concept that the powers of making, interpreting, and applying rules not be concentrated in the same institution or individuals. There are different conceptions of separation of powers and, arguably, strict separation of powers does not exist in any political system. At a minimum, however, there is consensus that those who enforce rules should not also have the power to make the rules. Combining executive and legislative powers creates the danger of arbitrary rule. Likewise, a combination of judicial and executive powers would undermine the rule of law by denying independent and objective review of enforcement powers.

Finally, an independent judiciary with power to review the validity of rules and the legitimacy and reasonableness of rule enforcement is an indispensable element of the rule of law. Judicial review also safeguards against encroachments on fundamental individual liberties, and it polices the constitutional scope of power.

a. Governance, the Rule of Law, and Environmentalism

Public environmentalism is almost nonexistent in developing countries for both economic and political
reasons. From an economic standpoint, people who survive at a basic subsistence level have neither the time nor the inclination to worry about larger, aesthetic environmental issues. That is probably the primary reason why whatever environmentalism has been identified in developing countries is characterized most often as "basic needs" environmentalism.

Political conditions in the overwhelming majority of developing countries compound this predicament by discouraging and even suppressing public environmentalism. The "basic needs" environmentalism that is evident in developing countries is characterized by ad hoc, spontaneous reactions to desperate conditions, rather than calculated and sustained political actions aimed at long-term policy reform. Typically, the general population in developing countries is politically marginalized and will confront and make demands on the political establishment only when they are faced with conditions which threaten their very means of survival. Such episodic activism, confined to certain basic needs issues, has a minimal effect on general governmental environment policy and rarely, if ever, leads to lasting policy changes.

The existence of environmentalism in liberal democracies and its relative absence in developing countries underscore the relevance of governance to the international environmental campaign. In the United States, for example, public environmentalism has arguably the most important catalyst for the environmental reforms of the last twenty years and for elevating the environment to the top of the country's political agenda. Without the persistence of groups like the Public Interest Research Group, the Natural Resources Defense Council, the Sierra Club Legal Defense, and the National Environmental Law Center, to name just a few, environmental policy development and enforcement would have been far more modest in the United States. Great Britain only recently went from being perhaps the leading importer of hazardous waste, earning close to $1.2 billion in 1987, to a very marginal participant in the hazardous waste trade, because of tremendous public pressure on the government to halt the imports.

Public environmental awareness and activism have influenced environmental policy in both the United States and Great Britain largely due to conducive political and legal conditions. Guarantees of freedom of association and speech allow environmentalists to form advocacy groups to influence public opinion and government policy. Government accountability ensures that governments consider and respond in some manner to environmentalists' concerns. Access to government information is an important right and tool that is used to track activities injurious to the environment and to monitor government enforcement of environmental policy. Democratic institutions such as a free press and an independent judiciary assist environmental causes and coax governments into action. Above all, the power of the ballot has always been available to the voting public as a tool to make the environment a serious political issue. In the 1988 United States presidential campaign, for instance, the environment was clearly one of the most important issues. George Bush's self-proclamation that he was the "Environmental President" and the recurring symbolic references to the pollution of Boston Harbor illustrate the success of public environmentalism in shaping the national political agenda.

Effective environmentalism is virtually impossible without basic democratic conditions. Where there is little respect for individual liberty and freedom of association, people who would have an interest in the environment tend to shy away from creating environmental advocacy groups. In many developing countries, activism is not tolerated and, in some cases, is violently suppressed. Due to their level of education and amount of leisure time, the more affluent sector of the population in those countries is the group most likely to form the core of an advocacy group. This group, however, is dissuaded from participating in environmental advocacy because of the risk of being misbranded by the government as subversive, anti-government or agents of foreign governments.

Government business in developing countries is conducted in secrecy and an atmosphere of nonaccountability that impedes public environmentalism. Because the public has no access to information about government conduct, and a free press does not exist to report on government activities, there is little, if any, incentive for accountability. Therefore, the opportunities for misconduct or nonperformance of government responsibilities are increased. The significance of the free flow of information and a free press to environmentalism is well illustrated in the hazardous waste shipment cases.

As the Basel Convention appropriately presumes, effective waste management and disposal require a highly sophisticated regulatory regime and a well-developed legal system. Yet, most poor countries do not have that kind of regulatory regime, and their political systems do not support or facilitate effective regulation. The Basel Convention, therefore, is not likely to succeed in its attempt to regulate the safe transportation and disposal of hazardous waste.

The Basel Convention is a compromise between the developing countries' demand for a total ban on hazardous waste export and the industrialized countries' free trade position. Instead of prohibition, the Convention focuses on the safe transportation and disposal of hazardous waste. To achieve the goal of safety, the Convention heavily regulates all stages of transportation and disposal of waste through notification and consent. First, a potential waste
expert decision-making should be public and deliberative. The EPA, for example, is governed by the notice and democratic principles in enhancing the quality of policy decisions. One such ideal is the requirement that even not only out of homage to the purely abstract ideal of democratic government, but also because of the virtues of their small number, experts in developing countries are largely excluded from policymaking.

The political autonomy of regulatory agencies, on the other hand, needs to be tempered with democratic ideals. In countries with highly centralized and autocratic governments, environmental agencies, where they exist, typically have minimal autonomy and are frequently subject to political caprice. Although the tendency of politicians to tamper with expert scientific studies exists in the developed countries too, it is far more pronounced in the developing countries where there are no effective legal and political restraints on such excesses. In addition to politicians to tamper with expert scientific studies exists in the developed countries too, it is far more pronounced in the developing countries where there are no effective legal and political restraints on such excesses. In addition to their small number, experts in developing countries are largely excluded from policymaking.

The Basel Convention itself recognizes this deficiency, but it merely urges the developing countries to establish appropriate regulatory agencies. Without the proper political and legal infrastructure, however, it is highly unlikely that these countries will establish functional and effective regulatory agencies. To be effective, regulatory agencies need some measure of political autonomy so that they may utilize their expertise to formulate and implement policies with minimal interruption from other branches of government. It is imperative that such autonomy be recognized and respected by the executive, legislative, and judicial branches of the government.

In countries with highly centralized and autocratic governments, environmental agencies, where they exist, typically have minimal autonomy and are frequently subject to political caprice. Although the tendency of politicians to tamper with expert scientific studies exists in the developed countries too, it is far more pronounced in the developing countries where there are no effective legal and political restraints on such excesses. In addition to their small number, experts in developing countries are largely excluded from policymaking.

The political autonomy of regulatory agencies, on the other hand, needs to be tempered with democratic ideals. Not only out of homage to the purely abstract ideal of democratic government, but also because of the virtues of democratic principles in enhancing the quality of policy decisions. One such ideal is the requirement that even expert decision-making should be public and deliberative. The EPA, for example, is governed by the notice and
comment requirements of the United States Administrative Procedure Act, which requires notice of all intended regulations, amendments, and repeals and an opportunity for public participation in the rulemaking process. Although there is no additional requirement that administrative agencies should give any particular consideration to public comment, the notice and comment provisions clearly attempt to balance expertise with democratic principles.

In addition to the administrative rulemaking process, the EPA is also subject to congressional oversight. Oversight hearings allow Congress to monitor agency activities, permit public participation in the administrative process, and protect the public interest and compel agency action. Important environmental policy reforms in the United States have resulted from such hearings and accompanying congressional pressure and legislative actions.

As indicated earlier, there is no public participation in the decision-making process in most developing countries and no government accountability. Centralization of power also means that there is no equivalent of Congress to oversee the performance of agencies and compel action. As a result, agencies are likely to neglect their duties and betray their mission.

The EPA is required by federal administrative law to publish its regulations. Rule publication informs groups affected by regulations and thus, promotes compliance with the law. It also forms the basis of judicial review, which in turn ensures agency accountability. The publication requirement is perhaps one of the most crucial aspects of responsive administrative government because it facilitates objective review of the legitimacy and propriety of government action.

The law in most developing countries is either unpublished or poorly organized. Agency regulations in particular are virtually inaccessible to the public. It is elementary that without access to the text of regulations, it is almost impossible to challenge agency action. Agencies are provided a protective shield that breeds arbitrariness, hampers policy enforcement, impedes institutional accountability, and encourages secrecy, which in turn breeds corruption and abuse of authority. These are all characteristic features of governments in developing countries, which undoubtedly have profoundly adverse effects on their environmental policies and programs.

The absence of an effective, independent judiciary is also a serious impediment to enforcement of environmental policy. In the United States, judicial review arguably has played a pivotal role in the environmental policy progress of the last twenty years. Congress, in adopting the Administrative Procedure Act in 1946, intended courts to be a counterweight to the potential political monster of administrative government. In the environmental area particularly, the courts have taken this charge seriously and have played a significant role in the environmentalism of the 1970s. For example, by expanding the doctrine of standing, courts have enabled environmental groups such as the Sierra Club and the Natural Resources Defense Council to invoke judicial power to raise the nation’s environmental consciousness and to force the government to adopt responsible environmental policies.

In contrast, judicial review is one of the weakest aspects of government in the developing countries. The judiciary in most developing countries tends to assume a limited, apolitical role. This role is reminiscent of the nineteenth century perspective of the judiciary as subservient and limited to the fulfillment of political wishes. Judicial activism is also discouraged, and in some cases, judges have been reprimanded harshly for attempting to challenge the authority of the political branches.

For judicial review to be instrumental in environmentalism, someone has to be willing to perform the role of a “private attorney general” to seek judicial enforcement of environmental laws or to compel adoption of sound environmental policies. In nondemocratic societies, the public’s right to challenge governmental authority is not recognized, and no tradition of participation in the policymaking process exists. In fact, popular participation is discouraged at all costs. Consequently, there is no constituency for the environment to nudge the government into adopting and implementing sound environmental policy.

The Basel Convention is fundamentally flawed because it fails to address the legal and political deficiencies in the developing countries, yet, adopts a complex reporting, consent, and tracking scheme that is simply not viable in most developing countries.

Providing for technology transfers or assistance to developing countries in testing toxic shipments, as the Basel Convention mandates, is important but clearly inadequate as a long-term solution. Likewise, linking foreign aid to the adoption of environmental policies and environmental impact statements, or the increasingly popular debt-for-nature swaps, will have only a negligible effect on the environmental quality of developing countries. These proposals only address symptoms of the real problem which is poor governance and the absence of the rule of law.

International law has traditionally regarded a country’s political structure as a matter of absolute sovereign prerogative. With the advent of the political reforms in Eastern and Central Europe, however, it has increasingly become more politically acceptable to demand political liberalization. Indeed, there is no convincing reason why political conditions should be considered solely a domestic matter when it is these political conditions that create
legitimate international law issues such as human rights, refugee problems, international conflicts, and evidently, environmental concerns as well.

But how does one incorporate political liberalization into the international agenda? Admittedly, this is a daunting task and there are no easy solutions. It should also be noted that meaningful political reforms cannot be externally imposed but must come from within the developing countries. There are, nevertheless, some contributions that international law and the international community can make.

The first step would be to make political liberalization an international law issue by incorporating it into all programmatic international conferences. In the past there was a tendency, evident in the Basel Convention, to compromise international programs to the low quality of governance in developing countries and their low performance expectations. Clearly, such an approach is counter-productive and seldom solves any problems. A second step would be to make political liberalization a condition for international aid and grants and even for bilateral assistance. Finally, assistance to environmental groups in developing countries would help the environmental cause and also heighten general political consciousness.

B. DEBATE: Should States Be Liable for the Exportation of Hazardous Technology By Private Nationals?

1. Negative

REMARKS BY DANIEL MAGRAW

The activity of the International Law Commission most directly related to the transfer of hazardous substances and technologies is the Commission’s work regarding a rather serpentine topic with a somewhat cumbersome title: International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law (the “Liability Topic”).

The Liability Topic is based on two possibly conflicting policy considerations. On the one hand is the sovereign right of a state to be free to engage in activities within its own territories and with respect to its own nationals, and on the other hand is the duty of a state to exercise its rights in a manner that does not harm unreasonably the interests of other states, which includes a state's duty to regulate activities within its own territory. The broad goal resulting from the dichotomy is to allow as much freedom of choice to states as is compatible with adequately protecting the interests of other states. That goal is laudable, but it has proven to be difficult to realize.

The question that has prompted the most prolonged discussion in the deliberations of the Liability Topic concerns the scope of the topic. One issue concerns the desire by some developing country representatives to have the topic deal with export of hazardous products or production techniques from industrialized countries to developing countries. At one point, it seemed that such activities were to be included in the Liability Topic; it now seems that they will not be included and that the topic will be restricted to activities like physical use of natural resources.

That reduction in scope is reflected in draft article I: “These draft articles apply with respect to activities and situations which are within the territory or control of a State, and which do or may give rise to a physical consequence affecting the use or enjoyment of areas within the territory or control of any other State.” That definition includes three express limitations. First, there must be a transboundary effect, i.e., the topic concerns effects felt within the territory or control of one state, but arising as a consequence of an activity or situation occurring, wholly or partly, within the territory or control of another state. Second, there must be an element of physical consequence, i.e., the activity or situation in question must have a physical effect, the activity or situation must have a physical quality, and the effect must flow from that quality. Third, there must be an effect on use or enjoyment by the affected state, i.e., generally speaking, there must be a significant effect in the affected country. It is evident from the proposed article regarding scope that the term “territory or control” is of primary importance.

With respect to applying the Commission’s work on the Liability Topic to the Bhopal tragedy, the question to be addressed is whether the United States is liable for all or part of the harm that occurred in Bhopal. As indicated earlier, the scope of the Liability Topic is subject to three limitations. Taking them in reverse order, the requirement that the harm affect use or enjoyment in the affected state is satisfied by the deaths and personal injuries to private parties that occurred. Second, two aspects of the element of physical consequence are satisfied by the physical injuries resulting from the physical escape of the toxic gas. The third aspect of physical consequence probably is not satisfied; the effect did not flow internationally through a physical medium.

Whether the requirement that there be a transboundary element, i.e., that an activity or situation in a territory or control of one state cause harm in the territory or control of another state, is met is more difficult to establish.

The first step is to identify the activities in question. It appears that there are two types: (1) activity in India, with the United States being liable for a failure to control those activities; and (2) failure to regulate Union Carbide’s
activities in the United States, for example, in terms of training personnel and controlling Union Carbide's subsidiary, Union Carbide India, Ltd., or in terms of designing the plant that was put in place in India.

The second step is to determine whether either activity is within the territory or control of the United States. The view of Robert Quentin Quentin-Baxter, the Special Rapporteur of the draft articles of the Liability Topic, was that the territorial state is primarily accountable, which in this case would mean that at least with respect to activities in India, the United States would not be liable. Even with respect to the activities occurring in the United States, Quentin-Baxter might say that those activities should not be viewed as giving rise to international liability of the United States, based on an example he mentions of a developing-country branch of a corporation headquartered in an industrialized country. The lack of details of that example, however, make a clear answer impossible. (Quentin-Baxter, however, would quite possibly find joint liability between the United States and India vis-a-vis a third state, if the injury occurred to that third state.) Quentin-Baxter's rationale was apparently that it is most appropriate to put the liability on the ultimate territorial state (here, India) because that state has the most control and can insist at the outset on the initial source state (here, the United States) being liable if it desires.

Representatives from the Third World would object on many grounds. They argue, first, that the moral and political imperative to develop means that developing countries cannot refuse transfer of technology or foreign investment and thus cannot insist meaningfully on the source state being liable or sharing liability. Second, limits on the information available to a developing country from a multinational indicate that the state in which the multinational is headquartered is the most appropriate state to bear liability. Third, limits on technological and administrative expertise to evaluate information, monitor performance, draft adequate laws and administer and enforce those laws imply that the Bhopal situation should result in liability to the United States, because developing countries typically cannot exercise sufficient control.

These arguments exemplify a tension that has existed, and surfaced periodically, throughout the deliberations of the Commission, the Sixth Committee and the General Assembly thus far with respect to the Liability Topic. Some express the view that developing countries cannot protect themselves, as has just been described. Some take the view that a developing country has a duty to regulate within its territory and take account of the fact that developing countries do regulate in certain areas, e.g., there exist, and arguably should exist, some developing-country controls on pollution, safety requirements, and requirements to train and employ local personnel.

The tension just described is illustrated by the Bhopal situation. It has been argued that India (including the central, state, and local governments) is involved in various ways in the tragedy. The subsidiary owning and operating the plant from which the leak occurred is 49-percent locally owned. Local authority allegedly allowed the eventual victims to occupy vacant land around the plant, in violation of Indian environmental laws. The possibilities have been raised that local governments did not conduct adequate inspections and that there was governmental pressure to appoint personnel more qualified by political affiliation than professional competence.

Returning to a broader perspective, a consideration that must be taken into account in evaluating the conflicting viewpoints regarding the role of developing countries is that allocation of liability may have a significant effect in discouraging the amount and changing the nature of foreign investment in and technology transfer to developing countries. For example, allocating liability to the state in which the parent corporation is headquartered (or incorporated) would presumably cause that state to regulate more strictly all foreign investment and technology export—a result that could easily lead to decreasing those types of activities and thus to hampering developing countries' efforts to create employment opportunities, increase standards of living and decrease dependency on imports. Similarly, although on a different level, holding the parent corporation liable could be expected to decrease total foreign investment by increasing the risk of such investment. Such an allocation of liability might lead to exercise of greater care in supervising operations of foreign branches or subsidiaries, but it might also result in exporting only simpler or older and more thoroughly tested technology—a result that presumably would increase safety but that also could leave the developing countries' products unable to compete in export markets—or to a restructuring of foreign activities, e.g., toward licensing instead of direct investment. These and other policy considerations affect the calculus of allocating liability.

2. Affirmative

Should nations that export nuclear power plants to developing countries be potentially liable to the people of those countries for catastrophic accidents such as meltdowns of the plants themselves, substantial radiation leaks in the atmosphere, or irradiation of water and soil that could render uninhabitable or useless large areas of the receiving nation? At first glance, the fact that exporter and importer are sovereign nations—coupled with the underdeveloped state of international law in this field—suggests legal immunity for both. The failure of exporting nations even to consider relevant the question of the health and well-being of the population of the importer demonstrates the
psychological distance between present attitudes and international imposition of liability. The goal of this Article is to shorten that psychological distance—in advance of public necessity and in the hope of helping to avert catastrophic accidents. The risk of accident can be reduced if international law compels an upgrading of safety design and construction of nuclear plants. We suggest that international environmental responsibility of the exporting nation is neither far-fetched nor unlikely.

That the exporting nation (which we will call nation ‘E’) may have liability under international law to the population of the receiving nation (nation ‘R’) is a thesis that has been underappreciated in the burgeoning literature devoted to nuclear power safety. Most writers considering the topic of liability for nuclear plant accidents or emissions primarily address transboundary physical and environmental harm. Yet the most likely victims of nuclear disasters—the people of the nation in which the nuclear plant is located—have largely been overlooked. To be sure, many scholars would say that those people have no international claims and can only look to their own government for possible help. In this Article, we take a contrary position.

In this Article we will argue that exporting states bear a minimal responsibility for the safety of the population of developing countries from accidents caused by the nuclear technology exported to these countries by private entities within the exporting state. Such a responsibility exists, we contend, even if the governments of the importing nations demonstrate a lack of concern for their population’s safety in the name of ‘sovereignty,’ and even if they grant a waiver of responsibility to the exporting nation. This claim of state responsibility is a logical extension of the developing international law of human rights—a law that trumps the legal power of the exporter and the importer to jointly shield themselves from liability to individuals even if they execute intergovernmental waivers of liability.

a. The Possibility of International Legal Regulation: The Law of State Responsibility

A state is responsible under international law for injury to a national of another state caused by an official act or omission that violates

(a) a human right that, under § 701, a state is obligated to respect for all persons subject to its authority;

(b) a personal right that, under international law, a state is obligated to respect for individuals of foreign nationality; . . .

This proposition obviously could be applied to nuclear exports, provided that the injured nationals in R have a personal right under international law that has been violated by E. The claim of those individuals, in accordance with the Restatement’s rule, would be that E wrongfully omitted to ensure that its nuclear exports met certain standards of safety. Because the exports failed to meet those standards, a nuclear accident occurred which resulted in harm to the individuals residing within R.

This summary statement, however, is tautological. The question we address in this paper is do those individuals have such a right that is protected by international law? And it, in turn, gives rise to a threshold inquiry: does the ‘territorial’ principle in international law stand as an insuperable barrier at the very outset of our analysis?

Territoriality is nearly synonymous in the minds of many writers with the doctrine of state responsibility, upon which we shall ground our argument. This doctrine traditionally has two faces; it absolves a state from liability for acts occurring outside its boundaries, but holds a state responsible for the external effects of acts commenced within its boundaries. It may strike some as surprising, therefore, that the comments and reporter’s notes to the above-quoted Restatement section do not specify that an injury to the national of another state must take place in the injuring state. We shall argue that the reporter’s failure to specify which territory is at issue is indeed a proper modern interpretation of the doctrine of state responsibility for two reasons. First, the location of the harm is not intrinsic to the doctrine of state responsibility even as classically conceived. Second, developments in areas of international human rights law have eroded the classical reason for territoriality, at least when fundamental human rights are implicated.

b. Principles of State Responsibility

The doctrine of state responsibility is composed of two fundamental principles. Under the first, the principle of the international minimum standard of treatment, aliens are entitled to a certain minimum standard of treatment that is invariant across international frontiers. Under the second principle of state responsibility, nonnationals may not be discriminated against in their basic human rights as compared to the treatment of nationals.

(1) International minimum standard of treatment

The principle of the international minimum standard of treatment stands for the proposition that nonnationals
are entitled to a certain minimum standard of treatment by the host state. This principle evolved from the norm referred to as 'denial of justice,' applied in egregious cases involving gross denials of justice: denying the accused the right to defend himself, not allowing the accused to call witnesses in his own behalf, double jeopardy, and control of the tribunal by the executive. Later cases transmuted the 'denial of justice' norm into 'ordinary standards of civilization' and extended it beyond the courtroom.12

The cases illustrate a gradual broadening of the principle of the international minimum standard of treatment from its genesis in the earliest egregious examples of denial of justice to the more inclusive doctrine now known as the international minimum standard of treatment of nonnationals. The principle is still limited by a certain notion of nondeprivation of `justice' to such persons, but the concept of `justice' itself has been expanded, in accordance with gradually evolving norms of responsibility to others. Its content is no longer confined to the judicial context, but can now embrace legislative and administrative denials of justice. The term `justice' is gaining content as the international community perceives a greater degree of civilized treatment as part of its standard conception of `justice.'

(2) Standard of nondiscrimination

In conjunction with the principle of the international minimum standard of treatment, the law of state responsibility has from the outset included a second principle--that of nondiscriminatory treatment of nonnationals. This standard was never meant to accord nonnationals the same rights and privileges accorded citizens. But it has had the operative effect of raising the rights of aliens, because if the level of treatment accorded an alien falls significantly below the level of national treatment, the alien can claim a denial of justice. Hence, due to the relationship between the nondiscriminatory standard and the international minimum standard, an alien is entitled to whichever standard is higher.

c. Extraterritorial Application of State Responsibility: The Threshold Question

(1) No doctrinal limitation to territorial harms.

There is nothing intrinsic to the doctrine of state responsibility that confines it to territorial applications. Vattel, generally credited with first articulating the doctrine, wrote in 1785 that:

`Whoever uses a citizen ill, indirectly offends the State, which ought to protect this citizen, and his sovereign should revenge the injuries, punish the aggressor, and, if possible, oblige him to make entire satisfaction; since otherwise the citizen would not obtain the great end of the civil association, which is safety.'

Under this classical view, the harm to the nonnational becomes an injury to the nonnational's state. Under the modern law of human rights, however, the injury to the state is seen as an unnecessary addition to the individual's claim.14 Yet, under either the classic or the modern view, what is striking is what is omitted: the requirement that the harm occur in the offending state's territory.15

To be sure, the doctrine of state responsibility has been implicitly tied to a state's territory through the argument that the doctrine is necessary to equip the nonnational with the protection afforded the national through his participation in the political process. The publicist Edwin Borchard noted that `it has been argued that one reason why the alien is not bound to submit to unjust and unredressed treatment equally with nationals is because the latter is presumed to have a political remedy, whereas the alien's inability to exercise political rights deprives him of one of the principal safeguards of the citizens.'16 This argument might suggest that an alien needs legal safeguards in a foreign territory precisely because he is denied a political voice. Yet, upon analysis, the argument does not necessarily confine itself to aliens within the host country's territory. An alien outside the host country's territory harmed by the host country is equally unable to exert a political voice; indeed, he may even be more disabled than an alien who is within the nation's territory (who might presumably have the political `clout' of association with ethnic groups, some of whom are naturalized citizens, as well as the `clout' of his own nation's consular office).

Hence Borchard's distinction does not justify drawing a line at a nation's boundary.

Under a more modern reformulation of the law of state responsibility, it is apparent that what is significant is whether the acts that cause harm to an alien are attributable to the state. Although the judicial precedents typically involve acts that occur within the territory of the state, it is clear that the location of the acts is unimportant compared to the need for attribution to the state. A state may, for example, act outside its own territory, as when its agents abroad maltreat a nonnational. Although the location of the acts constituting a tort is significant in terms of choice-of-law questions, these questions come up only when the issue concerns which national tort law to apply. However, because international law is not a choice-of-law system, it inherently applies equally to all nations, and the location of tortious acts is irrelevant. Hence, focusing upon the attribution of the acts rather than their location seems necessary given the nature of international law; to do otherwise would be to introduce illogical distinctions that would tend to destroy any claim that international law has total universality.
On the other hand, Rawls’s moral imperatives call for an expansion of effect that logically could not stop at a same as the rights of individuals within states. Rights of persons in a just society and the rights of states in a just international society, for states’ rights are not the

Suddenly he is discussing states as if they were persons. As a result, there is a tension in Rawls’s work between the international law, he unaccountably shifts from a discussion of persons to a discussion of representatives of states.

Justice, analyses to particular states or societies. The leading modern example is John Rawls, who in his A Theory of

Nevertheless, social-contract notions continue to cause problems for advocates of transnational justice, if only for the philosophically contingent circumstance that theorists of the social contract have tended to confine their analyses to particular states or societies. The leading modern example is John Rawls, who in his A Theory of Justice, written in 1971, invokes social contract ideology to explicate justice obligations among citizens within a single society. To be sure, his conception of the `original position,’ in which persons argue for their mutual rights and obligations without knowledge of the social position into which they will be born, could be considered to be equally consistent with lack of knowledge of what country into which they will be born. But when Rawls addresses international law, he unaccountably shifts from a discussion of persons to a discussion of representatives of states. Suddenly he is discussing states as if they were persons. As a result, there is a tension in Rawls’s work between the rights of persons in a just society and the rights of states in a just international society, for states’ rights are not the same as the rights of individuals within states.

On the other hand, Rawls’s moral imperatives call for an expansion of effect that logically could not stop at a
nacht's edge. This is evidenced by his characterizations of the universal traits of persons (which he calls `moral
sentiments') and his axiom of the universality of principles: `[P]rinciples are to be universal in application. They
must hold for everyone in virtue of their being moral persons.'

Given this tension in Rawls's theory, is there any way to interpret it as addressing the question of whether
there is an obligation upon persons or states to do justice internationally? Charles Beitz suggests an interesting
approach.27 Professor Beitz points out that Rawls regards justice as applying in situations where benefits and
burdens are produced by `social cooperation.' But because people within society may not always cooperate in social
activity, and each person is not necessarily always advantaged by social activity, Beitz reformulates Rawls's baseline
textual requirement as follows: `[T]he requirements of justice apply to institutions and practices (whether or not
they are genuinely cooperative) in which social activity produces relative or absolute benefits or burdens that would
not exist if the social activity did not take place.' Beitz's reformulation persuasively captures the philosophic
underpinnings of Rawls's prescriptions. It is a functional, as opposed to a categoric, definition of the social
interactions that Rawls posits as the unit for social justice. As such, it clearly encompasses transboundary relations
so long as they in fact produce benefits or burdens that would not exist absent the social activity.

Obviously, the degree to which nations interact will then be a critical determinant of the scope of the justice
obligation. Nations that share a common boundary, that constantly exchange goods, services, and visitors, and
maintain a high degree of mutual investment in each other's industries, will under this analysis have a much higher
degree of duty to do justice than nations that are only casual trading partners. This higher degree can indeed
approach a duty of distributive justice for which Professor Beitz has argued.

But is such a high level of sacrifice, as exemplified by distributive justice, necessary in state relations under
Beitz's theories? The answer seems to be no. One of the bedrock conceptions of justice, emphasized by Aristotle
and institutionalized in all of the world's legal systems, is compensatory justice: the requirement that a person who
causes injury to another owes that other person financial compensation.28 In every legal system of which we are
aware, this principle of justice forms the basis for private lawsuits. Its pervasiveness and fundamentality are
manifest. The question is, however, when does compensatory justice apply?

Since the notion of compensatory justice is far more elementary than the notion of distributive justice, and
since it requires far less in the way of individual sacrifice (indeed, one might argue that it involves no sacrifice at all
because it is merely compensatory for an advantage taken that harmed another), the level of social interaction upon
which such a duty of compensatory justice may be based is far lower than that which would give rise to a duty of
distributive justice. Indeed, applying Professor Beitz's analysis of the basis of the social-contractarian system, the
social activity of the sale of goods (here, the export of nuclear power plant technology) necessarily produces relative
or absolute benefits or burdens that would not exist if the social activity did not take place. If that social activity is
not taken to give rise to the strong obligation of distributive justice advocated by Beitz, at the very least it gives rise
to the weak obligation to render compensatory justice.

Arguably, even a single export of a nuclear power plant from E to R invokes Beitz's relationship theory.
Because of the magnitude of potential harm resulting from malfunction of the technology, the people of R are in a
particularly dependent relationship with E; their safety and their lives are potentially in E's hands. In this respect,
nuclear power plant exports are distinguishable from most other exports. Even a single export of a nuclear power
plant carries with it a greater social responsibility than would a stream of exports of household appliances or
television sets.

We have thus argued that the very act of import-export creates a relationship between the parties that on a
social-contractarian view of justice--and certainly upon an Aristotelian view--gives rise to expectations of, and a
duty of, doing justice, at the very least in the minimal form of compensatory justice. The obligation to compensate
the purchasing party for damages resulting from the installation and use of a dangerous product (a nuclear power
plant) is an obligation within the modern and generally accepted notion of `justice.' Thus, it would be a denial of
justice not to furnish compensation to an injured party in appropriate circumstances.

What would be appropriate circumstances is not a matter of legal or moral philosophy, but rather is a matter of
the application of the customary international law of state responsibility to the exportation of nuclear power plant
technology.

FOOTNOTES CHAPTER 9

1 Katharina Kummer, The International Regulation of Transboundary Traffic in Hazardous Wastes: The 1989
permission.
There is some dispute whether the mere existence of rules is sufficient for rule of law, or if there is also a content requirement. An instrumentalist conception of the rule of law would suggest that content is not a necessary requirement. See Raz, *The Rule of Law and Its Virtue*, in *The Authority of Law* 210, 211 (1979) ("A non-democratic legal system, based on the denial of human rights, on extensive poverty, on racial segregation, sexual inequalities, and religious persecution may, in principle, conform to the requirements of the rule of law better than any of the legal systems of the more enlightened Western democracies.").

A substantive conception, on the other hand, maintains that content is important because fairness and liberty are the goals of the rule of law. See, e.g., J. Rawls, *A Theory of Justice* 241 (1971) ("The dangers to liberty are less than when the law is impartially and regularly administered in accordance with the principle of legality.").


See *e.g.*, Neer Case (U.S. v. Mex.), 4 R. Int'l Arb. Awards 60 (1926) (term extended to lack of adequate police protection of aliens). The quoted phrase is derived from the separate concurrence of Commissioner Fred K. Nielsen. Id. at 65.


16 Borchard, The Law of Responsibility of States for Damages Done in Their Territory to the Person or Property of Foreigners, 23 AM. J. INTL L. 140, 149 (Supp. 1929).


18 Cf. D’Amato, Lon Fuller and Substantive Natural Law, 26 AM. J. JURIS. 202, 204 (1981) (discussing ‘substantive natural law’ which holds that there are certain absolutes in law).

19 See W. F. HARDIE, ARISTOTLE’S ETHICAL THEORY (1980).


25 Id. at Book II, ch. IV, § 56, at 155.


28 For an excellent historical analysis, see Posner, The Concept of Corrective Justice in Recent Theories of Tort Law, 10 J. LEG. STUD. 187 (1981).