KEEPING AFRICA OUT OF THE GLOBAL BACKYARD: A COMPARATIVE STUDY OF THE BASEL AND BAMAKO CONVENTIONS

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I. Introduction

In 1988, Nigerian officials discovered eight hundred open drums, containing eight million pounds of unprotected industrial and nuclear waste, in a local resident's backyard. An Italian exporter, without disclosing the contents of the drums, had rented the lot from the owner for \$100 a month. By the time the barrels were discovered, they had already leaked into an adjacent river. Some of the barrels were dumped by residents and used to store drinking water. The waste plagued the local population; residents suffered chemical burns, paralysis, premature births, and fatalities.

In 1992, Italian and Swiss companies exploited the anarchic violence in Somalia by securing an \$80 million, twenty-year contract for dumping toxic wastes.⁶ The contract was signed by the Somali Minister of Health, yet at the time, none of the warring factions truly held power in the wartorn, famine-stricken nation.⁷

In 2000, South Africa agreed to import 60 tons of hazardous waste from Australia.⁸ Environmentalists in both countries responded in outrage, proclaiming, "Australia's export of hazardous waste to South Af-

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¹ Fred L. Morrison & Wm. Carroll Muffett, *Hazardous Waste, in* International, Regional, and National Environmental Law 409, 418 (Fred L. Morrison & Rüdiger Wolfrum, eds., 2000).

² *Id*.

 $^{^3}$ Id.

⁴ *Id*.

⁵ Id. See Lillian M. Pinzon, Criminalization of the Transboundary Movement of Hazardous Waste and the Effect on Corporations, 7 DEPAUL BUS. L.J. 173, 176 (1994); Sylvia F. Liu, The Koko Incident: Developing International Norms for the Transboundary Movement of Hazardous Waste, 8 J. NATL. Res. & Envil. L. 121 (1993).

⁶ Hao-Nhien Q. Vu, Comment: The Law of Treaties and the Export of Hazardous Waste, 12 UCLA J. Envtl. L. & Pol'y 389, 390 (1994).

⁷ Id.

⁸ Anger Over Import of Hazardous Waste, Panafrican News Agency, Sept. 18, 2000.

rica reveals this country's total disregard to the people and environment of South Africa."

These distressing stories are examples of a global phenomenon that has been called "the 'not in my back yard' (NIMBY) principle writ large:"10 nations benefiting from modern economic and scientific developments, unwilling to bear the environmental burdens of their economic activities, have often sought to shift those burdens to nations that reap none of the benefits." The world's waste consequently rushes toward poor, developing nations "like water running downhill."12

As hazardous waste management becomes an increasingly globalized business, multilateral regimes have emerged to regulate the potential environmental effects of improper practices.¹³ The 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention)¹⁴ has been ratified by 149 states and the European Union. 15 The Bamako Convention on the Ban of the Import Into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa (Bamako Convention) was drafted by the Organization of African Unity (OAU) in 1991.16 It came into force on April 22, 1998 upon its tenth state ratification.¹⁷ As of April 28, 2002, it has been ratified by eighteen African states. 18 As their titles indicate, these instruments share the common goal of controlling the movement of hazardous wastes across national borders. They differ in some substantial aspects, however. This paper will compare and contrast the Bamako and Basel Conventions, and examine the viability of each as an instrument to protect the environmental wellbeing of the African continent.

⁹ *Id.*

¹⁰ Morrison & Muffett, supra note 1, at 409.

¹¹ Id at 400

¹² Hugh J. Marbug, Note, *Hazardous Waste Exportation: The Global Manifestation of Environmental Racism*, 28 VAND. J. TRANSNAT'L L. 251, 282(1995).

¹³ Organization For Economic Co-operation and Development, Trade Measures in Multilateral Environmental Agreements 100 (1999) [hereinafter OECD].

¹⁴ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, U.N. Doc. UNEP/WG.190/4, UNEP/IG.80/3 (1989), *reprinted in* 28 I.L.M. 657 (1989) [hereinafter Basel Convention].

¹⁵ Basel Convention List of Ratifications Website (visited April 25, 2002) http://www.basel.int/ratif/ratif.html> [hereinafter Basel Ratifications].

¹⁶ Bamako Convention on the Ban of the Import Into Africa and the Control of the Transboundary Movement and Management of Hazardous Wastes Within Africa, *reprinted in* 30 I.L.M. 775 (1991) [hereinafter Bamako Convention].

¹⁷ Center for Human Rights, University of Pretoria Website (visited April 27, 2002) http://www.up.ac.za/chr/ahrdb/statorat_12.html [hereinafter Center for Human Rights].

¹⁸ *Id*.

Though regional agreements such as the Bamako Convention have sometimes been dismissed as merely hortatory, ¹⁹ such assessments overlook the fact that regional agreements can play an arguably more significant symbolic role. This paper proposes that, insofar that the Bamako Convention is a legal instrument drafted uniquely by and for the African region, it symbolizes the proclivity of African states to act regionally in preventing the export of hazardous waste to the African continent. To African nations, the Bamako Convention symbolizes their power to act collectively in the post-Cold War era where Africa's geo-political stock has devalued, and its former stockbrokers are no longer interested in finding new ways to proactively reinvest.²⁰

Part II of this paper explores international trade in hazardous waste. Part III analyzes the history and regulatory emphasis of the Basel Convention. This section will then examine the shortcomings and strong points of the Basel Convention. Part IV correspondingly examines the relative merits and weaknesses of the Bamako Convention. Part V revisits the question of the efficacy of the Basel and Bamako Conventions, this time not as individual multilateral environmental treaties, but as complements to each other and as symbols of Africa's desire to protect its fragile resources from outside exploitation.

II. INTERNATIONAL TRADE IN HAZARDOUS WASTE

While the percentage of hazardous waste generated by industrialized countries that crosses an international border is small,²¹ international trade of hazardous wastes is nonetheless a big business. United States industries export over 160,000 tons of hazardous waste each year.²² Trade in hazardous waste is likely to increase in the future, as industrialized nations are faced with increasingly stringent environmental regulations and shrinking landfill capacity, and quantities of hazardous waste continue to grow.²³

The scarcity of waste disposal sites and the increasing cost of disposal provide an economic incentive for companies in the industrialized

¹⁹ CarrieLyn Donigan Guymon, International Legal Mechanisms for Combating Transnational Organized Crime: The Need for a Multilateral Convention, 18 Berk. J. Int'l Law 53, 77 (2000).

²⁰ Jeremy Levitt, Conflict Prevention, Management, and Resolution: Africa – Regional Strategies for the Prevention of Displacement and Protection of Displaced Persons: The Cases of the OAU, ECOWAS, SADC, AND IGAD, 11 DUKE J. COMP. & INT'L L. 39, 40 (2001).

²¹ OECD, supra note 13, at 100.

²² Daniel Jaffe, Note, *The International Effort to Control the Transboundary Movement of Hazardous Waste: The Basel and Bamako Conventions*, 2 ILSA J. INT'L & COMP. L. 123, 125 (1995).

²³ OECD, supra note 13, at 100.

world to export their waste.²⁴ While disposal of a ton of waste can cost as much as \$2500 in the United States, the same waste can be disposed in a less developed nation for as little as three dollars a ton.²⁵ As environmental regulations in industrialized nations become more stringent and comprehensive, this economic incentive correspondingly increases.²⁶ Two major legal regimes governing hazardous waste disposal in the United States, the Resource Conservation and Recovery Act (RCRA)²⁷ and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)²⁸ both present incentives for domestic industries to export hazardous wastes.²⁹

RCRA's regulations governing waste disposal in the United States are so lengthy and time-consuming that courts have described them as "mind-numbing." RCRA includes a number of enforcement mechanisms and citizens' suit provisions applicable to domestic waste disposal activities. All of these elements increase the costs and difficulties associated with waste disposal in the United States. Because RCRA does not address disposal of waste in other countries, United States waste generators can circumvent RCRA's oversight by exporting hazardous waste outside the United States.

CERCLA provides similar incentives to dispose of hazardous waste outside of the United States' jurisdiction.³³ CERCLA's fearsome joint and several liability regime, which has been described as "a black hole that indiscriminately devours all who come near it,"³⁴ is so severe that a generator of waste may seek to export wastes as a means of reducing litigation concerns.³⁵ CERCLA's liability scheme, however, does not ap-

²⁴ Jaffe, supra note 22, at 124.

²⁵ Id.

²⁶ Id.

²⁷ Resource Conservation and Recovery Act of 1976, 42 U.S.C.§§ 6901-6991 (1976) [hereinafter RCRA].

²⁸ Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675 (1994) [hereinafter CERCLA].

²⁹ Theodore Waugh, Where Do We Go From Here: Legal Controls and Future Strategies for Addressing the Transportation of Hazardous Wastes Across International Borders, 11 FORDHAM ENVIL. LAW J. 477, 490, 497-96 (2000).

³⁰ *Id.*, *See* American Mining Congress v. EPA, 824 F.2d 1177, 1189 (D.C. Cir 1987). (describing the circuitous analysis of RCRA as a "mind-numbing journey").

³¹ *Id*.

³² Id.

³³ Id. at 496.

³⁴ Long Beach Unified School District v. Dorothy B. Godwin California Living Trust, 32 F.3d 1364, 1366 (9th Cir. 1994).

³⁵ Waugh, supra note 29, at 496.

ply to releases in foreign countries even if the release resulted from a hazardous substance exported from the United States.³⁶

The United States, along with other industrialized nations, is in an economic position to manipulate less developed nations to its advantage: industries in the northern hemisphere funclear—does this refer to North America? are willing to pay generous fees to developing nations in return for an agreement to import their hazardous waste. 37 This would appear to be the archetype of supply and demand economics; industrialized nations have capital and need a place to dump their waste while developing nations lack capital and have the room to store the waste.³⁸ The transboundary movement of hazardous waste, however, produces externalities that can outweigh economic benefits.³⁹ When hazardous waste is moved from an industrialized nation to a developing one for disposal purposes, the externalities of environmental degradation and risk to human health are traditionally borne solely by the importing nation. Industrialized nations have nonetheless continued to export hazardous waste to less developed nations, in spite of the fact that the importing nations cannot adequately manage the waste or maintain sufficient environmental and health standards.40

The consequences of improper management of hazardous wastes to a nation's environment and to the health of its citizens can be disastrous. When hazardous wastes are improperly handled, they may leach into soil and groundwater and concentrate in food chains.⁴¹ While knowledge on the health and ecological impacts of hazardous substances is limited, case studies indicate that community exposure to hazardous waste is linked to increases in leukemia, kidney cancer and respiratory disorders.⁴²

III. THE GLOBAL RESPONSE - THE BASEL CONVENTION

The Basel Convention is the most significant and influential international agreement regulating trade of hazardous waste.⁴³ The Basel Convention was born from the view that industrial nations in the northern hemisphere were exporting hazardous wastes to developing nations in

³⁶ CERCLA, *supra* note 28, at §9601(8) and §9601(22) (defining the terms "environment" and "release" in a manner that limits liability to releases into the navigable waters or territories under the jurisdiction of the United States.).

³⁷ Jaffe, supra note 22, at 125.

³⁸ Id.

³⁹ *Id*.

⁴⁰ See e.g, Anger Over Import Of Hazardous Waste, supra note 8 (describing outrage by international and South African environmental groups over South Africa's agreement to import 60 tons of toxic waste from Australia).

⁴¹ OECD, supra note 13, at 98.

⁴² Id.

⁴³ Waugh, supra note 29, at 503.

the south that were incapable of effective waste management.⁴⁴ Public reaction to the threat posed to the environment of developing states by the illegal import of hazardous wastes from industrialized nations shifted focus from the reality that the vast majority of international waste transport takes place between industrialized nations.⁴⁵ Nevertheless, this shift in focus may not have been detrimental; public reaction to widely publicized media reports of nefarious dumping of toxic wastes by industrialized nations in developing States⁴⁶ provided a nucleus of dissent to the global (NIMBY) principle.

The Basel Convention needed ratification by twenty countries in order to become effective.⁴⁷ This is a relatively small threshold compared to many multilateral treaties. For instance, the Rome Statute of the International Criminal Court required sixty country ratifications in order to come into force on July 1, 2002.48 Nonetheless, ratification of the Basel Convention took over three years. 49 In roughly the same period of time, the Rome Statute generated three times the ratifications of the Basel Convention. 50 Except for Nigeria, member states of the Organization of African Unity (OAU) did not initially ratify the Convention, largely because it failed to impose an outright ban on transboundary waste transport.⁵¹ Ironically, industrialized nations such as the United States, Japan, and Canada were slow to ratify the Convention for exactly the opposite reason; they believed the Basel Convention would unduly constrain legitimate trade in hazardous waste.⁵² While Japan and Canada have both since ratified the Convention, the United States has not.53 Despite initial opposition to the instrument, thirty-five African nations have ratified the Basel Convention.54

A. Basel's Aim

The Basel Convention represents a compromise between industrialized and developing nations; consequently, the Convention regulates

⁴⁴ Trade in Hazardous Wastes and Technologies, in International Environmental Law Anthology 153, 154 (Anthony D'Amato and Kirsten Engel eds., 1996) [hereinafter D'Amato & Engel].

⁴⁵ OECD, supra note 13, at 98; see also D'Amato & Engel, supra note 44, at 154.

⁴⁶ D'Amato & Engel, supra note 44, at 154.

⁴⁷ Basel Convention, supra note 14.

⁴⁸ Website of the Rome Statute of the International Criminal Court http://www.un.org/law/icc/ (visited April 27, 2002).

⁴⁹ Vu, *supra* note 6, at 410.

⁵⁰ The Rome Statute on the International Criminal Court was drafted on July 17, 1998.

⁵¹ Vu, *supra* note 6, at 410.

⁵² D'Amato & Engel, supra note 44, at 176.

⁵³ Basel Convention Website (visited April 25, 2002) http://www.basel.int>.

⁵⁴ Basel Ratifications, supra note 15. 35 nations listed on website as of 10/10/02.

rather than bans exports of hazardous wastes.⁵⁵ The underlying policy goals of the Convention are safe disposal and minimization of transboundary transport of hazardous wastes.⁵⁶

Article 4 of the Basel Convention provides a general framework for state behavior in hazardous waste management.⁵⁷ State parties are obliged to conduct the transportation and disposal of hazardous waste in an "environmentally sound manner."⁵⁸ States are required to take "appropriate measures" to reach these goals, but they are left to determine the exact nature and extent of such actions.⁵⁹ While providing guidance for the conduct of States in that context, Article 4 does not contain absolute obligations.⁶⁰

Although these provisions promulgate valuable global standards for the protection of the environment against adverse effects of hazardous wastes, ⁶¹ they are nonetheless beset with ambiguities. Not only do the provisions fail to define "environmentally sound" management, but they also leave a number of other equally important provisions to the discretion of the states. ⁶² For instance, the provisions are silent in regard to the extent of the generating State's duty to ascertain the adequacy of disposal facilities in the prospective importing state and the allocation of the burden of proof for the permissibility of export. ⁶³

B. Key Provisions

Prior Informed Consent

The Basel Convention allows transboundary movement of hazardous waste, but requires that it must be carried out in accordance with the Convention's regulatory regime of prior informed consent.⁶⁴ Exporters must notify receiving countries of intended hazardous waste shipments.⁶⁵

⁵⁵ Vu, *supra* note 6, at 411.

⁵⁶ *Id*.

⁵⁷ D'Amato & Engel, supra note 44, at 155.

⁵⁸ Basel Convention, supra note 14, Art. 4.

⁵⁹ *Id*.

⁶⁰ *Id*.

⁶¹ *Id*.

⁶² Id.

⁶³ Id

⁶⁴ Basel Convention, *supra* note 14, Art. 4, para 1(c) ("Parties shall prohibit or shall not permit the export of hazardous wastes and other wastes if the State of import does not consent in writing to the specific import, in the case where that State of import has not prohibited the import of such wastes."); Basel Convention, *supra* note 14, Art. 4, para 2(f) ("Each party shall take the appropriate measures to require that information about a proposed transboundary movement of hazardous wastes and other wastes be provided to the States concerned, according to Annex VA, to state clearly the effects of the proposed movement on human health and the environment.").

⁶⁵ Basel Convention, supra note 14, at Art. 6, para. 1.

The notification must specify all the countries through which the waste will travel. 66 The receiving nation has a number of options: it may accept the offer, reject it, solicit additional information, or accept the request with stipulated conditions. 67 In any case, the exporting nation must not ship the waste until it gets consent and a disposal contract that provides for "environmentally sound management" of the wastes. 68 A state party may not import or export wastes with nonparty states unless a separate disposal agreement that satisfies the environmentally sound management standard has been established. 69 A violation of any of these provisions requires the exporting State to recover its wastes from the receiving country. 70

In addition to these requirements, the parties to the Basel Convention proposed an amendment ("Decision III/1") in 1995.⁷¹ Decision III/1 prohibits state parties of the Organization of Economic Cooperation and Development (OECD) from exporting hazardous wastes to non-OECD countries.⁷² This amendment, commonly called the "Basel Ban," was created largely due to a strong push by African nations, none of which are OECD member countries.⁷³ The amendment's aim is to increase safe disposal practices and limit generation of hazardous wastes by forcing OECD countries to retain their own hazardous waste.⁷⁴ Decision III/1, however, has been ratified by only thirty-two states; it has therefore not yet garnered the sixty-two ratifications necessary to render it binding.⁷⁵

The extent to which the Basel Convention and Ban are enforceable is an important, yet unresolved, issue. Article 16 of the Basel Convention provides for a Secretariat to oversee implementation of the Convention; while it is unknown whether it will function permanently in the position, the United Nations Environmental Program (UNEP) serves as the interim Secretariat. Though there have been efforts to expand the Secre-

⁶⁶ Id. at Art. 6, para. 1. See also Id. at Annex 5(A), para. 7.

⁶⁷ *Id.* at Art. 6, para. 2.

⁶⁸ Id. at Art. 6, para. 3.

⁶⁹ Id. at Art. 4, para. 5.

⁷⁰ Id. at Art. 8.

⁷¹ See Decisions Adopted by the Third Meeting of the Conference of the Parties to the Basel Convention, U.N. Doc. UNEP/CHW.3/35 (1995) [hereinafter Basel Ban].
⁷² Id

⁷³ Organization of Economic Co-Operation and Development (OECD) Website (visited April 26, 2002) http://www.oecd.org; see also Anger Over Import of Hazardous Waste, supra note 8.

⁷⁴ Waugh, supra note 29, at 505.

⁷⁵ See Basel Convention Website (visited April 27, 2002) http://www.basel.int/ WhatsNew/annexVII.PDF>. 32 states have ratified as of 10/10/02 http://www.basel.int/ ratif/ratif.html.

⁷⁶ Basel Convention, *supra* note 14, Art. 16.

⁷⁷ William Schneider, The Basel Convention Ban on Hazardous Waste Exports: Paradigm of Efficacy or Exercise in Futility?, 20 SUFFOLK TRANSNAT'L L. REV. 247, 280 (1996).

tariat's power so that it may enforce and police the Basel Ban, UNEP is currently unable to do so.⁷⁸ Such an expansion of power is a prerequisite to successfully enforcing the provisions of the Basel Ban.⁷⁹

The chief benefit to the Basel Convention's prior informed consent approach is that it enables waste trading to continue subject to the control of the receiving country.80 Critics have nonetheless raised a host of concerns with this approach. The most salient concern about the Basel Convention's prior informed consent regime is that, by facilitating the transboundary movement of hazardous wastes, it creates opportunity for the improper disposal of hazardous wastes within receiving countries.81 Although the Basel Convention has sought to address this issue by requiring hazardous waste exports to be managed in an environmentally sound manner, concerns have been expressed that this standard is subject to conjecture. 82 The Convention sets no guidelines to determine whether this requirement has been satisfied.83 Critics' warnings that countries may be misled into improper decision-making on the basis of inaccurate or incomplete information submitted by exporters84 should be heeded by African nations in particular, as they often lack sufficient resources to implement thorough monitoring and enforcement programs.85 Until the Basel Ban is ratified, African nations must remain vigilant to the possibility that unscrupulous exporters may submit misleading or incomplete information. Moreover, African nations must maintain vigilance after the ratification of the Ban; it is not inconceivable that exporting countries will endeavor to contravene it.

2. Liability Provisions

Articles 8 and 9 of the Basel Convention impose duties on state parties to retrieve exported waste that is in violation of an importation contract and to penalize illegal traffic in hazardous waste. 86 While these provisions have been praised for being considerably more far-reaching than those found in most other environmental treaties, 87 they mandate unilateral national action or implementation of legislation; they do not erect a liability regime under the Convention itself.

⁷⁸ *Id*.

⁷⁹ Id.

⁸⁰ Waugh, supra note 29, at 524.

⁸¹ *Id*.

⁸² Id.

⁸³ Id. at 529.

⁸⁴ Id. at 524.

⁸⁵ Waugh, *supra* note 29, at 534.

⁸⁶ Basel Convention, supra note 14, Art. 8 & 9.

⁸⁷ Katharina Kummer, International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules 224 (1995).

The Basel Convention provides for the creation of an ad hoc expert organ to prepare a protocol setting out appropriate rules and procedures in the field of liabilities and compensation for damage resulting from the transboundary movement of hazardous wastes. The Basel Protocol on Liability and Compensation (Protocol) was adopted at the Fifth Conference of Parties (COP-5) on December 10, 1999. The Protocol is crucial to establishing an international mechanism that may operate free from what has been called "the whims and prejudices of nations" with regard to what shall constitute liability and obligation. The protocol is crucial to establish the same called "the whims and prejudices of nations" with regard to what shall constitute liability and obligation.

The Protocol talks began in 1993 in response to the concerns of developing countries that they lacked the funds and technologies to cope with illegal dumping or accidental spills. 91 Observers were concerned that the Protocol's standards could prove difficult to enforce if they were based not on a clear standard (e.g., allowing an export without seeking the importing state's consent) but on whether the exporting state has taken "appropriate measures" to avoid mismanagement or had "reason to believe" the wastes would be mismanaged. The Protocol avoids such pitfalls by imposing strict liability on the "person who notifies" the state of import in accordance with Article 6 of the Basel Convention.⁹³ Article 6 requires an exporting state to notify or require the generator or exporter to notify "the competent authority of the States concerned of any proposed transboundary movement of hazardous wastes or other wastes."94 Once the hazardous waste comes into the possession of the disposing party, strict liability is transferred from the notifier to the disposer. 95 Under the Protocol, notifiers and disposers are strictly liable for any "damage due to an incident occurring during a transboundary movement of hazardous wastes." Any other participant in the transboundary movement of hazardous waste is liable for "damage caused or contrib-

⁸⁸ Basel Convention, supra note 14, Art. 12.

⁸⁹ Basel Protocol on Liability and Compensation for Damage Resulting From Transboundary Movements of Hazardous Wastes and Their Disposal and of the Decision Regarding the Basel Protocol (1999) [hereinafter Protocol on Liability and Compensation]; *See also* Basel Convention Protocol Website (last visited April 26, 2002) http://www.basel.int/protocol/protodes.html>.

⁹⁰ C. Russell H. Shearer, Comparative Analysis of the Basel and Bamako Conventions on Hazardous Waste, 23 ENVIL L. 141, 158-59 (1993).

⁹¹ See generally id.

⁹² Basel Convention, supra note 14, Art. 4, para. 2; see Sean D. Murphy, Prospective Liability Regimes for the Transboundary Movement of Hazardous Wastes, 88 A.J.I.L. 24, 44; see also Kummer, supra note 87, at 225 ("In their present form, the provisions are unlikely to contribute significantly to the development of the law in the field of state responsibility.").

⁹³ Protocol on Liability and Compensation, supra note 89, Art. 4.

⁹⁴ Basel Convention, supra note 14, Art. 6.

⁹⁵ Protocol on Liability and Compensation, supra note 89, Art. 4 para 1.

⁹⁶ Id. Art. 3.

uted to by his lack of compliance with the provisions implementing the Convention or by his wrongful intentional, reckless or negligent acts or omissions."97 Therefore, the exporting or generating party that engages the Basel Convention's Article 6 prior informed consent process is strictly liable for the damage done from transboundary movement of hazardous waste until the waste reaches the disposing party.98 At that point, strict liability shifts to the disposing party. A party that handled the waste at some point in its movement but was neither a "notifier" or "disposer" would be liable only for damage arising from the party's faulty actions.100

The Protocol includes in its definition of damage "the cost of preventative measures" as well as "the costs of measures of reinstatement of the impaired environment."101 Under the protocol, therefore, a party, regardless of the standard of care it exercises, can be strictly liable as a "notifier" or a "disposer" for costs incurred in preventing or minimizing damage from the transboundary movement of hazardous waste for which it is responsible.¹⁰² Furthermore, a state can be strictly liable as a "notifier" or "disposer" for the necessary clean-up and restoration costs incurred from damage by transboundary movement of hazardous waste. 103

The Protocol's liability provisions are, therefore, broader than some had expected. It is perhaps for this reason that, three years after its crea-

⁹⁷ Id. Art. 5.

⁹⁸ Id. Art. 4 para. 1 ("The person who notifies in accordance with Article 6 of the Convention, shall be liable for damage until the disposer has taken possession of the hazardous wastes and other wastes. Thereafter the disposer shall be liable for damage.").

¹⁰⁰ See Id. Art. 5 ("Without prejudice to Article 4, any person shall be liable for damage caused or contributed to by his lack of compliance with the provisions implementing the Convention or by his wrongful intentional, reckless or negligent acts or

¹⁰¹ Id. Art. 2 para. 2(c) ("For the purposes of the Protocol..."damage" means (i) loss of life or personal injury; (ii) loss of or damage to property other than property held by the person liable in accordance with the present Protocol; (iii) loss of income directly deriving from an economic interest in any use of the environment, incurred as a result of impairment of the environment, taking into account savings and costs; (iv) the costs of measures of reinstatement of the impaired environment, limited to the costs of measures actually taken or to be undertaken; and (v) The costs of preventative measures, including any loss or damage caused by such measures, to the extent that the damage arises out of or results from hazardous properties of the wastes involved in the transboundary movement and disposal of hazardous wastes and other wastes subject to the Convention.") (emphasis added).

¹⁰² Id. Art. 2 para. 2(e) ("'preventative measures' means any reasonable measures taken by any person in response to an incident, to prevent, minimize, or mitigate loss or damage, or to effect environmental clean-up.").

¹⁰³ Id. Art. 2 para. 2(d) ('Measures of reinstatement' means any reasonable measures aiming to assess, reinstate or restore damaged or destroyed components of the environment. Domestic law may indicate who will be entitled to take such measures.).

tion, the Protocol has yet to be ratified.¹⁰⁴ Like the Convention, the Protocol requires only 20 state ratifications to enter into force.¹⁰⁵ It has been signed by thirteen, but has not yet been ratified by a single country.¹⁰⁶

3. Scope of the Basel Convention

The Basel Convention creates a two-pronged [should this be two-pronged test?] test for determining whether a substance falls within its purview. First, the substance must be defined as a "hazardous waste." If not, the waste must alternately be an "other waste." Second [or make "first" above "firstly," also where is secondly?], a waste must also be "subject to transboundary movement." 109

The Basel Convention provides [yet another two-prong test] [not 'yet another' if the earlier test was 3-pronged] to determine if a substance is a "hazardous waste." A substance is a "waste" for purposes of regulation if it belongs to one of the 45 categories enumerated in Annex I¹¹¹ or the 86 categories enumerated in Annex VIII. Annex I includes specific substances such as "Zinc compounds" as well as broadly-defined materials such as "clinical wastes from medical care in hospitals, medical centers and clinics." Annex VIII includes substances such as "Metal wastes and waste consisting of alloys of . . . selenium" and "fluff – light fraction from shredding." In order to fall under the regulatory ambit of the Basel Convention, an Annex I or Annex VIII substance must also possess a "hazardous" characteristic enumerated in Annex III. This list

¹⁰⁴ Basel Ratifications, supra note 15.

¹⁰⁵ Protocol on Liability and Compensation, *supra* note 89, Art. 29. ("The Protocol shall enter into force on the ninetieth day after the date of deposit of the twentieth instrument of ratification, acceptance, formal confirmation, approval or accession.")

¹⁰⁶ Basel Ratifications, supra note 15.

¹⁰⁷ Basel Convention, *supra* note 14, Art. 1 para. 1; *see also* Basel Convention, *supra* note 14, Art. 2 para. 1. ("'Wastes' are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.")

¹⁰⁸ Basel Convention, *supra* note 14, Art. 1 para. 2; Basel Convention, *supra* note 14, Annex 2.

¹⁰⁹ Id. Art 1 para. 1; see also Id. Art. 2 para. 3. ("'Transboundary movement' means any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided at least two States are involved in the movement. . .")

¹¹⁰ Id. Art. 1 paras. 1(a) and (b).

¹¹¹ Id. Annex 2.

¹¹² Id. Annex 8.

¹¹³ Id. Annex 1.

¹¹⁴ Id. Annex 8.

¹¹⁵ Id. Annex 3.

of 14 characteristics includes "toxic (delayed or chronic)" and "flammable," among others.¹¹⁶

The Basel Convention, therefore, sets up a double-hurdle test to determine if a substance is a "hazardous waste" subject to regulation. This process closely resembles RCRA's two-step process of determining whether a waste is "hazardous." A crucial difference between the two instruments exists, however; in order for a waste to fall under the purview of RCRA, it must either be listed as one of many pre-determined "hazardous" substances or possess a hazardous characteristic, such as ignitability or toxicity. The Basel Convention, by requiring a "hazardous waste" both to be listed on Annex I or VIII and to possess a "hazardous" characteristic listed in Annex III, sets a significantly higher standard for regulation.

The Basel Convention does not require "other waste" to meet the same stringent two-step standard. "Other waste" must fall into one of the two categories enumerated in Annex II. 120 These categories of wastes "requiring special consideration" are "wastes collected from households" and "residues arising from the incineration of household wastes." A waste that falls into one of these two Annex II categories is not subject to the requirement of also possessing an Annex III "hazardous" characteristic.

Annex IX lists substances that are specifically excepted from the "waste" definition "unless they contain Annex I material to an extent causing them to exhibit an Annex III characteristic." Under Annex IX, a substance such as "feldspar waste" or "coal-fired power plant fly-ash" is not a "waste" for the purposes of Basel Convention regulation unless it contains a substance listed in Annex I such as "mercury [or] mercury compounds" to an extent causing it to exhibit a Annex III "hazardous" characteristic, such as "poisonous." While Annex IX may function to better define when a mixed substance is subject to Basel Convention regulation, it would appear to potentially exempt a wide variety of potentially hazardous substances insofar as it establishes a presumption that the substances it lists are not subject to regulation unless they contain a quantity of an Annex I substance large enough to exhibit an Annex III characteristic. Therefore, Annex IX impliedly exempts from regulation any mix-

¹¹⁶ *Id*.

¹¹⁷ RCRA, supra note 27.

¹¹⁸ *Id*.

¹¹⁹ Basel Convention, *supra* note 14, Art. 1 para. 2 ("Wastes that belong to any category contained in Annex 2 that are subject of transboundary movement shall be 'other wastes' for the purposes of this Convention.")

¹²⁰ Id. Annex 2.

¹²¹ *Id*.

¹²² Id. Annex 9.

ture of an Annex IX waste and another material, regardless of whether the mixture exhibited an Annex III characteristic, unless the second material is listed on Annex I.

A significant challenge in implementing the Basel Convention lies in the difficulty of establishing whether a substance is a "hazardous waste" as defined by Annexes I, VIII, XI and III. Characteristics listed under Annex III range from those that are easily recognizable, ("explosive" and "corrosive") to those with only delayed or chronic effects, ("toxic" and "ecotoxic"). 123 The Convention acknowledges the dilemma inherent in determining whether a substance is hazardous; Annex III provides that "the potential hazards posed by certain types of wastes are not yet fully documented; tests to define quantitatively these hazards do not exist. Further research is necessary in order to develop means to characterize potential hazards posed to man and/or the environment by these wastes." 124 It is not unlikely that the means to determine such potential hazards, especially those with delayed effects, would arrive later in the developing world than anywhere else.

Annex III does not specify at which dosage a substance is considered to display a characteristic triggering regulation. It is unclear, therefore, whether a teaspoonful of toxic waste dropped into the Pacific Ocean would be considered a violation of the Basel Convention. The Basel Convention leaves to the state parties the responsibility of determining these dosage and concentration levels. 126

The Basel Convention compounds the problems arising from multiple interpretations of its terms by including within the definition of "hazardous waste" substances "defined as, or . . . considered to be, hazardous wastes by the domestic legislation of the Party of export, import or transit." Any substance that is considered hazardous in a country involved as an exporter, importer, or transporter or toxic waste is therefore considered to fall within the ambit of the Basel Convention. Upon the ratification of the Protocol, a generator of waste not considered toxic in the country of generation can therefore be strictly liable for damages arising from the transboundary movement of that waste to or through any country that considers the waste to be hazardous under its national legislation.

¹²³ Id. Annex 3; See Jason L. Gudofsky, Transboundary Shipments of Hazardous Waste for Recycling and Recovery Operations, 34 STAN. J. INT'L L. 219, 234 (1998).

¹²⁴ Basel Convention, supra note 14, Annex 3.

¹²⁵ Jaffe, supra note 22, at 133.

¹²⁶ Gudofsky, supra note 123, at 235.

¹²⁷ Basel Convention, supra note 14, Art. 1 para. 1(b).

Lastly, the Basel Convention does not regulate radioactive wastes¹²⁸ or wastes "which derive from the normal operations of a ship."¹²⁹ The Basel Convention specifies that both of these substances fall outside its regulatory scope because they are regulated by other "control systems" and international instruments.¹³⁰

4. Dispute Resolution

The Basel Convention outlines a course of action to be taken in the event that a dispute between state parties arises. Article 4 requires that conduct violating the Convention must be prevented or punished. 131 Article 9 obliges states parties to implement national legislation to prevent and punish illegal traffic in hazardous wastes. 132 In order to enforce compliance with these provisions, Article 20 provides three alternatives for dispute resolution; negotiation, submission to the International Court of Justice (ICJ), and submission to arbitration. ¹³³ If negotiations between the parties fail, the dispute is referred to the ICJ or to arbitration, provided the parties so agree. 134 Annex VI outlines the procedures for arbitrating a dispute between parties to the Basel Convention. 135 Neither process is compulsory; states can choose to submit to the jurisdiction of the ICJ, but none have yet done so in order to settle a dispute under the Basel Convention.¹³⁶ It is unclear whether any states have chosen to submit a dispute to arbitration.¹³⁷ Because submission of a dispute to the ICJ or to arbitration is entirely voluntary, disputes between parties to the Basel Convention can potentially be left unresolved.

All claims under the Protocol are to be brought either in the national courts of countries where the damage from a hazardous waste trade was suffered, where the incident occurred, or where the defendant has his habitual residence or place of business.¹³⁸ The Protocol leaves it to the parties involved to ensure that their courts possess the necessary

¹²⁸ Id. Art. 1 para. 3.

¹²⁹ Id. Art. 1 para. 4.

¹³⁰ *Id.* Art. 1 paras. 3 & 4; *See* International Convention for the Prevention of Pollution from Ships, Nov. 2, 1973, S. TREATY DOC. No. [I changed "Treaty Doc. No. to small caps] 1, 95thCong., 1stSess., 12 I.L.M. 1319 (1977); *see also* Protocol Relating to the International Convention for the Prevention of Pollution of Ships, Feb. 17, 1978, IMCO Doc. TSPP/CONF/11 78.09 (1978).

¹³¹ Id. Art. 4, para. 4.

¹³² Id. Art. 9, para. 5.

¹³³ Id. Art. 20.

¹³⁴ *Id*.

¹³⁵ Id. Annex 6.

¹³⁶ IA

¹³⁷ Id. Annex 6, Art. 2 ("The claimant party shall notify the Secretariat that the Parties have agreed to submit the dispute to arbitration...") (emphasis added).

Protocol on Liability and Compensation, supra note 89, Art. 17 para. 1(a)-(c).

competence to entertain such claims.¹³⁹ Therefore, if a Greek firm shipped waste to Spain via Tunisia, a Tunisian court could hold the Greek firm strictly liable for damages incurred from a leakage of hazardous waste suffered in Tunisia. Under the Protocol, the Greek firm could also be tried in Greece. If the leaking waste also washed onto Algerian shores, an Algerian court could also hear the case. In such a hypothetical circumstance, all three parties would likely wish to hear the case. It is also possible that national, regional, ethnic, or social biases would produce different outcomes in the same case, depending on the venue. By not establishing an independent source to determine whether a particular national court is an appropriate forum for receiving a claim and to impartially resolve disputes when several parties claim jurisdiction over a case, the Protocol opens up the possibility of international "forum shopping" and leaves an important step in the enforcement process to the "whims and prejudices of nations."

IV. THE AFRICAN RESPONSE - THE BAMAKO CONVENTION

The Preamble of the Basel Convention protects the sovereign right of every state to ban the import of hazardous wastes for transit or disposal. Therefore, one of the initial consequences of the Basel Convention was the subsequent negotiation of separate regional agreements banning all imports of hazardous wastes to developing nations in specific regions. One of these agreements was the Bamako Convention.

The OAU created the Bamako Convention in 1991 as a response to perceived shortcomings of the Basel Convention.¹⁴³ Declaring that the hazardous waste trade constituted "a crime against Africa and the African people,"¹⁴⁴ African leaders believed that Basel's regulatory regime would merely legitimize a practice they found unacceptable.¹⁴⁵ Under the Basel Convention, cash-poor states could potentially be lured to ignore the disastrous consequences of the hazardous waste trade in the face of tremendous economic incentives.¹⁴⁶ African leaders were concerned that

¹³⁹ Id. Art. 17 para. 2.

¹⁴⁰ Basel Convention, supra note 14, pmbl. ("... Fully recognizing that any State has the sovereign right to ban the entry or disposal of foreign hazardous wastes and other wastes in its territory. ..."); see generally Mark Bradford, The United States, China and the Basel Convention on the Transboundary Movements of Hazardous Wastes and Their Disposal, 8 FORDHAM ENVIL. LAW J. 305 (1997).

¹⁴¹ Bradford, supra note 140, at 322.

¹⁴² Bamako Convention, supra note 16.

¹⁴³ Shearer, supra note 90, at 143.

¹⁴⁴ MORRISON & MUFFETT, supra note 1, at 418.

¹⁴⁵ Id.

¹⁴⁶ Id.

if such economic incentives proved too enticing, Africa would become a dumping ground for hazardous waste from industrialized countries.¹⁴⁷

A. Hazardous Waste in Africa

African nations are not unfamiliar with hazardous wastes. For example, there are estimated to be 100,000 tons of stockpiled pesticides in Africa. The developing African continent, however, does not share the capacity of the industrialized world to manage such toxic substances. Many of these stockpiled substances are poorly contained or dumped irresponsibly, leaking into water supplies and contaminating the food chain. Bobby Peek, an environmentalist in South Africa, the richest of all sub-Saharan African countries, explains that environmental standards and control technology in his country are "about 30 years behind anything in the United States and Europe." 152

Incidents at the Thor chemicals plant in Natal province of South Africa in 1994 illustrate the technical shortcomings of African nations to manage toxic substances. Three senior officials of Thor, a British-owned firm, were indicted on criminal homicide charges after two workers died after being exposed to high levels of mercury toxins. Another worker was in a coma due to the exposure, and 28 others were diagnosed as having mercury poisoning symptoms. Thor was provided with a permit by the apartheid-era South African government to import large amounts of toxic materials from the United States. The plant leaked large amounts of mercury into rivers in the Natal province.

A significant problem that has gone hand-in-hand with environmental degradation in Africa is political corruption. The United Nations Environment Program (UNEP), based in Nairobi, Kenya, has asserted that, owing to poverty and political instability, "some African governments or groups may resort to accepting hazardous wastes in exchange for money, weapons or other needs." This theory has played itself out in Somalia,

¹⁴⁷ *Id*.

¹⁴⁸ World Moves Towards Curbing Toxic Chemicals, Xinhua General News Service, Feb. 20, 2002 [hereinafter Toxic Chemicals].

¹⁴⁹ Id.

¹⁵⁰ Id.

¹⁵¹ See Mr. Dowling's Electronic Passport: Africa Today (visited April 25, 2002) http://www.mrdowling.com/611-nations.html>.

¹⁵² Tina Susman, Nature under Pressure: The Clouds of Suspicion/ Many Believe South Africa's Industries Emit Toxins that Kill, N.Y. NEWSDAY, Nov. 30, 2002, at A8.

¹⁵³ Eddie Koch, South Africa: Cabinet Against Toxic Waste Imports, INTER PRESS SERVICE, Nov. 3, 1994.

¹⁵⁴ *Id*.

¹⁵⁵ Id.

¹⁵⁶ Id.

¹⁵⁷ Africa Remains Upbeat On Protection of the Environment, PANAFRICAN News Agency, November 30, 1998 [hereinafter Africa Remains Upbeat].

whose long coastline, raging war and absence of functioning government created the perfect environment for the dumping of hazardous waste by unscrupulous brokers who offered guns in exchange for being allowed to unload their waste.¹⁵⁸

The crux of the problem was succinctly presented by Xie Zhenhua, minister of China's State Environmental Protection Administration: "There is too big a gap in the capacity of chemical management between developed and developing countries." Africa, plagued by political corruption and saddled with little or no waste handling technologies, needed the Bamako Convention, which bans the importation and movement of hazardous wastes across national borders, to compensate for this gap. 160

B. Provisions of the Bamako Convention

1. The Ban

In shaping the Basel Convention, member countries of the OAU pushed for a total ban on transboundary shipment of hazardous waste.¹⁶¹ Recognizing their inability to enforce unilateral bans on the shipment of such waste under national legislation, OAU nations looked towards the strength of a multilateral instrument to enforce such measures.¹⁶²

The industrialized countries favored regulation over prohibition. ¹⁶³ 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. ¹⁶⁴ Other countries, such as the Netherlands, opposed the ban because they rely on exportation of waste as domestic environmental conditions make safe disposal impossible. ¹⁶⁵ Some nations opposed a ban because they import hazardous wastes as a source of valuable recyclable resources. ¹⁶⁶ Countries such as the Philippines and India rely on imported lead-acid batteries as a source for lead. ¹⁶⁷ If these countries were party to an instrument that banned the movement of hazardous waste into their borders, such as the Bamako Convention, not only would they lose their source of lead, but also there would be less reclamation of these hazardous wastes. ¹⁶⁸ For the majority

¹⁵⁸ Susman, supra note 152.

¹⁵⁹ Toxic Chemicals, supra note 148.

¹⁶⁰ Africa Remains Upbeat, supra note 157.

¹⁶¹ Murphy, supra note 92, at 35.

¹⁶² *Id*.

¹⁶³ D'AMATO & ENGEL, *supra* note 44, at 176.

¹⁶⁴ *Id.* at 176.

¹⁶⁵ Murphy, supra note 92, at 35.

¹⁶⁶ Waugh, *supra* note 29, at 523.

¹⁶⁷ D'AMATO & ENGEL, supra note 44, at 176.

¹⁶⁸ Id., see also Gudofsky, supra note 123, at 219.

of industrialized countries, however, the most salient reason for opposing the ban was the economics of hazardous waste traffic.¹⁶⁹

In the end, the industrial countries won the argument. The OAU shaped the Bamako Convention, therefore, as a response to the inadequacies of the Basel Convention. The Bamako Convention places a complete ban on all hazardous waste imports into Africa,¹⁷⁰ including the importation of waste for use in recycling, a frequently used loophole in the Basel Convention.¹⁷¹ The Bamako Convention also creates a limited ban on the transfer of hazardous waste within and among the African nations.¹⁷²

There has been considerable debate surrounding the merits of a total ban on the movement of hazardous waste. It has been argued that a ban only does a disservice to those nations who are unable to dispose of it in an environmentally safe manner.¹⁷³ A country that lacks safe disposal facilities for the toxic wastes it generates faces three choices: (1) disposing of the wastes locally and, presumably, unsafely; (2) halting waste generation; or (3) shipping the wastes elsewhere, preferably somewhere with safe disposal facilities.¹⁷⁴ If the country continues to produce hazardous waste, it should be allowed to dispose of its waste in a safer manner elsewhere. As long as wastes are generated in countries that cannot safely manage their disposal, their international transport should be permitted and regulated, rather than banned.¹⁷⁵

The focus of the Bamako Convention, however, is not on *exports* of hazardous wastes from Africa; rather, it is meant to halt *imports* into the continent. The Bamako Convention was created in order to address the growing dual problems of industrial nations using Africa as a dumping ground and of Africa's continuing incapacity to adequately handle such waste. The Bamako Convention's imposition of the Basel Convention's prior informed consent rule vis-à-vis movement of hazardous wastes between its state parties thus allows African States that have the capacity to safely dispose of hazardous waste to accept it from their African neighbors. Moreover, the Bamako Convention does not restrict African States from exporting hazardous waste to non-OAU countries. The Bamako Convention's ban, therefore, does not function to limit an African State's choice to export hazardous waste it cannot dispose of prop-

¹⁶⁹ *Id*.

¹⁷⁰ Bamako Convention, supra note 16, Art. 4 para. 1.

¹⁷¹ Marbug, supra note 12, at 271.

¹⁷² Bamako Convention, supra note 16, Art 4, para. 3(n).

¹⁷³ See, e.g., Vu, supra note 6, at 391.

¹⁷⁴ Id.

¹⁷⁵ Shearer, supra note 90, at 163.

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¹⁷⁷ Bamako Convention, supra note 16, Art. 4, para. 3(n).

erly. Rather, its aim is to protect Africa from becoming a dumping ground for the hazardous waste of an industrialized country.¹⁷⁸

The chief benefit to the imposition of a total ban is that it decreases the possibility that generators will pass their environmental responsibilities onto countries which lack the environmental technology, regulatory infrastructure, or training and experience necessary to ensure that the waste management adequately protects human health and the environment. A ban therefore reduces fears that receiving countries will dismiss potential risks in order to obtain the income, technological benefits, and employment opportunities associated with waste importation. 180

There is no escaping the fact, however, that the ban inflicts some collateral damage. The Bamako Convention essentially forces its states parties to forgo any legitimate recycling or reclamation interest they may have had for the environmental security that the Convention confers. In this regard, the Bamako Convention largely ignores the importance that recycling and reclamation play in the emerging world environmental order. 181 On the other hand, the ban recognizes that most African nations are not administratively capable of enforcing such a "recycling and reclamation" exception were it to exist, and that such a loophole would probably allow for contravention of the Convention.¹⁸² Recycling has been used as a pretext to export thousands of tons of wastes such as lead scrap. contaminated scrap metal, plastic waste and computer wastes. 183 Even legitimate recycling or recovery operations that extract the valuable components of a hazardous waste will end up with residual wastes that a developing country may not be able to safely handle.¹⁸⁴ Furthermore, in the absence of adequate safeguards, recycling or recovery operations can pose greater human health problems than disposal, due to the higher levels of worker exposure and handling.185

¹⁷⁸ The OAU Council of Ministers passed a Resolution on Dumping of Nuclear and Industrial Waste in Africa 1989. The Resolution was drafted in the wake of the aforementioned hazardous waste-dumping fiasco in Koko, Nigeria and after 15,000 tons of toxic incinerator ash were found in Guinea in 1988. This Resolution, calling for a ban on dumping, declared that dumping hazardous wastes in Africa was a "crime against Africa and the African people." Organization of African Unity: Council of Ministers Resolution on Dumping of Nuclear and Industrial Waste in Africa, May 23, 1989, reprinted in 28 I.L.M. 568 (1989). This resolution served as the framework for the Bamako Convention.

¹⁷⁹ Waugh, *supra* note 29, at 521.

¹⁸⁰ *Id*.

¹⁸¹ Shearer, supra note 90, at 175.

¹⁸² *Id*

¹⁸³ Kunda Dixit, Last Place on Earth to Dump Trash, INTER PRESS SERVICE, Mar. 10, 1994.

¹⁸⁴ OECD, supra note 13, at 98.

¹⁸⁵ *Id*.

Opponents of the Bamako Convention's total ban argue that it denies developing nations in Africa the opportunity to enjoy the economic and technological benefits of the hazardous waste trade. 186 Considering the widespread corruption that jeopardizes the political integrity of many African countries,187 there is no guarantee any economic or technological benefit from such an endeavor would enrich the country as a whole. The practice of Somali warlords of accepting hazardous waste in return for guns¹⁸⁸ could hardly be colored as an exchange that works to the technological or economic advantage of the Somali people. Nigeria, a party to the Basel Convention, 189 has been the recipient of hazardous waste from abroad during the last quarter century. 190 Very recently, the former Nigerian presidential family was found to have embezzled over a billion dollars from Nigeria.¹⁹¹ By rough estimate, this sum accounts for 3.1% of Nigeria's Gross National Product (GNP). 192 Such flagrant embezzlement casts a shadow of doubt over the likelihood that the benefits of any trade activity would actually benefit the people living under such regimes.

2. Liability and Dispute Resolution Under the Bamako Convention

The Bamako and Basel Conventions feature identical provisions in Articles 8 and 9 that impose duties on state parties to re-import waste that is in violation of an importation contract and to penalize illegal traffic in hazardous waste. The Bamako Convention provides a slightly stronger reading of a state party's obligations under Article 9 in that it provides for the wastes to be returned to the states of origin in every case, and places a stronger emphasis on states' duties to adopt relevant criminal legislation of a punitive and deterrent nature. Hhile these provisions have been praised for being considerably more far-reaching than those found in most other environmental treaties, they mandate unilateral national action or implementation of legislation; they do not erect a liability regime under the Conventions itself.

¹⁸⁶ Lillian M. Pinzon, Criminalization of the Transboundary Movement of Hazardous Waste and the Effect on Corporations, 7 DePaul Bus. L.J. 173, 202 (1994).

¹⁸⁷ Id.

¹⁸⁸ Susman, supra note 152.

¹⁸⁹ Basel Ratifications, supra note 15.

¹⁹⁰ See, e.g., Morrison & Muffett, supra note 1, at 409.

¹⁹¹ Elizabeth Olson, Nigeria to Recover \$1 Billion From the Family of a Late Dictator, N.Y. Times, April 18, 2002, at A5.

¹⁹² See World Resources Institute Website http://www.wri.org/wr-96-97/ wr96dtei.pdf> (Nigeria's GNP was \$31.5 billion in 1993.) (visited April 25, 2002).

¹⁹³ Bamako Convention, *supra* note 16, Art. 8 & 9; Basel Convention, *supra* note 14, Art. 8 & 9.

¹⁹⁴ Bamako Convention, supra note 16, Art. 9; see Kummer, supra note 84, at 103.

¹⁹⁵ Kummer, supra note 87, at 224.

The Bamako Convention's re-importation mandate creates potential problems in regulating illegal traffic in hazardous wastes. 196 Under Article 9, a party who exports waste improperly is required to return the waste to its own jurisdiction, despite the fact that in some cases it may be less expensive or more environmentally sound to explore other options.¹⁹⁷ This should be of particular concern to African nations exporting waste. as many lack the resources to manage, transport, or retransport hazardous waste.198

Pursuant to the Bamako Convention's Article 9 mandate, African states have been extremely proactive in creating national laws forbidding the import of hazardous waste. The Ivory Coast has adopted a law that imposes prison terms of up to twenty years and fines of up to \$1.6 million for individuals who import toxic or nuclear waste into the country.¹⁹⁹ Other African nations have even prosecuted government officials involved in the hazardous waste trade.²⁰⁰ Guinea arrested at least thirteen people after 15,000 tons of incinerator ash from Philadelphia were found in 1988.²⁰¹ Nigeria has not only arrested people, but has threatened to execute anyone, including foreigners, involved in the dumping of hazardous waste inside its borders.202

Like the Basel Convention, the Bamako Convention calls upon parties to negotiate a substantive protocol on the issue of liability. 203 Unlike the Basel Convention, no such protocol yet exists for the Bamako Convention.204 Nonetheless, the Bamako Convention, in furtherance of its chief goal of blocking any import of hazardous waste into Africa, creates a regime of unlimited joint and several liability on the generators of improperly disposed waste.²⁰⁵ This regime is to be enforced by the implementation of appropriate national legislation.²⁰⁶ The unlimited liability provision allows for the imposition of whatever damages are deemed appropriate, including punitive damages.²⁰⁷ A claim could be brought against any generator, exporter, carrier, importer or disposer that was associated with the wastes that caused damage to the claimant.²⁰⁸ The onus of liability would fall either upon all those responsible on a pro rata basis reflecting responsibility, or entirely upon one of those responsible

¹⁹⁶ Shearer, supra note 90, at 177.

¹⁹⁷ *Id*.

¹⁹⁸ Id.

¹⁹⁹ Pinzon, supra note 186, at 173.

²⁰⁰ Id.

²⁰¹ Id.

²⁰² Id.

²⁰³ Bamako Convention, supra note 16, Art. 12.

²⁰⁴ See Morrison & Muffett, supra note 1, at 428.

²⁰⁵ Bamako Convention, supra note 16, Art. 4 para. 3(b).

²⁰⁶ Id. Art 4, para 4(a).

²⁰⁷ Marbug, supra note 12, at 274.

²⁰⁸ Murphy, supra note 92, at 53.

parties, leaving that party to obtain compensation from the other responsible parties.²⁰⁹ Joint and several liability fulfills a purpose that is especially pertinent to the states parties to the Bamako Convention insofar that it imposes liability when the responsible parties have been identified, but the extent of responsibility is impossible to determine.²¹⁰

Joint and several liability, however, can frustrate a just resolution to disputes. For instance, it can potentially impose liability on innocent parties rather than the actor at fault.²¹¹ Imposing liability on multiple defendants could also reduce a disposal facility's financial incentive to ensure that imported waste is safely handled and disposed.²¹² Importers and disposers would be less likely to handle waste safely if they believed that any suits by local parties would be brought against foreigners, either because the foreigners were perceived to have deep pockets or because of political pressure to protect local industries.²¹³ Such a result would only prolong the continuing incapacity of African nations to adequately handle hazardous waste.²¹⁴ Lastly, the Bamako Convention's joint and several liability regime places responsibility on law-abiding generators to supervise the actions of disposers, despite the fact that the generator may be thousands of miles away from the site of disposal.²¹⁵ While such a regime would force exporters to scrutinize the adequacy of a receiving party's facilities, it would place an almost impossible responsibility on generating parties to monitor the safe handling and disposal of wastes after exportation.216

3. The Scope of the Bamako Convention

While the Basel Convention's definition of "wastes" reflects an attempt not to overregulate or establish an excessively inclusive list, ²¹⁷ the Bamako Convention extends its scope of regulation much more broadly. ²¹⁸ Firstly, the Bamako Convention mirrors RCRA's two-step process more faithfully than does the Basel Convention insofar that the Bamako Convention defines "hazardous waste" as any waste that is listed in its Annex I or that possesses any hazardous characteristic enumerated in its Appendix II. ²¹⁹ Therefore, the double-hurdle test of the Basel Convention is transformed into an either/or test similar to that in

²⁰⁹ Shearer, supra note 90, at 158.

²¹⁰ Id.

²¹¹ Waugh, supra note 29, at 527.

²¹² *Id*.

²¹³ Murphy, supra note 92, at 54.

²¹⁴ Shearer, supra note 90, at 163.

²¹⁵ Waugh, *supra* note 29, at 527.

²¹⁶ *Id*

²¹⁷ Gudofsky, supra note 123, at 229.

²¹⁸ *Id.* at 247.

²¹⁹ Bamako Convention, supra note 16, Art. 2 para. 1(a)&(c).

RCRA. The either/or test necessarily includes many more substances under its regulatory scope than does the double-hurdle test.

The Bamako Convention includes a provision roughly identical to that in the Basel Convention that includes within its definition of hazardous wastes substances "that are considered to be hazardous wastes by the domestic legislation of the Party of export, import, or transit,"²²⁰ but the Bamako Convention extends the definition to include any waste "that has been banned, cancelled or refused registration by government regulatory action, or voluntarily withdrawn from registration in the country of manufacture, for human health or environmental reasons."²²¹ The Bamako Convention also regulates radioactive waste.²²²

The Bamako Convention's greatest deviation in scope from the Basel Convention is found in Article 4(3)(f), which states,

"Each party shall strive to adopt and implement the preventive, precautionary approach to pollution problems which entails, *inter alia*, preventing the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm."

This mandate, an articulation of what is commonly known as the precautionary principle, extends the Bamako Convention's regulatory power to wastes that have not been proven hazardous, but *may be* hazardous.²²³ The precautionary principle is essentially a counterpart to the customary international law obligation of due diligence that requires minimization of the risk of harm.²²⁴ The precautionary principle is a significant shift from the Basel Convention's cost-benefit approach inasmuch that it is based neither on economic analysis nor on scientific proof.²²⁵ Because the lack of information on the environmental damages caused by hazardous waste mismanagement and by transboundary movements of hazardous waste is a major barrier to understanding the extent of the environmental problem addressed by both conventions, the precautionary principle is especially appropriate.²²⁶

The one-two punch of the Bamako Convention's either/or test for defining "hazardous waste" and its promulgation of the precautionary principle lead observers to call its scope "immensely broader than that of

²²⁰ Id. Art. 2 para. 1(b).

²²¹ *Id.* Art. 2 para. 1(d).

²²² Id. Art. 2 para. 2.

²²³ Gudofsky, supra note 123, at 247.

²²⁴ Mark Allan Gray, The International Crime of Ecocide, 26 CAL. W. INT'L L. J. 215 at 142 (1996).

²²⁵ Howard S. Kaminsky, Assessment of the Bamako Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, 5 Geo. Int'l Envtl. L. Rev. 77, 78 (1992).

²²⁶ OECD, *supra* note 13, at 100.

the Basel Convention."227 This breadth of scope could be argued to result in overinclusion. If too many wastes fall under the ambit of regulation, industrial opposition provoked from the inclusion of substances that are believed to not be hazardous could potentially block its enactment.²²⁸

The Bamako Convention mandates an ambitious measure in furtherance of the precautionary principle. State parties are required to promote clean production methods "applicable to entire product life cycles." The emphasis of this cradle-to-grave approach is to eliminate waste before it is created by utilizing technologies that produce goods with less waste by-product.²³⁰

The Bamako Convention's mandate for clean production methods has been sharply criticized in respect to the economic realities of developing nations in Africa.²³¹ By requiring the creation of new technology, the Bamako Convention creates a potentially insurmountable obstacle for African nations with little or no capital.²³² It has been suggested, therefore, that the Bamako Convention symbolizes the quixotic regional desire of African nations to end and prohibit the influx of polluting technologies into their nations.²³³

The Basel Convention, on the other hand, requires its states parties to ensure that hazardous waste generation is reduced to a minimum, taking into consideration technological, social, and economic factors.²³⁴ By taking these factors into consideration, no party is required to make technological innovations or legal amendments beyond their means or national best interest.²³⁵ It is possible that parties to the Basel Convention will use the "national best interest" as a pretext for inaction.

4. Loopholes

The framers of the Basel Convention have extended a certain degree of effort to address the concerns of the OAU nations. First, in an attempt to ensure that each signatory of the Basel Convention could successfully manage each hazardous waste that may be legally traded under its regulatory scope, the Convention calls for transfers of technology.²³⁶ To this

²²⁷ Gudofsky, supra note 123, at 247.

²²⁸ Vu, *supra* note 6, at 412.

²²⁹ Bamako Convention, supra note 16, Art. 4 para 3(g).

²³⁰ Shearer, supra note 90, at 161.

²³¹ See Shearer, supra note 90, at 162-163.

²³² Id.

²³³ *Id*.

²³⁴ Basel Convention, supra note 14, Art. 4 para. 2(a).

Shearer, supra note 90, at 162.

²³⁶ Basel Convention, *supra* note 14, Art. 10 paras. 1 & 2(d) ("The Parties shall cooperate with each other in order to improve and achieve environmentally sound management of hazardous wastes and other wastes. To this end, the parties shall . . . Cooperate actively, subject to their national laws, regulations, and policies, in the trans-

end, the Basel Convention has established Regional Centers of Technology and Training in many developing countries, including Egypt, Nigeria, Senegal, and South Africa.²³⁷ These centers facilitate technical and technological advancement, promote cleaner production technologies and the use of environmentally sound waste management practices, and provide advice on enforcement aspects of the Basel Convention.²³⁸

In addition, the Basel Convention contains certain "loopholes" that function to encourage its ratification by states party to the Bamako Convention.²⁹ Article 11 allows non-party countries to transport waste to party countries if a bilateral, multilateral or regional agreement exists for such a purpose, as long as such agreements are "not less environmentally sound" than the Convention.²⁴⁰ This provision was enacted to address concerns of OAU countries that the Basel Convention was too weak and did not protect the interests of the developing nations because it did not adopt a total ban.²⁴¹ Because Article 11 allows more restrictive instruments to be enacted, it does not preclude OAU States from becoming parties to the Bamako Convention.²⁴²

Article 11 of the Bamako Convention similarly provides that the parties to the Convention may enter into bilateral or multilateral arrangements with Parties or non-Parties, provided that such agreements or arrangements "stipulate provisions which are no less environmentally sound than those provided for by the Convention." The "Basel Ban," which effectively functions to bar all movement of hazardous waste into African countries, harmonizes the Basel Convention's provisions with those of the Bamako Convention. A party to the Bamako Convention, therefore, can also ratify the Basel Convention. Articles 11 of the Basel and Bamako Conventions consequently function to allow the Conventions to operate simultaneously. 46

The Basel Convention also contains a loophole that compromises the ability of developing nations to restrict imports of hazardous

fer of technology and management systems related to the environmentally sound management of hazardous wastes and other wastes. They shall also co-operate in developing the technical capacity among Parties, especially those which may need and request technical assistance in this field.") (emphasis added).

²³⁷ Basel Convention Website http://www.basel.int/pub/basics.html#train (visited April 28, 2002).

²³⁸ *ld*.

²³⁹ Vu, supra note 6, at 418.

²⁴⁰ Basel Convention, supra note 14, Art. 11.

²⁴¹ Shearer, supra note 90, at 173.

²⁴² Id.

²⁴³ Bamako Convention, supra note 16, Art. 11.

²⁴⁴ Basel Ban, supra note 71.

²⁴⁵ Shearer, supra note 90, at 174.

²⁴⁶ Id. at 173-74.

wastes.²⁴⁷ While the Basel Convention imposes dual control on both the export and import parties to a waste transport, it does not apply to brokers working for international clients.²⁴⁸ This shortcoming is best illustrated by the aforementioned attempt of Italian and Swiss firms to dump hazardous waste in Somalia in 1992.²⁴⁹ Because Italy and Somalia were not parties to the Basel Convention, but Switzerland was,²⁵⁰ only Switzerland was obligated to comply with the Convention. The Swiss party functioned as the "broker" of the deal between Italian and Somalian parties.²⁵¹ The Basel Convention, however, does not apply to Switzerland unless the waste either originated from or is transported through Switzerland.²⁵² Thus, because the waste did not come from or go through Switzerland, Switzerland was able to evade the Basel Convention's regulatory domain.²⁵³

The Somalia incident exposes a loophole in the Basel Convention that probably will be continually exploited unless it is "closed." In fact, UNEP indicates that it is now a common practice for companies in industrialized countries to take the "path of least resistance " and hire brokers to market their waste to undeveloped countries.²⁵⁴ The incident raises an equally fearsome specter of doubt insofar that it exposes the Achilles' heel of all international agreements: they only bind governments, not individuals.²⁵⁵ In 1992, Somalia had no government, so there was nothing for either the Basel or the Bamako Convention to bind. Stronger governmental regimes may also have difficulty regulating the activities of private actors. For example, several months passed before the Nigerian government discovered Italian industries had been dumping toxic waste in Koko.²⁵⁶

Article 11 may have a small loophole-within-a-loophole: it mandates that such separate agreements must implement "environmentally sound management of hazardous wastes" at levels no less restrictive than those of the Basel Convention,²⁵⁷ yet it fails to define the term "environmen-

²⁴⁷ Bradford, supra note 140, at 322.

²⁴⁸ See generally Vu, supra note 6, at 430-1.

²⁴⁹ Id.

²⁵⁰ See Basel Ratifications, supra note 15. (Italy ratified the Basel Convention in 1994; Somalia has not yet ratified it. Switzerland ratified the Convention in 1990.)

²⁵¹ Vu, *supra* note 6, at 431.

²⁵² Id.

²⁵³ Id.

²⁵⁴ Susman, supra note 152.

²⁵⁵ Vu, *supra* note 6, at 431.

²⁵⁶ See Nigeria Waste Imports from Italy http://www.american.edu/ted/nigeria.htm> (visited April 27, 2002).

²⁵⁷ Basel Convention, *supra* note 14, Art. 11 para. 1. ("Notwithstanding the provisions of Article 4 paragraph 5, Parties may enter into bilateral, multilateral, or regional agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-Parties provided that such agreements or

tally sound management." Because it leaves the definition of this term to state parties, the Basel Convention allows for inconsistent or even conflicting decisions between countries over what management practices are environmentally sound.²⁵⁸ Moreover, because it is impossible to verify the quality of such separate agreements and States' compliance with them, Article 11 potentially jeopardizes the Basel Convention's aim of ensuring compliance with its standards by all parties.²⁵⁹

V. Conclusion

The recent fracas in South Africa over the import of 60 tons of hazardous waste from Australia demonstrates that the Basel and Bamako Conventions fail to stop states from conspiring to import hazardous waste into Africa. As UNEP explains, Africa continues to be "targeted as a dumping ground . . . because [unscrupulous waste producers or dealers] believe this is the place with the least capacity to control or do something about it."²⁶⁰

The event demonstrates why all African States should ratify both the Bamako and Basel Conventions. Because the conventions can operate simultaneously, States are not precluded from doing so. Indeed, fourteen countries in Africa have ratified both the Basel and Bamako Conventions.²⁶¹ In furtherance of this goal, African states should endeavor to meet a few key objectives.

First, all States must ratify the Basel Convention. Of Africa's dual problems with hazardous waste – industrial nations using Africa as a dumping ground and Africa's continuing incapacity to adequately handle such waste²⁶² - [this should be a dash not a hyphen] only one is sufficiently addressed by the Bamako Convention. While the Bamako Convention's ban on all import of hazardous waste into Africa addresses the former problem, only the Basel Convention addresses the latter. Signing the Basel Convention allows African countries the opportunity to enjoy the United Nation's affirmative commitment to provide assistance to developing countries in achieving the Basel Convention's goals, including the "environmentally sound management of hazardous wastes." The Basel

arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by this Convention. These agreements shall stipulate provisions which are not less environmentally sound than those provided for by this Convention in particular taking into account the interests of developing countries.")

²⁵⁸ Waugh, *supra* note 29, at 530.

²⁵⁹ D'Amato & Engel, supra note 44, at 162.

²⁶⁰ Susman, supra note 152.

²⁶¹ See Center for Human Rights, supra note 17; see also Basel Ratifications, supra

²⁶² Shearer, supra note 90, at 163.

²⁶³ See generally id.

Convention provides funding and monitoring procedures that the Bamako Convention cannot.²⁶⁴

The Basel Convention, unlike the Bamako Convention, has the support of many nations. The Bamako Convention, despite its ambitious protective measures, has only been ratified by eighteen African countries. Four of these countries; Congo, Sudan, Togo, and Zimbabwe, have not ratified the Basel Convention. OAU Nations were politically obligated to become parties to the Bamako Convention before they became parties to the Basel Convention. Nonetheless, of the 54 African countries to ratify the Basel Convention, 40 have not also ratified the Bamako Convention.

Second, all States must ratify the Basel Ban and the Protocol. While some observers marked the deal between Australian and South African parties as "the first time that the . . .Basel . . . Ban . . . has been intentionally violated," the Basel Ban has in fact yet to be ratified into force. Australia and South Africa, both parties to the Basel Convention, have not ratified the Basel Ban, and were therefore not bound by it. Australia, an OECD-member country, would have been in violation of the Basel Ban, if the Basel Ban had been ratified by South Africa and in force. Furthermore, if the Secretariat is afforded greater enforcement power under Article 16 of the Basel Convention, Australia could be punished for its violation. Additionally, if the Protocol were in force, both the notifying party in Australia and the disposing party in South Africa would have been strictly liable for any damages resulting from the hazardous waste trade.

Lastly, all African States must ratify the Bamako Convention. Like the vast majority of African States, South Africa has not ratified the Bamako Convention, so it is not subject to the Convention's joint and several liability provisions.²⁷⁴ The Bamako Convention's broad definition of "hazardous waste" would probably include paragoethite, the waste to be shipped from Australia, because it contains both lead and arsenic.²⁷⁵

²⁶⁴ Rebecca A. Kirby, *The Basel Convention and the Need for United States Implementation*, 24 Ga. J. INT'L & COMP. L. 281, 299 (1994).

²⁶⁵ Center for Human Rights, supra note 17.

²⁶⁶ See Id.; see also Basel Ratifications, supra note 15.

²⁶⁷ Shearer, supra note 90, at 179.

²⁶⁸ *Id*.

²⁶⁹ Anger Over Import of Hazardous Waste, supra, note 8.

²⁷⁰ Basel Convention Website, http://www.basel.int/ratif/ratif.html (last visited April 27, 2002).

²⁷¹ Anger Over Import of Hazardous Waste, supra note 8.

²⁷² Basel Ratifications, supra note 15.

²⁷³ Organization of Economic Co-Operation and Development Website http://www.oecd.org (visited April 28, 2002).

²⁷⁴ Center for Human Rights, supra note 17.

²⁷⁵ Anger Over Import of Hazardous Waste, supra note 8.

Even if the substance was not proven to be "hazardous," the Bamako Convention's precautionary principle would require the South African party to refuse the Australian party's waste shipment if it was determined that paragoethite *may* cause harm.²⁷⁶

The Bamako Convention transcends its function as an instrument of protection against unscrupulous foreign industrialists; it is a symbol of African unity and strength. It is crucial that African nations show solidarity, a willingness to cooperate, and a desire to end the trade in hazardous waste.²⁷⁷ The issue is not only an environmental or economic one – the OAU clearly viewed the hazardous waste trade as a racial issue when it called the transport of waste into Africa "a crime against Africa and African people."²⁷⁸ It is therefore important to view the Bamako Convention, despite its shortcomings, as a symbolic instrument that, in tandem with the Basel Convention, will serve to further the interests of all African nations.

²⁷⁶ Bamako Convention, supra note 16, Art. 4 para. 3(f).

²⁷⁷ Id

²⁷⁸ Marbug, supra note 12, at 295.