U.S. Hazardous Waste Exports: Regulations and Proposals

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U.S. HAZARDOUS WASTE EXPORTS: REGULATIONS AND PROPOSALS

I. INTRODUCTION

The United States produces between 250 and 500 million tons of toxic waste each year. Of that amount less than one tenth of one percent is exported. Of all the hazardous waste exported, between 80% and 90% is shipped to Canada. Canada has adequate resources and
technology to handle the waste in an environmentally sound manner.\(^4\) However, problems arise with the remaining hazardous waste that is exported elsewhere. While this amount may seem negligible, it constitutes tens of thousands\(^5\) (possibly hundreds of thousands)\(^6\) of tons of hazardous waste each year. These toxins can cause crippling illnesses, birth defects and death\(^7\) not only for a nation’s current inhabitants, but for generations to come. In addition, hazardous waste has a long life span, thus increasing the chances of human exposure.\(^8\) Its effect on humans may not appear until years after exposure.\(^9\)

The most troubling aspect of this situation is that hazardous wastes from industrialized countries are often being uncovered in developing nations,\(^10\) most of which lack the technical expertise and regulatory infrastructure to properly handle the hazardous waste.\(^11\) Often,

\(^{U.S.\ Waste\ Exports,\ supra\ note\ 1,\ at\ 2\ (statement\ of\ Hon.\ Howard\ Wolpe\ (D-MI),\ “Some\ 80\ to\ 90\ percent\ of\ hazardous\ wastes\ exported\ by\ the\ United\ States\ goes\ to\ Canada\ for\ treatment\ and\ disposal.”).\ But\ see,\ infra\ note\ 6.\ )\ ^{4.\ See\ generally\ Handley,\ Canada,\ supra\ note\ 2.\ But\ cf.\ Hearing\ on\ U.S.\ Waste\ Exports,\ supra\ note\ 1,\ at\ 195\ (Pacific\ Basin\ Consortium\ for\ Hazardous\ Waste\ Research,\ Hazardous\ Waste\ in\ the\ Pacific\ Basin\ (May\ 1988))\ (“The\ CCREM\ [Canadian\ Council\ of\ Resource\ and\ Environment\ Ministers]\ recently\ concluded\ that,\ ‘In\ Canada,\ hazardous\ wastes\ are\ being\ managed\ in\ a\ manner\ that\ could\ pose\ a\ significant\ danger\ to\ public\ health\ and\ the\ environment.\ This\ has\ occurred\ as\ a\ result\ of\ inadequate\ and\ inconsistent\ application\ of\ legislation\ across\ the\ country\ and\ the\ lack\ of\ disposal\ facilities.’”).\ ^{5.\ See\ supra\ note\ 3.\ )\ ^{6.\ EPA\ Audit,\ supra\ note\ 1,\ at\ 12\ (“In\ our\ review\ we\ found\ hundreds\ of\ tons\ of\ exported\ hazardous\ waste\ which\ were\ not\ handled\ in\ accordance\ with\ the\ Agency’s\ regulations.\ .\ .\ .\ [T]he\ Agency\ did\ not\ know\ the\ amount\ of\ hazardous\ waste\ actually\ exported\ to\ other\ countries.”);\ Parker,\ supra\ note\ 3,\ at\ 4\ (“EPA\ estimates\ that\ maybe\ eight\ times\ as\ much\ waste\ is\ exported\ as\ is\ actually\ reported.”);\ Porterfield\ &\ Weir,\ supra\ note\ 1,\ at\ 341\ (“[A]ccording\ to\ a\ recent\ study\ by\ the\ G.A.O.\ [General\ Accounting\ Office],\ the\ ‘E.P.A.\ does\ not\ know\ whether\ it\ is\ controlling\ 90\ percent\ of\ the\ existing\ waste\ or\ 10\ percent.\ Likewise\ it\ does\ not\ know\ if\ it\ is\ controlling\ the\ wastes\ that\ are\ most\ hazardous.’”)).\ ^{7.\ See\ infra\ notes\ 24-26\ and\ accompanying\ text\ (discussing\ the\ definition\ of\ hazardous\ waste\ under\ the\ Resource\ Conservation\ and\ Recovery\ Act\ and\ EPA\ regulations).\ Although\ the\ dangers\ of\ improper\ disposal\ can\ be\ similar\ with\ regard\ to\ both\ hazardous\ wastes\ and\ radioactive\ materials,\ radioactive\ wastes\ are\ covered\ by\ a\ separate\ set\ of\ domestic\ and\ international\ regulations,\ and\ are\ not\ discussed\ in\ this\ Comment.\ )\ ^{8.\ Issues\ and\ Policy\ Considerations\ Regarding\ Hazardous\ Waste\ Exports,\ 11\ Hous.\ J.\ Int’l\ L.\ 373,\ 373\ (1989)\ [hereinafter\ Issues\ and\ Policy].\ )\ ^{9.\ Id.\ )\ ^{10.\ See\ infra\ notes\ 165-72\ and\ accompanying\ text.\ )\ ^{11.\ See\ Porterfield,\ Developing\ States\ Become\ Developing\ Dump\ for\ Toxics,\ WorldPaper\ 6\ (Dec.\ 1988);\ Issues\ and\ Policy,\ supra\ note\ 8,\ at\ 374.\ )
these dangerous substances are mislabeled or are combined with non-
hazardous exports. Sometimes they are dumped in the country without notice, or corrupt officials accept bribes to look the other way. Frequently, countries are so troubled by their dismal financial situation that they willingly accept hazardous waste for cash, unaware of the serious long-term consequences.

Consequently, America must recognize the need for imposing restrictive regulations on hazardous waste exports. This is necessary not only for the obvious moral and ethical reasons, but also to avoid possible foreign relation repercussions. If improperly disposed, exported hazardous waste may return to the United States either directly, through the air, rivers and oceans, or indirectly, through, for example, contaminated produce grown in hazardous “fertilizer,” or other poisonous byproducts. Moreover, shipping hazardous waste over long distances increases safety and environmental risks. “These transactions may be handled by a labyrinth of middle men between the generator

12. See infra notes 151-54 and accompanying text.
13. See infra notes 126-33 and accompanying text.
15. See Koch, Environment: South Africa Willing to Harbor Global Garbage, Inter Press Serv., July 17, 1989 (South Africa has been considering importing toxic waste as a means of solving the country's serious balance of payments problem. However, a prior “recycling” project has lead to traces of mercury more than two times the legal limit 12 miles down river from the recycling firm.); Islam, Bangladesh: Re-Opens Question of Foreign Industrial Waste, Inter Press Serv., Mar. 16, 1989 (Bangladesh is considering importing hazardous waste for recycling, even though scientists warn that a waste recycling plant would kill the fish in Chittagong bay and thus upset the entire economy.); Millman, Exporting Hazardous Waste; From Developed to Third World Nations, 92 TECH. REV. 6 (Apr. 1989) (Peru is considering building the Third World's first industrial waste incinerator, despite the inevitable air pollution and massive problems that could result if the incinerator were to break down in this less technically advanced country.). See also, infra notes 31-32 and accompanying text (discussing Marshall Islands' import of municipal garbage to create a landfill).
16. See CENTER FOR INVESTIGATIVE REPORTING, supra note 1, at 112 (quoting Jim Vallette of Greenpeace, "'You don't dump your garbage on your neighbor's lawn for moral reasons. It's that simple.'")
17. See infra note 171 and accompanying text (Nigeria recalled its ambassador from Rome after an Italian waste broker dumped 3,800 tons of hazardous waste in a residential area of Koko, Nigeria).
19. Porterfield & Weir, supra note 1, at 344.
20. Id. at 343 (discussing the death of an animal due to wastes containing antibiotics and fish oil imported for use as cattle feed and fertilizer); French, supra note 14, at 15, 17 (referring to this phenomenon as a "circle of poison").
and the party actually accepting the waste in the import country, which increases the risks of mishandling and subterfuge.18

II. DEFINITIONAL QUESTION

A. U.S. Definition of Hazardous Waste

The first issue that must be addressed concerns the meaning of "hazardous waste". The United States' Resource Conservation and Recovery Act (RCRA)24 defines "hazardous waste" as:

waste, which because of its quantity, concentration, or physical, chemical or infectious characteristics may cause . . . an increase in mortality[;] . . . serious . . . illness; or pose a substantial . . . hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.24

Using this legislation as a guideline, the EPA defined hazardous waste to include a list of nearly 350 chemicals25 and any solid waste that exhibits the characteristics of ignitability, corrosivity, reactivity or toxicity.26

B. "Non-Hazardous" Waste

The United States has no regulations or any means of tracking27 exported waste that is not deemed to be "hazardous."28 This "non-hazardous" waste includes common garbage, untreated sewage and incinerator ash.29 The primary problem with this distinction is that waste

22. Issues and Policy, supra note 8, at 375.
23. See infra notes 43-44, 49-56 and accompanying text.
27. Handley, Canada, supra note 2, at 10,061 & nn. 4-5 (Feb. 1990) (citing RCRA § 3001, 42 U.S.C. § 6938, ELR STAT. RCRA 025; 40 C.F.R. § 262.54 (1988) (hazardous waste manifest documents), RCRA § 3017(g)) (U.S. export regulation only applies "to exports of 'hazardous waste' and does not require tracking documents for exports of nonhazardous waste. Consequently, little or no accurate data are available about the quantities of nonhazardous waste shipments.").
28. Hearing on U.S. Waste Exports, supra note 1, at 16 (statement of Hon. John Conyers (D-MI)).
considered to be "non-hazardous" in the United States may indeed become "hazardous" in the context of the receiving country's inferior treatment, storage or disposal capabilities. For example, the Marshall Islands recently agreed to accept tens of millions of tons of "non-hazardous" municipal trash to create a landfill. As Representative John Conyers, Jr. (D-MI) noted, "[T]he result [will] be almost certain contamination of the ocean and food sources...[and] would never be allowed today in the United States..." 

Failure to regulate non-hazardous exports increases the potential for abuses involving tainted or "laundered" hazardous waste shipments. In addition, failure to require prior notification or tracking documentation enables U.S. exporters to escape liability for spills and improper disposal.

Despite the lack of U.S. regulation, non-hazardous waste disposal scams are occasionally detected. In one extreme example of greed and dishonesty, a Philadelphia contractor created an international scandal that generated worldwide outrage and condemnation of U.S. export regulations. In September 1986, a freighter ship known as the Khian Sea left Philadelphia port loaded with 28 million pounds of municipal and industrial incinerator ash. Incinerator ash, while considered non-

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32. Hearing on U.S. Waste Exports, supra note 1, at 16 (statement of Hon. John Conyers (D-MI)).

33. Handley Canada, supra note 2, at 10,062. See infra notes 50-53 and accompanying text.

34. Handley Canada, supra note 2, at 10,062.

hazardous in the U.S., is often loaded with lead, mercury, and deadly dioxins. These poisons can destroy wildlife and kill humans. Originally intended for the Bahamas, the shipment was rejected, falsely relabeled as bulk construction material, and sent back out to sea. After 18 months of wandering the Caribbean, the Khian Sea docked in Haiti and began unloading the ash, which was re-labeled as fertilizer. Upon discovery of the true nature of the cargo, the Haitian government ordered the vessel to leave, but not before the ship dumped and deserted between 2,000 to 3,000 tons of ash on the island. Over the next 22 months, the barge changed its name twice and touched five continents. At least 13 other countries rejected its cargo. In early November, 1988, two years after its initial departure, the ship’s holds were reported empty. A lawyer for the Philadelphia contractor expressed concern that the ash may have been dumped at sea.

42. Philadelphia Ash, supra note 35, at 30. See also Greenpeace Inventory, supra notes 35, at 163-66; Khian Sea Under U.S. Justice Department Investigation — U.S. Wastes May have been Dumped in Indian Ocean, 2 Greenpeace Waste Trade Update, 4, 12 (Dec. 1989) [hereinafter Khian Sea]. While there are no U.S. restrictions on exporting incinerator ash, the U.S., as a signatory of the London Dumping Convention, is prohibited from dumping incinerator ash and a number of other waste products into the ocean. Khian Sea, supra; London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 11 I.L.M. 1291 (Nov. 13, 1982). See also Greenpeace USA v. Stone, No. 90-00588 (D. Haw. Sept. 28, 1990) (LEXIS, Genfed library, Dist File) ("The London Dumping Convention ... has been ratified and there is implementing legislation, the Marine Protection, Research, and Sanctuaries Act (‘MPRSA’), 33 U.S.C. §§ 1401 et seq. ... Article III(1)(a)(i) of the
III. U.S. Regulations

A. Resource Conservation and Recovery Act

In 1976, Congress passed the Resource Conservation and Recovery Act (RCRA) to provide "cradle to grave" regulation of hazardous waste. The purpose of this statute was to create: (1) minimum standards for the storage, treatment and disposal of hazardous waste at U.S. facilities; and (2) a system to track hazardous wastes to those facilities. Although RCRA did not expressly address hazardous waste exports, in February 1980, the Environmental Protection Agency (EPA) enacted regulations to govern such exports. Exporters, in effect, were required to comply with regulations applicable to domestic shippers of waste, including: (1) initiating a manifest; (2) using proper labels and containers; and (3) complying with the record keeping and reporting requirements of the RCRA. In addition, exporters were required to submit annual reports and to notify EPA four weeks prior to the initial shipment of hazardous waste to each foreign country in a calendar year. Regulations were so limited that they left the EPA both ignorant of how much waste was being exported and impotent to stop shipments proscribed by foreign nations.

A generator must only identify the waste and consignee. Notification of the quantities of waste, frequency of shipment, or the manner in which such waste will be transported to, treated, stored or disposed in the receiving country is not required. Current regulations also do not require prior written consent of the receiving country prior to shipment. Accordingly, under current regulations, EPA has no authority to prohibit the export of hazardous waste if the foreign country objects to its receipt; any action to stop the shipment must be taken by the receiving country.
country.  

B. Hazardous and Solid Waste Amendment

In response to concerns that exports of hazardous waste may create foreign policy problems and provide a loophole to circumvent U.S. law, Congress passed the Hazardous and Solid Waste Amendment of 1984 (HWSA). This comprehensive set of amendments “significantly changed the way that [the U.S.] managed hazardous waste including the export of such waste.” Section 3017 was one of the most important additions to RCRA concerning hazardous waste exports. It provides that “the export of hazardous waste is prohibited unless the person exporting the waste:

(1) Provides notification to the [EPA];
(2) the government of the receiving country has consented to accept the waste;
(3) a copy of the ... written consent ... accompanies each waste shipment; and
(4) the shipment conforms to the terms of the consent.”

Section 3017(f) allows for alternative requirements where there exists an international agreement between the United States and the government of the receiving country. Section 3017(g) requires exporters of hazardous waste to file with the EPA a report summarizing the types, quantities, frequency, and ultimate destination of all such waste exported during the previous year. In addition, criminal penalties were added to RCRA to punish those who knowingly violate these amendments.

C. EPA Rules

Although President Reagan signed HSWA into law on November 48. 51 Fed. Reg. 8,744 (1986).
51. EPA Audit, supra note 1, at 9.
55. 51 Fed. Reg. 8,745 (1986); 42 U.S.C. § 6938(g).
56. 51 Fed. Reg. 8,745 (March 13, 1986); 42 U.S.C. § 6928(d), (e).
8, 1984, it was not until August 8, 1986 that EPA promulgated final rules and regulations to implement the statute.\(^{57}\) In adopting these rules, EPA relied on minimal legislative history\(^{58}\) and two decisions by the Organization for Economic Cooperation and Development (OECD)\(^{59}\) for guidance.

According to the EPA regulations, generators, transporters, and export brokers are each subject to different liabilities and responsibilities.\(^{60}\) "Primary exporters" bear the greatest burden — they are responsible for submitting notification, keeping required records, and filing annual reports and other documentation.\(^{61}\) Primary exporters are defined as: (1) persons required to originate a manifest, the document that specifies the receiving country's treatment, storage or disposal\(^{62}\) facility to which the hazardous waste will be sent; and (2) any intermediary arranging for the export.\(^{63}\) An "intermediary" is a party who arranges hazardous waste export by acting as a broker between the party

\(^{57}\) 51 Fed. Reg. 28,664-86 (1986) (Final Rule). Section 3017 provided that enforcement was not to begin until 24 months after enactment of HSWA. 42 U.S.C. § 6938(a). In fact, according to Inspector General John C. Marin, the EPA did not have proper channels of enforcement set up until 1988. Gilmore, supra note 30, at 895 n.73 (citing International Export of U.S. Waste: Hearing Before the Subcomm. on Environment, Energy, and Natural Resources of the Comm. on Government Operations, 100th Cong., 2d Sess., at 1627 (1988)). See also EPA Audit, supra note 1, at 12 (finding that from October 1, 1986 through September 30, 1987 hundreds of tons of hazardous waste were not handled in accordance with EPA regulations).


\(^{60}\) For a detailed analysis of EPA notification and consent requirements, and other general information for hazardous waste exporters, see Semenoff, Foreign Trade in Trash? Exporting Hazardous Waste, 4 NATURE RESOURCES & ENV'T 14 (Summer 1989).


\(^{62}\) Hazardous wastes exported for use, reuse, reclamation or other recycling activities are within the statutory meaning of the terms "treatment, storage and disposal." Id. at 28,669.

\(^{63}\) Id. at 28,667-69, 28,683 (codified at 40 C.F.R. § 262.51).
originating the manifest and the party exporting the waste (such as the transporter). By definition there may be more than one primary exporter per transaction. However, only one party is to submit notification and comply with the paperwork requirements. EPA retains the right to take enforcement action against all primary exporters in an illegal transaction. In addition, if the primary exporter is a corporation, partnership or sole proprietor, the business' owners, officers and employees may be held liable if they knew or should have known of the violation.

Transporters are required to: (1) ensure that a manifest and an EPA Acknowledgment of Consent accompanies the hazardous waste; (2) return signed copy of the manifest back to the generator; (3) give a copy of the manifest to a U.S. Customs official at the point of departure from the United States; and (4) deliver the entire quantity of hazardous waste to the place outside the United States designated by the primary exporter. Furthermore, transporters may not accept hazardous waste from a primary exporter if they know that the shipment does not conform to the EPA Acknowledgment of Consent.

1. Notification and Consent

The EPA's export regulations impose several notification and con-
sent requirements on primary exporters of hazardous waste. Before exporting hazardous wastes primary exporters must notify EPA. In addition, the receiving country must consent to accept the shipment.\textsuperscript{72} Notification is sent to both the receiving country and any transit countries, although no consent is required from transit countries.\textsuperscript{73} The EPA recommends submitting a complete notification\textsuperscript{74} sixty days before the intended date of the initial shipment.\textsuperscript{76} Each notification covers export activities up to 12 months.\textsuperscript{78}

If a primary exporter claims confidentiality as to any notification information, the EPA will withhold this information from private parties. EPA may also withhold the information from transit countries, if the EPA determines that the information is important for a transit country to know.\textsuperscript{77} Confidential notification information will not be

\begin{footnotesize}
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\item \textsuperscript{72} \textit{Id.} at 28,672-73, 28,683 (codified at 40 C.F.R. §§ 262.52(a),(b), and 262.53(a)).
\item \textsuperscript{73} Notification should contain: (1) the name, mailing address, telephone number and EPA ID number of the primary exporter; (2) a description of the hazardous waste and the EPA hazardous waste number; (3) the estimated period of time and frequency in which the waste is to be exported; (4) the estimated total quantity; (5) all points of entry to and departure from each foreign country through which the hazardous waste will pass; (6) a description of the form(s) of transportation and type(s) of containers to be used; (7) a description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country; (8) the name and site address of the cosignee and any alternate cosignee; and (9) the name of any transit countries through which the hazardous waste will be sent and a description of the approximate time the waste will remain in that country and the nature of its handling while there. 40 C.F.R. § 262.53(a).
\item \textsuperscript{74} 51 Fed. Reg. 28,675-76, 28,683 (August 8, 1986) (Final Rule) (codified at 40 C.F.R. § 262.53(e)).
\item \textsuperscript{75} The EPA's 60 day time frame is merely an estimate of how long the notification and consent procedure will take. It should be emphasized that hazardous waste cannot be exported without prior consent from the receiving country. If for some reason the receiving country takes longer to respond than expected, the primary exporter must delay shipment. Exporters are free to submit notification before the recommended 60 days advanced notice, as they so desire. \textit{Id.} at 28,672-73, 28,683 (codified at 40 C.F.R. § 263.53(a)).
\item \textsuperscript{76} \textit{Id.} (codified at 40 C.F.R. § 262.53(a)). Any changes in the original notification (except for changes in: (1) the primary exporter's telephone number; (2) the method(s) of transportation and type(s) of containers to be used; and (3) a decrease in the estimated total quantity) require renotification to the EPA and renewed consent from the receiving country. Shipments cannot take place until the receiving country consents to the changes. Transit countries will be notified of the changes, but no consent is required. 40 C.F.R. § 262.53(c). See 51 Fed. Reg. 28,674-75, 28,683 (August 8, 1986) (Final Rule).
\item \textsuperscript{77} 51 Fed. Reg. 28,679 (August 8, 1986) (Final Rule) (codified at 40 C.F.R. §§ 262.2 and 262.53).
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withheld from the receiving country as this information is necessary for
the receiving country to make an informed decision whether to accept
the hazardous waste, and, if accepted, how to deal with it.\footnote{78}

EPA acts in concert with the U.S. Department of State to send
notification to receiving and transit countries and to relay the receiving
country’s consent or objection to primary exporters.\footnote{79} After EPA has
received a completed notification from primary exporters, it sends the
notification to the Department of State\footnote{80} for telegraphic transmission\footnote{81} to the U.S. Embassy in the receiving country.\footnote{82} The U.S. Embassy
translates the information\footnote{83} and forwards the information to the appro-
priate authorities in the receiving country.\footnote{84} Along with a request for
an expedited written response, the U.S. Embassy notifies the receiving
country that U.S. law prohibits the export of hazardous waste unless
the receiving country consents to accept the waste.\footnote{85} The U.S. Embassy
also provides a description of the federal regulations which apply to the
treatment, storage and disposal of the hazardous waste in the United
States.\footnote{86} Upon receipt of the receiving country’s written response, the
U.S. Embassy translates and cables it to the Department of State.\footnote{87} The

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No. 98-284, 98th Cong., 1st Sess. 47 (1983)).
\item[79] 51 Fed. Reg. 28,675-76, 28,683 (August 8, 1986) (Final Rule) (codified at 40
\item[80] 40 C.F.R. \$ 262.53. The EPA estimates that it will notify the Department of
State within five days of receipt of the completed notification. 51 Federal Register
\item[81] ‘‘Telegraphic transmission of information between the United States and re-
ceiving countries is necessary to expeditiously transmit notification and consent in-
formation. Mailing actual reproductions of such documents would take considerably
longer, making it difficult to meet statutory deadlines for transmission of such informa-
tion and necessitating earlier notification by the exporter than that proposed.’’ Id. at
8,749-50.
\item[82] 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,749-50
(March 13, 1986) (Proposed Rule). The State Department estimates it will notify the
receiving country within ten days of receipt of the information from the EPA. 51 Fed.
\item[83] The EPA will not take enforcement action against an exporter who relied in
good faith on an erroneous translation by a U.S. Embassy. 51 Fed. Reg. 28,675-76
(August 8, 1986) (Final Rule).
\item[85] 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,749-50
\item[86] 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,749-50
\item[87] 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,749-50
(March 13, 1986) (Proposed Rule). The original written communication from the re-
\end{footnotes}
cable is forwarded to the EPA. If the receiving country consents fully or with specified modification, the cable will constitute the EPA Acknowledgment of Consent and will be forwarded to the primary exporter for attachment to the manifest. Where the receiving country rejects the shipment, the EPA will notify the primary exporter in writing.

2. Annual Disclosure

In addition to notification and consent requirements, the EPA codified an annual reporting requirement for exporters of hazardous waste. Exporters must file an annual report summarizing the types, quantities, frequency and ultimate destination of all hazardous waste exported during the previous year. On even numbered years, the report must include a description of the efforts made, and the degree of receiving country will be sent to the Department of State in the diplomatic pouch. This document will then be forwarded to EPA, and a copy sent to the primary exporter. 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,749-50 (March 13, 1986) (Proposed Rule).


89. But see supra note 69 (railroad exception). 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,749-50 (March 13, 1986) (Proposed Rule) (codified at 40 C.F.R. § 262.54). Although no consent is required from transit countries, EPA will notify the primary exporter of any responses made by transit countries. Comments made by these countries are not binding upon the primary exporter. However, if the exporter does not act accordingly, a transit country may prohibit entry of the waste. 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,750-51 (March 13, 1986) (Proposed Rule).

90. 51 Fed. Reg. 28,675-76 (August 8, 1986) (Final Rule); 51 Fed. Reg. 8,749-50 (March 13, 1986) (Proposed Rule) (codified at 40 C.F.R. § 262.54). EPA estimates it will notify the primary exporter within five days of receipt of the receiving countries response. The total amounts to 30 days transmission time for notification and consent — thus, the receiving country has 30 days to respond. Again, it should be emphasized that these are only estimates. Unforseen circumstances may lengthen the process. 51 Fed. Reg. 8,749 (March 13, 1986) (Proposed Rule).


92. 50 Fed. Reg. 28,733, 28,746 (July 15, 1985) (Final Rule) (codified at 40 C.F.R. § 262.50(d)).
success, in reducing the volume and toxicity of waste generated. Furthermore, each annual report must include a certification signed by the primary exporter indicating that the submitted information is true, accurate and complete.

D. Enforcement

The EPA relies on section 3008 of RCRA to enforce compliance through civil and criminal penalties. The strongest penalty provides that any person who knowingly exports hazardous waste without a receiving country's proper consent or in violation of a bilateral agreement may be subject to fines of up to $50,000 per day and/or imprisonment of up to two years. Second offenders may be fined $100,000 per day and/or be sentenced to four years in prison. EPA has made it clear that they intend to prosecute violators to the fullest extent of the law.

Exporters of hazardous waste may also be required to comply with export control laws of other agencies. For example, the U.S. Customs Service has authority to stop, search, and seize hazardous waste shipments which they suspect of being exported illegally. The Bureau of the Census, under the Department of Commerce, requires exporters to file a Shipper's Export Declaration for shipments valued at over $1500,

93. 51 Fed. Reg. 28,682, 28,684 (August 8, 1986) (Final Rule) (codified at 40 C.F.R. §§ 262.41, 262.56(3)).
94. Id. at 28,684 (codified at 40 C.F.R. § 262.56(6)).
a likely possibility when hazardous waste is being exported for recycling.\textsuperscript{101} Civil and criminal penalties also exist for failing to file or for knowingly making false representations on the Shipper's Export Declaration.\textsuperscript{102}

In addition to the export control laws, RCRA provides for civil and criminal penalties against any citizen who contributes to imminent and substantial endangerment.\textsuperscript{103} The Comprehensive Environmental Response, Compensation, and Recovery Act (CERCLA) allows the government and private parties to seek response costs and natural resource damages.\textsuperscript{104} Foreign individuals have more limited remedies. If a hazardous exporter complies with the U.S. export regulations, a foreign individual or government only has recourse to the U.S. courts with an action in tort to redress injuries created by an American exporter's hazardous waste disposal activities outside the United States.\textsuperscript{105}

1. Enforcement Problems

Despite extensive regulations, in March 1988, an EPA audit report found that hundreds of tons of hazardous waste had been exported without meeting proper EPA requirements.\textsuperscript{106} One reasons for this lack of compliance is ignorance and misunderstanding of the export regulations by hazardous waste producers and transporters.\textsuperscript{107} In addition, some exporters are involved in sham recycling\textsuperscript{108} and deliberate avoidance of export regulations.\textsuperscript{109}


\textsuperscript{103} Handley, International Legal Controls, supra note 91, at 10,174 (referring specifically to RCRA §§ 7002 and 7003, 42 U.S.C. §§ 6972 and 6973).

\textsuperscript{104} Id. (referring specifically to CERCLA § 107, 42 U.S.C. § 9607).

\textsuperscript{105} Id.

\textsuperscript{106} EPA Audit, supra note 1, at 2. Cf. Center for Investigative Reporting, supra note 1, at 11-12 ("[A] follow-up inspector general's report . . . [in 1990] found that the EPA had corrected many of those deficiencies.") (referring to, although not citing, Office of the Inspector General, Follow-up on EPA's Program to Control Exports of Hazardous Waste, Audit Report Number E1DSGO-05-5003-0400011 (1988)).

\textsuperscript{107} EPA Office of Enforcement and Compliance Monitoring, supra note 101, at 13-14.

\textsuperscript{108} Id.; see infra notes 125-33 and accompanying text.

\textsuperscript{109} EPA Office of Enforcement and Compliance Monitoring, supra note 101, at 13-14; see infra notes 149-50 and accompanying text. Some of the solutions
According to the audit report, there are deficiencies in the EPA’s export control program that cause and encourage exporter noncompliance. For example, the report noted the following problems: (1) The lack of effective coordination between EPA and the U.S. Customs Service, thus, hazardous waste exporters can disregard EPA regulations with little fear of detection;\(^1\) (2) EPA does not know the amount of hazardous waste exported to other countries, and does not know the extent of noncompliance with notification of intent and annual reporting requirements;\(^1\) (3) due to vague EPA guidelines on how much information is required, exporters do not provide adequate descriptions on their notification documents on the manner of treatment, storage, or disposal that the hazardous waste is to receive in the foreign country;\(^1\) (4) the hazardous waste export program lacks accountability;\(^1\) and (5) it is possible that EPA has occasionally failed to inform exporters of objections made by receiving countries.\(^1\)

**E. Statutory and Regulatory Problems**

Even if EPA’s method of enforcement were perfected in accordance with RCRA, HSWA, and the regulations promulgated by EPA, problems in exporting hazardous wastes would still exist due to gaps and inconsistencies in U.S. laws. In promulgating final rules as required under HSWA, EPA concluded that, “Congress could not have intended to regulate for export those ‘hazardous wastes’ which EPA does not regulate domestically.”\(^5\) Consequently, there is a small group of hazardous waste exports which, because they are fully or partially exempt from domestic regulation, have no notification, consent or annual reporting requirements. Such hazardous wastes include samples, residues in empty containers, wastes generated in product transportation vehicles, scrap metal when recycled, and waste generated by small

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suggested by the National Enforcement Investigation Center, a subdivision within the EPA’s Office of Enforcement and Compliance Monitoring, include: (1) targeting generators and treatment, storage and disposal facilities for evaluation of compliance with export requirements; (2) creating a waste exporter profile to assist Customs inspectors in identifying suspicious shipments of hazardous waste; and (3) periodic border spot checks. EPA OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING, supra note 101, at 21-22.

110. EPA Audit supra note 1, at 4.
111. Id. at 3.
112. Id. at 5.
113. Id. at 6.
114. Id. Whether or not this allegation is true, the EPA’s current record keeping system provides no means for proving otherwise. Id. But see supra note 106.
quantity generators generating less than 100kg/mo of hazardous waste.\textsuperscript{118} 

EPA’s lack of authority to stop hazardous (or non-hazardous) waste shipments is another problem with current U.S. regulations. These wastes are shipped, even if EPA believes that the receiving country does not have adequate technology and resources to handle the waste.\textsuperscript{117} In addition, incinerator ash, untreated sewage, municipal garbage and other wastes not classified as hazardous have no notification requirements.\textsuperscript{118}

IV. BILATERAL AGREEMENTS

A. Mexico

The United States has two bilateral agreements that supercede EPA notice, export and enforcement procedures.\textsuperscript{119} The agreement between the United States and Mexico, signed on November 12, 1986,\textsuperscript{120}
requires both notification at least 45 days prior to the planned date of export and consent. Consent must be express; it will not be implied from a failure to respond. However, much of this 1986 agreement has been rendered moot because a Mexican presidential decree prohibits the disposal of hazardous waste within Mexico. Only hazardous waste destined for qualified recycling facilities may be exported to Mexico. Non-hazardous waste, on the other hand, is not covered by either the U.S.-Mexican agreement or the presidential decree.

While hazardous waste cannot legally be disposed in Mexico, illegal dumping and sham recycling schemes occur frequently. For example, on May 9, 1990, Raymond Franco and David Torres were indicted for illegal transportation and dumping of hazardous waste in Mexico. According to the indictment, Franco contracted to transport the hazardous waste from California businesses to legal landfills or recycling facilities. Instead of going to the designated sites, the indictment charges that Franco and Torres loaded drums of the dangerous material onto trucks and concealed their contents by surrounding them with empty containers and covering them with wood and cardboard. The drums were then driven across the Mexican boarder to a Tijuana


124. See Gilmore, supra note 30, at 893 n.66.


127. See supra note 126.

128. Id.
warehouse owned by Torres, where much of the hazardous waste was dumped. After more than a year of investigation and surveillance, law enforcement officials witnessed the attempted smuggling. Torres and Franco were charged with illegal transportation and disposal of hazardous waste, conspiracy, and illegal export of hazardous waste into Mexico. This indictment marks the first time that transporters of hazardous waste have been charged for illegal smuggling under the Resource Conservation and Recovery Act. If convicted, Torres and Franco face severe prison sentences and a maximum of $250,000 for each count filed against them.

In addition to illegal dumping activities, sham recycling programs have also plagued enforcement efforts. Under an agreement between the United States and Mexico, manufacturers known as maquiladoras, or “twin plants,” produce goods in Mexico just beyond the Mexican border. These manufacturers use raw materials shipped from the U.S. and inexpensive Mexican labor to produce finished goods that are then exported back to the United States. Hazardous waste generated from the manufacturing process is considered U.S. property. It is to be exported with the manufactured products. However, due to the high cost of disposing hazardous waste in the United States, occasionally the remaining toxins do not get shipped back to the United States.

Aside from outright dumping, Mexican law permitted maqui-
ladoras to avoid the hazardous waste export requirements by donating them to Mexican charities. This provision was intended to benefit legitimate charities that could use industrial scraps. However, phony charities were soon created and dangerous manufacturing byproducts were being improperly disposed. While this law was repealed last year and Mexican authorities are more vigorously enforcing environmental regulations, much of the land and water surrounding the maquiladoras are severely polluted.

B. Canada

An agreement between the United States and Canada was signed on October 28, 1986. Article 3(d) of the agreement states that if the country of import does not respond within 30 days after receipt of notification of a hazardous waste shipment, it has, in effect, consented to the import of the hazardous waste. This "implied consent" provision has raised a great deal of criticism, and will probably be altered in November, 1991 when the agreement comes up for renewal. Non-hazardous waste is not covered by this U.S.-Canadian agreement.

139. Id.
140. Id.
141. Id. Between November 1988 and May 1990, enforcement officials shut down seven maquiladoras until the factories were properly cleaned up. Id.
142. CENTER FOR INVESTIGATIVE REPORTING, supra note 1, at 58-62. Maquiladoras have made the New River one of the most polluted waterways in the world. Soil and well water samples reveal high levels of heavy metals, including cadmium (linked to liver and kidney disease) and lead (known to cause damage to the central nervous system). Id.
143. EPA OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING, supra note 101, at appendix B (Canada-USA Agreement on the Transboundary Movement of Hazardous Waste).
144. Id. art. 3(d). But see Hearing on Waste Export Control, supra note 2, at 23, (material submitted by the Canadian Embassy stating that under the Canada-USA agreement "the exporting country must notify the importing country and obtain consent prior to shipment . . ." (emphasis added)).
145. In contrast, RCRA prohibits the export of hazardous waste unless the receiving country expressly consents to accept it. 42 U.S.C. § 6938(a)(1)(C). But see supra note 119 (international agreements that establish notification and consent requirements between the U.S. and a receiving country supersede existing U.S.C. regulations. 42 U.S.C. § 6938(f)).
146. See 96 CHEMICAL ENGINEERING 27 (July 31, 1989).
147. EPA OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING, supra note 101, at appendix B (Canada-USA Agreement on the Transboundary Movement of Hazardous Waste, art. 13).
148. EPA OFFICE OF ENFORCEMENT AND COMPLIANCE MONITORING, supra note 101, at appendix B (Canada-USA Agreement on the Transboundary Movement of
Canada has also experienced problems with illegal hazardous waste imports. For example, on April 5, 1990, the EPA announced proposed fines of $254,728 against Textron Lycoming for violating federal waste disposal and export regulations. Textron Lycoming allegedly shipped at least 834 truck loads of metal hydroxide sludge from the U.S. to a Canadian hazardous waste treatment facility without permission from the EPA. From 1987 through 1989, in a similar incident, New York tanker trucks secretly filled the bottom of their tanks with burnable chemical waste. The drivers would then fill the rest of the tank with diesel or heavy heating oil and sell the mixture at bargain prices across the Canadian border. When burned, the tainted fuel produced toxic emissions. In response, Canada closed 125 of 175 entry points for fuel tankers. After a lengthy investigation twelve people were charged with eighty-eight criminal charges of conspiracy, fraud and theft.

V. INTERNATIONAL REGULATIONS AND PROPOSALS

A. Agreements in Which the U.S. is Not a Participant

1. European Community

In 1984, the Council of the European Community (EC) adopted a directive that organized the supervision and control of transfrontier shipments of hazardous waste within the EC. Under this directive,
exporters of hazardous waste\textsuperscript{156} are to notify the recipient and transit countries of: (1) the content of the shipment; (2) the route of the shipment; (3) measures to be taken to ensure its safe transportation; and (4) the contract agreement with the importer, who must have adequate technical capacity for the disposal of the waste.\textsuperscript{157} No hazardous waste can be shipped to an EC member state until the receiving country has acknowledged receipt of the notification.\textsuperscript{158} In addition to these notification and acknowledgement requirements, the 1984 directive imposed reporting, packaging and labeling requirements.\textsuperscript{159}

One major weakness of the 1984 directive was its failure to fully consider non-EC member states. Although hazardous waste exporters were required to send prior notification to non-EC member states, no provisions existed for non-member states to refuse authorization.\textsuperscript{160} On June 12, 1986, the Council amended the 1984 directive to remedy this situation.\textsuperscript{161} The 1986 amendment contained procedures that are to be applied more strictly to hazardous waste exports shipped to non-member states than to similar exports shipped to EC countries. Article 3(4) of the 1986 amendment requires a hazardous waste exporter who intends to ship to a non-member state to obtain an agreement with that non-member state before beginning the notification procedures.\textsuperscript{162}

Despite these Council directives, recent events have shown that the provisions are neither sufficiently detailed\textsuperscript{163} nor adequately enforced.\textsuperscript{164}


\textsuperscript{158} Id.

\textsuperscript{159} Id. at 35.


\textsuperscript{162} Id. at 14. See also Greenhouse, Europe's Failing Efforts to Exile Toxic Trash, N.Y. Times, Oct. 16, 1988, § 4, at 6, col. 1 (late city final ed.) ("The European Community has adopted a directive that calls on the 12 member nations to allow toxic waste to be exported from their countries only after determining that the receiving country has agreed to accept the waste and has adequate means of disposing of it. The directive also calls on members to allow waste into their countries only after assuring that it will be disposed of properly.").

\textsuperscript{163} See, e.g., supra note 156; Handley, International Legal Controls, supra note 91, at 10,175-78.

\textsuperscript{164} By October 1988, only three countries have enacted the Council of European Community's directive into law. Greenhouse, supra note 162; Millman, supra note 15;
For example, between September 1987 and May 1988, an Italian waste broker\textsuperscript{165} directed five shiploads of waste, totalling 3,800 tons, to Koko, Nigeria, where they were dumped in a dirt lot in a residential area.\textsuperscript{166} Later, it was discovered that some of the drums contained polychlorinated biphenyls (PCBs), one of the world's most toxic industrial wastes, and there was some suggestion that other containers held biological waste\textsuperscript{167} and radioactive materials.\textsuperscript{168} Leaking containers reportedly seeped into Koko's water supply and contaminated the village's rice, which lead to numerous illnesses, premature births and 19 deaths.\textsuperscript{169} While attempting to clean up the waste site, three Nigerian workers were rushed to the hospital with chemical burns. One man was partially paralyzed and others vomited blood.\textsuperscript{170}


directives have certainly not been met in connection with contracts for the importation of very large quantities of waste into a number of African countries which do not possess the necessary technical capacity to deal safely with the type of waste concerned.

Commission of the European Communities, \textit{Communication from the Commission: Export of Toxic Waste}, COM(88) 365, at 2 (July 13, 1988) (final). The Commission stated that it would take steps to have the prior directives quickly implemented by member states and would adopt new directives to establish "a more precise and uniform definition of hazardous waste as well as more precise rules for the transport and elimination of waste and fuller information requirements." \textit{Id.} By April 1989, two of the twelve EC countries had not yet implemented the directives, and another four had just enacted them within the last few months. Johnson, \textit{Keeping Tabs on the World's Wastes}, 96 Chemical Engineering 48 (Apr. 1989).

165. Italian businessman Gianfranco Raffaele planned to make $4.3 million from the arrangement. Raffaele fled Nigeria, thus narrowly escaping arrest. Lief, Barnes & Zulueta, \textit{supra} note 36.

166. A retired Nigerian timber worker, Sunday Nana, was persuaded to store the waste containers in his back yard for $100 per month, a small fortune in his village. Two years after the drums were dumped, Nana died of respiratory failure, although authorities claimed there was no connection. Harden, \textit{supra} note 35; \textit{West Africa in Toxic Waste Dumping Furor; Foreign Deals Protested}, Facts on File World News Dig., Aug. 12, 1988, § G2, at 584; Lief, Barnes & Zulueta, \textit{supra} note 36; \textit{Center for Investigative Reporting, supra} note 1, at 1-2.


169. Lief, Barnes & Zulueta, \textit{supra} note 36; \textit{Center for Investigative Reporting, supra} note 1, at 1-2.

170. Lief, Barnes & Zulueta, \textit{supra} note 36; \textit{Center for Investigative Reporting, supra} note 1, at 1-2. The Nigerian workers lacked protective masks, boots
In response to this disaster, Nigeria arrested between 15 and 54 people involved in the dumping scheme. Nigeria seized Italian and Dutch cargo ships unrelated to the toxic waste, and it recalled its ambassador from Rome.\textsuperscript{171} Shamed by the international community, in June 1989, Italy imposed the strictest export regulations in Europe, including a ban on all exports of municipal and hazardous waste to all non-EC countries.\textsuperscript{172}

For years, Eastern Europe has been one of the favorite dumping sites of Western Europe.\textsuperscript{173} East Germany, for example, had reportedly been accepting between 1 and 5.5 million tons of waste a year in exchange for hard currency.\textsuperscript{174} Only with the recent independence of Eastern Europe and unification of Germany has the of the extent of these hazardous waste shipments and their reckless disposal come to light.\textsuperscript{175} In one East German town 10 miles from the West German border, there is serious concern that toxic waste from a local dump site may have seeped into the ground water and may contaminate the water supply.\textsuperscript{176} With the reunification of Germany, West Germany will have to address the enormous hazardous waste disposal problem that it

\begin{itemize}
\item and other basic equipment to handle the waste. \textit{Toxic Waste; Trade-Offs in Poison and Poverty}, Fin. Times, Aug. 31, 1988, at 6.
\item \textsuperscript{171} Lief, Barnes & Zulueta, \textit{supra} note 36; Harden, \textit{supra} note 35; \textit{West Africa in Toxic Waste Dumping Furor; Foreign Deals Protested}, Facts on File World News Dig., Aug. 12, 1988, \textsection G2, at 584. The Dutch ship was not held long, but the Italian vessel was not released until Italy agreed to remove the waste. \textit{West Africa in Toxic Waste Dumping Furor; Foreign Deals Protested}, Facts on File World News Dig., Aug. 12, 1988, \textsection G2, at 584. On the return of the waste to the Italian port of Manfredonia, mobs went on a three-day rampage, barricading entrance to the city and setting fire to the town hall, to protest an order of the central government to allow the toxic waste carrier to dock there. Marshell, \textit{supra} note 167; Lief, Barnes & Zulueta, \textit{supra} note 36.
\item \textsuperscript{172} \textit{Waste Trade Opposition Grows Within European Government}, 2 \textit{Greenpeace Waste Trade Update} 3 (Dec. 1989); Greenhouse, \textit{supra} note 162.
\item \textsuperscript{173} Marshell, \textit{supra} note 167; French, \textit{supra} note 14, at 11; \textit{Center for Investigative Reporting, \textit{supra} note 1, at 96-100}; Atkinson, \textit{Control of Hazardous Waste Exports}, 16 \textit{Barrister} 46, 46 (Fall 1989); Millman, \textit{supra} note 15.
\end{itemize}
U.S. HAZARDOUS WASTE EXPORTS

helped to create.\textsuperscript{177}

2. Africa and the Caribbean

On March 22, 1990, the EC agreed, under the Lome IV Treaty, to ban toxic waste exports to 68 former European colonies in Africa, the Caribbean,\textsuperscript{178} and the Pacific.\textsuperscript{179} According to Greenpeace, this agreement is the world's most comprehensive prohibition on international waste trade.\textsuperscript{180} It is worth noting, however, that at least 50 developing countries are not covered by this agreement.\textsuperscript{181}

3. Other Countries

Although Japan reportedly exports almost no toxic waste,\textsuperscript{182} Japanese officials stated that it will have to transport hazardous waste abroad when domestic waste disposal facilities operate at full capacity.\textsuperscript{183} Under an agreement with United Nations Environment Programme (UNEP), Japan will begin monitoring the transboundary movement of industrial waste in Asia.\textsuperscript{184} The Japanese Health and Welfare Ministry will investigate the responsible governmental agencies, disposal firms and related facilities to monitor the production and


\textsuperscript{180} \textit{Waste Shipments to 68 African, Caribbean and Pacific Countries will be Prohibited}, 2 \textsc{Greenpeace Waste Trade Update} 2 (Dec. 1989). Before this agreement, the tiny African nation of Guinea-Bissau had agreed to accept hazardous waste through private U.S. and European companies in exchange for $600 million — three times the country's gross national product. Marshall, supra note 167.

\textsuperscript{181} French, supra note 14, at 13.

\textsuperscript{182} In 1979, Japan dumped low-level nuclear waste in the South Pacific off the Mariana Islands. However, due to an outcry from the Pacific island countries, Japan ended this practice. Peng, \textit{Third World: Receptacle for World's Toxic Waste}, Inter Press Service, Sept. 21, 1988 (LEXIS, NEXIS).

\textsuperscript{183} \textit{Japan to Start Research on Transboundary Movement of Waste}, Kyodo News Service, Oct. 6, 1989 (LEXIS, NEXIS).

\textsuperscript{184} \textit{Id.}
treatment of industrial wastes in Thailand, Malaysia, China, Indonesia and South Korea.¹⁸⁵

B. Agreements in Which the U.S. is a Participant

1. Organization for Economic Cooperation and Development

The Organization for Economic Cooperation and Development (OECD)¹⁸⁶ adopted the first international legal instrument with regard to the transfrontier movement of hazardous waste on February 1, 1984.¹⁸⁷ This agreement requires that signatory countries¹⁸⁸ “shall control the transfrontier movements of hazardous waste and, for this purpose, shall ensure that the competent authorities of the countries concerned are provided with adequate and timely information concerning such movements.”¹⁸⁹ The Council agreed to additional nonbinding recommendations, including notification and consent procedures which are similar to legislation that has since been adopted by the United States and the EC.¹⁹⁰ Like the EC,¹⁹¹ in 1986, the OECD Council decided to

¹⁸⁵. Id.
¹⁸⁶. The OECD is comprised of Australia, Austria, Belgium, Canada, Denmark, Finland, France, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States and West Germany. In addition, limited forms of cooperation have been established with Yugoslavia. 1990 EUR. Y.B. 185; G. SCHWARZENBERGER & E. BROWN, A MANUAL OF INTERNATIONAL LAW 285 (1976).
¹⁸⁸. Australia and Greece abstained, and therefore are not bound by the decision. In addition, decisions are not binding on signatory countries until they have incorporated the agreement into their own legislative system. G. SCHWARZENBERGER & E. BROWN, A MANUAL OF INTERNATIONAL LAW 286 (1976). Council recommendations are not binding. Handley, International Legal Controls, supra note 91, at 10178 & n.134. See also Gilmore, supra note 30, at 901 n.108 (1989) (“OECD documents have traditionally been standards of achievement, rather than mandatory law, in order to attract greater compliance.”).
¹⁹⁰. Id. at 215-17; See supra notes 49-90, 155-59 and accompanying text.
emphasize the care to be taken when exporting hazardous waste to non-OECD countries. This decision requires member states to: (1) ensure that their authorities are empowered to prohibit exports; (2) apply no less strict controls on hazardous waste exports to non-member states than to member states; (3) prohibit export of hazardous waste prior to notification to transit countries and consent from non-member destination countries; and (4) prohibit export of hazardous waste to a non-member country, unless it is directed to an adequate disposal facility within the country.

Until 1988, the OECD defined hazardous waste as:

any waste other than radioactive waste considered as hazardous or legally defined as hazardous in the country where it is situated or through or to which it is conveyed, because of the potential risk to man or the environment likely to result from an accident or from improper transport or disposal.

This definition was not only vague, but it also presented an obstacle to further agreements. On May 27, 1988, the OECD repealed its old definition of hazardous waste, and, like the U.S. and EC systems, adopted a core list of substances that are defined as hazardous wastes. Hazardous wastes which are now to be controlled include: (1) all wastes on the core list, unless they do not posses any defined hazardous characteristics; and (2) all other wastes which are legally

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193. Id. at 1011. The agreement does not define what constitutes an "adequate disposal facility". See also Greenhouse, supra note 162 ("[A] rule adopted by the Organization for Economic Cooperation [and Development], an association of 24 industrial nations, ... holds the originating nation responsible for waste that is disposed of improperly.").


195. Handley, International Legal Controls, supra note 91, at 10178. See infra notes 201-202 and accompanying text.

196. See supra note 25 and accompanying text.

197. See supra note 156.


199. The decision notes that objective tests to define these hazards quantitatively do not exist. Id. at 271-72. How then is it to be objectively determined whether a waste on the core list does or does not posses any hazardous characteristic? To what degree
defined as hazardous waste in the importing country.\textsuperscript{200} Part (2) of the new OECD definition is substantially similar to the old definition. Consequently, some of the problems associated with the old definition still remain. Hazardous or toxic waste is defined in confusingly different ways by different countries.\textsuperscript{201} Some member countries, including the United States, do not consider the definitions used by other countries to determine whether notification and consent provisions should apply.\textsuperscript{202} The inherent contradiction between the U.S. and OECD systems decreases the likelihood of complete and universal implementation of the OECD decision.\textsuperscript{203}

2. United Nations Environment Programme

The United Nations General Assembly established the United Nations Environment Programme (UNEP) in 1972. UNEP followed the recommendations set forth in the U.N. Conference on the Human Environment held at Stockholm, Sweden, June 16, 1972.\textsuperscript{204} Principle 21 of the Stockholm conference declared that "[s]tates have . . . the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States."\textsuperscript{205}

UNEP has undertaken two major projects.\textsuperscript{206} The first project established and continuously updates the International Register of Potentially Toxic Chemicals (IRPTC). The IRPTC collects and stores data on hundreds\textsuperscript{207} of toxic pesticides, pharmaceuticals and hazardous in-

\begin{itemize}
  \item 200. Id. at 260.
  \item 201. \textit{Hazardous Waste; Passing the Muck}, ECONOMIST 41 (Aug. 19, 1989).
  \item 202. In addition, Spain and Australia abstained from the decision and therefore are not bound by it. \textit{Id.} at 257.
  \item 203. Handley, \textit{International Legal Controls}, supra note 91, at 10178.
  \item 204. 1990 EUR. Y.B. 40. \textit{But see} Rublack, \textit{supra} note 187, at 117 (stating that UNEP was established on December 15, 1962).
\end{itemize}
dustrial wastes, and makes that data available worldwide through a global information-sharing network.208

Second, UNEP developed guidelines for the international exchange of hazardous waste.208 This goal was advanced by the "Environmentally Sound Management of Hazardous Waste" agreement, adopted in Cairo, Egypt on June 17, 1987.210 Although this agreement covered the management of hazardous waste from cradle to grave, it is nonbinding.211 To develop a legally binding treaty, UNEP coordinated the Basel Convention.212

a. Basel Convention

After five years of negotiations, representatives from 117 countries met in Basel, Switzerland in March, 1989 to establish a framework to regulate international shipments of hazardous waste.213 As of 1990, 53

208. Traylor, supra note 206, at 10156-57. See also Nanda & Bailey, Exports of Hazardous Waste and Hazardous Technology: Challenge for International Environmental Law, 17 DEP. J. INT'L L. & POL'Y 155, 188 (Fall 1988) (Now that a list compilation is complete, "the next phase is to start a program monitoring banned chemicals around the world and their effects on human health.") (citing UNEP Group Moves From List Compilation to Monitoring Banned Chemicals Worldwide, 9 Int'l Env't Rep. (BNA) 357 (Oct. 8, 1986)). See also Sankey, Domestically Prohibited Goods and Hazardous Substances — A New GATT Working Group is Established, 23 J. WORLD TRADE 99, 103 (1989) (discussing the London Guidelines for the Exchange of Information on Chemicals in International Trade coordinated under UNEP in 1987. This agreement requires signatory countries to notify each other whenever they ban or restrict a chemical, so that other nations can similarly assess the chemical's potential risks.)

209. Traylor, supra note 206, at 10156, 10158.


nations, including the United States, have signed the Basel Convention, but only 4 countries have ratified it. The Convention does not become effective until it has been ratified by at least 20 nations.

The Basel Convention was modeled after EPA, EC and OECD regulations. It contains similar notification and consent provisions, comparable annual reporting requirements, and allows for multilateral or bilateral agreements in lieu of the UNEP standards, as long as the provisions "are no less environmentally sound than those provided by [the] Convention." Some provisions in UNEP and the U.S. systems are substantially different. For instance, Article 4, sec. 2(e) of the Basel Convention prohibits exports even with an importing country's consent "if [the exporting country] has reason to believe that the waste in question will not be managed in an environmentally sound manner." In contrast, EPA does have not the authority to stop an export once the a receiving country has given its consent. In addition, EPA has no ability to assess the environmental soundness of disposal facilities in foreign nations.

U.S. regulations and the Basel Convention differ in their definitions of hazardous waste. The Basel Convention defines hazardous waste as any waste defined as hazardous by the party of import, export

216. Basel Convention, supra note 213, art. 25, at 676.
218. Basel Convention, supra note 213, art. 6, at 664-65.
219. Id. art. 14, at 669-70.
220. Id. art. 11, at 668.
221. Id. art. 4, § 2(e), at 662. See Rublack, supra note 187, at 119 (citing UNEP/WG.182/2, 21) ("Originally, the draft had taken the wording from Cairo guideline 26 (f), which requires the state of export to be 'satisfied with' the environmental soundness of the ultimate disposal. . . . The changed version is more flexible, but allows for a restrictive interpretation under which the exporting country may make its judgment solely on the basis of information provided by the exporter of the country of import.").
222. See supra note 117 and accompanying notes. See Handley, International Legal Controls, supra note 91, at 10,181 (suggesting that a possible source of authority is the Export Administration Act, which allows the State Department to halt shipments of waste "to the extent necessary to further significantly foreign policy [interests] of the United States or to fulfill its declared international obligations." 50 U.S.C. App. § 2405(a). However, the Export Administration Act is cumbersome because it requires the President to consult with Congress before imposing controls on exports. 50 U.S.C. App. § 2405(e)).
or transit. In addition, UNEP includes a core list of chemicals to be treated as hazardous. This list includes infectious waste, municipal garbage and incinerator ash, all of which are considered to be nonhazardous under U.S. regulations and are not regulated under U.S. law.

The two systems also differ with regard to re-importing hazardous waste. The Basel Convention contains a duty to re-import. The disposal cannot be completed as contracted, despite the consent of all the parties, if the exporting country must take back the waste or arrange an environmentally sound alternative. While this does not directly contradict EPA rules, there is no parallel U.S. requirement.

Other sections of the UNEP agreement also deviate from EPA regulations, but often the international treaty leaves ample room for working around these differences. For instance, unlike U.S. law, the Basel Convention requires not only the consent of the import country, but also the consent of all transit countries. However, Article 6, sec. 4 of the Basel Convention allows the parties to agree expressly not to require consent from transit countries. The issue of capacity is another example. Article 9(a), of the Basel Convention states that exports will only be allowed if the exporting country “does not have the technical capacity and the necessary facilities, capacity, or suitable dis-

223. Basel Convention, supra note 177, art. 1, § 1(b), at 659. This raises some of the same problems mentioned earlier with regard to OECD regulations. See supra notes 201-202 and accompanying text.
224. Basel Convention, supra note 177, art. 1, § 1(a), at 659.
226. Basel Convention, supra note 177, art. 8, at 666. See Atkinson, Control of Hazardous Waste Exports, 16 BARRISTER 46, 46 (Fall 1989).
227. Basel Convention, supra note 177, art. 6, § 4, at 664-65. "In this latter case, if no response is received by the State of export within 60 days of the receipt of a given notification by the State of transit, the State of export may allow the export to proceed through the State of transit." Id.
proposals. Yet, section (c) allows transboundary movements if they are “in accordance with other criteria decided by the Parties, provided these criteria do not differ from the objectives of this Convention.”

While Article 9(c) is ambiguous, the Basel Convention will probably permit U.S. export of hazardous waste to continue despite its adequate domestic capacity.

The Basel Convention is only a framework. As such, it still contains at least two major unresolved issues: Questions of liability and compensation, and the transfer of technology. Developing nations insist that exporters retain responsibility from “cradle to grave,” while the industrialized nations refuse to take responsibility for mishandling at foreign disposal facilities. Moreover, developing nations have called for the establishment of a research center to promote the environmentally sound management of hazardous waste. Industrialized nations, anxious to avoid the additional expense, insist that the technology is already available, and that the Secretariat of UNEP should simply act as a clearing house for information.

VI. LEGISLATIVE PROPOSALS

From 1988 to the present, Congress has introduced a number of bills to impose new restrictions on the export of hazardous waste. Yet not one of these bills has come to a vote. The 101st Congress was no exception. Congress was too busy working on the budget and the new Clean Air Act to direct its full attention to redefining hazardous waste export regulations. Nevertheless, it is useful to review recent bills to

230. Basel Convention, supra note 177, art. 4, § 9(a), at 663.
231. Id. at art. 4, § 9(c), at 663.
232. See Hearing on U.S. Waste Exports, supra note 1, at 123-24 (statement of Dr. William Y. Brown, Director of Environmental Affairs, Waste Management Incorporated, referring to, but not citing, EPA hazardous waste treatment requirements).
235. Id.
236. Id.
238. Rotman, Tightening Rules — and Options — Up the Ante, CHEMICAL WEEK, Aug. 22, 1990, at 34. RCRA expired on September 30, 1988, but additional funding was provided as part of an EPA appropriation. Baucus Introduces RCRA Bill Focusing on Waste Reduction, [Analysis & Perspective] 3 Toxic L. Rep. (BNA) No. 17, at 537 (Sept. 21, 1988); Sarasohn & Kaplan, Derailing Limits on Toxic Exports,
On June 1, 1989, Senator Max Baucus (D-Mont.) introduced legislation to amend the Solid Waste Disposal Act.239 S. 1112240 and S. 1113241 would prohibit the export of solid waste to any foreign nation except Canada.242 This ban would also exempt solid waste destined for recycling, provided that the United States has entered into a bilateral agreement with the destination country.243

Representative Mike Synar (D-OK) sponsored a bill (H.R. 2525) that would ban the export of solid waste, except where an international agreement has been signed between the United States and the importing country.244 Under these compulsory, international agreements, the importing country must meet standards no less strict than that which would be required if the waste were managed in the United States.245

These legislative proposals recognize both the potential for international trade in recyclable materials, and that Canada may have a special trade relationship with the United States because of its contiguous borders and Canada's technical sophistication about waste management practices. Moreover, because waste crosses the border in both directions, leaving the U.S. border open to waste trade may be advantageous to both countries. Id. at 10065.


245. Hearing on Waste Export Control, supra note 2, at 7-8 (H.R. 2525, § 12002); See also Hearing on U.S. Waste Exports, supra note 1, at 4 (statement of the
In addition, the United States must be allowed access to treatment, storage or disposal facilities in the receiving countries, as well as any other information necessary to ensure that the waste is properly treated and disposed. H.R. 2525 does not apply to certain solid waste exported for recycling.

In November 1989, Representative Thomas Luken (D-Ohio) introduced H.R. 3735, to reauthorize the Resource Conservation and Recovery Act (RCRA), and H.R. 3736 to regulate the export of hazardous waste. This legislation is substantially similar to H.R. 2525, but H.R. 3736 does not include a liability provision. Under Luken's bill, U.S. waste generators could not be held liable for future damages caused by the hazardous waste exported abroad. In effect, this would greatly encourage waste generators, seeking to avoid future liability, to export their waste.

VII. RECOMMENDATIONS AND CONCLUSION

A. Ban on Hazardous Waste Exports

Unregulated trade in hazardous wastes could create an environmental disaster on a global scale. If the United States were to unilaterally deregulate the hazardous waste export industry, it would almost

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Honororable Howard Wolpe (D-MI)).


247. Hearing on Waste Export Control, supra note 2, at 6 (H.R. 2525, § 12001(a)).


250. See, e.g., supra notes 125-33, 165-72 and accompanying text.
certainly create an international uproar. What restrictions should be imposed on the hazardous waste export industry to maximize profits and output, while minimizing waste and harm to international relations and the environment?

Several organizations have called for a ban on all hazardous waste exports.\(^5\) Jim Vallette, International Waste Trade Project Coordinator for Greenpeace, argues that:

\[E\]ven if foreign facilities operate at U.S. standards, they will still pollute the surrounding environment. One merely needs to survey the existing industrial landscape in the United States to realize the failure of U.S. waste disposal regulations to prevent incinerators and landfills from poisoning our air, soil and water. These facilities may be even less satisfactory in less industrialized countries which lack the vital infrastructure such as hospitals, emergency response equipment, evacuation roads, reliable communication technologies, and well-funded environmental protection agencies.\(^2\)

Opponents of a ban argue that it is paternalistic to deny an importing country the opportunity to do its own risk/benefit analysis. This denial infringes on the importing country’s sovereignty.\(^2\) States often have different needs,\(^2\) with varying risk sensitivities and health priorities.\(^2\) Yet these disparities may be quite reasonable.\(^2\) For instance, a developing country might have such clean air that it could support several heavy industries without significant degradation to its air quality. It might view its clean air as a revenue-gener-

\(251\). Porterfield, Developing States Become Developing Dump for Toxics, WorldPaper 6 (Dec. 1988) (LEXIS, NEXIS) ("The South Pacific Environment Program has called for an export ban."); Notes on Other International fora, 2 Greenpeace Waste Trade Update 2-3 (Dec. 1989) (The Organization of African Unity, representing every nation in Africa except Morocco and South Africa, and the nations of the Non-Aligned Movement, representing 102 member states, are both working on resolutions to ban the export of toxic wastes to the territories of other countries.).

\(252\). Hearing on U.S. Waste Exports, supra note 1, at 163.


\(254\). PIC, supra note 253, at 386.


\(256\). Hazardous Exports To The Third World: The Need to Abolish The Double Standard, 12 Colum. J. Envtl. L. 71, 78 (1987) [hereinafter The Double Standard].
ating asset by selling to hazardous industries the right to degrade it.\textsuperscript{257}

Supporters of a hazardous trade ban respond that importing countries often lack the technical expertise and regulatory framework to make a truly informed decision.\textsuperscript{258} In addition, bans can protect developing nations from corrupt officials that accept bribes in exchange for hazardous waste.\textsuperscript{259}

Nevertheless, a world-wide ban on hazardous waste is not necessarily in the best interests of developing countries. If technology,\textsuperscript{260} as well as hazardous waste is exported, developing countries can benefit from the educational enhancement, increased employment, inflow of cash, and valuable by-products from recycled waste.\textsuperscript{261}

A global ban would be particularly detrimental to countries that generate too little hazardous waste to dispose of effectively,\textsuperscript{262} or nations with constraining geographical characteristics\textsuperscript{263} or population distributions.\textsuperscript{264} Mostafa Tolba, the executive director of UNEP, notes that economies of scale and technical expertise needed make it impossible for every country to have their own disposal plants.\textsuperscript{265}

The United States also derives some important benefits from hazardous waste trade. For example, some U.S. waste is exported to recycling facilities in countries like Germany and the United Kingdom, that use technologies America does not have.\textsuperscript{266} In addition, a large

\begin{itemize}
\item 257. Id.
\item 258. See PIC, supra note 253, at 386; See also, Handley, Canada, supra note 2, at 10,182.
\item 259. PIC, supra note 253, at 386.
\item 260. See, e.g., Chemfix will Export Technology, CHEMICAL WEEK 64 (Apr. 19, 1989); Chemfix Technology Inc. Exports Technology to Taiwan and Far East, PR Newswire, Apr. 11, 1989 (LEXIS, NEXIS).
\item 261. Helfenstein, supra note 18, at 788.
\item 263. According to Jan Huisman, director of the International Register of Potentially Toxic Chemicals, “In the Netherlands, you virtually can’t put anything anywhere because it’s hard to dispose of waste without bringing it in contact with the water table.” Third World: Receptacle for World’s Toxic Wastes, Inter Press Service, Sept. 21, 1988 (LEXIS, NEXIS).
\item 264. See, Gilmore, supra note 30, at 904.
\item 265. Environment: Toxic Waste Exports Need Controls, Not Ban, Inter Press Service, Jan. 6, 1989 (LEXIS, NEXIS).
\item 266. Hearing on U.S. Waste Exports, supra note 1, at 37 (statement of Dr. Frederick M. Bernthal, Assistant Secretary of State for Oceans, International Environmental and Scientific Affairs); at 55 (statement of Scott A. Hajost, Acting Associate Ad-
portion of U.S. waste exports are sent from Michigan, New York and New England to Canadian facilities that are closer and cheaper than equivalent U.S. disposal sites.  

Moreover, while the need to export hazardous waste may be less pressing for the United States than other countries, a unilateral ban by the United States is not politically feasible. Fear has already been voiced that stringent environmental legislation will have a negative impact on the competitiveness of domestic industry. Suggestions of a unilateral ban will surely raise concerns that whole manufacturing plants in the U.S. will relocate in "pollution havens" where environmental controls are unusually lax.

B. Prior Informed Consent

The world seems to be moving toward a universal hazardous waste export system requiring prior informed consent. Yet even with a relatively simple prior informed consent scheme, varying approaches need to resolved. During the negotiations that lead to the Basel Con

ministrator for International Activities, U.S Environmental Protection Agency); at 169 (statement of Frances Spivy-Weber, Director, International Program, and V. Ann Strickland, Deputy Counsel and Director, Toxic Program, National Audubon Society).

267. Id. at 37 (statement of Dr. Frederick M. Bernthal, Assistant Secretary of State for Oceans, International Environmental and Scientific Affairs); at 55 (statement of Scott A. Hajost, Acting Associate Administrator for International Activities, U.S. Environmental Protection Agency); at 169 (statement of Frances Spivy-Weber, Director, International Program, and of V. Ann Strickland, Deputy Counsel and Director, Toxic Program, National Audubon Society). See generally Handley, Canada, supra note 2.

268. Gilmore, supra note 30, at 904. But see notes 78-81 and accompanying text (on March 22, 1990, in accordance with the Lome Convention, the EC agreed to ban toxic waste exports to 68 former European colonies in the ACP.).

269. Hearing on Waste Export Control, supra note 2, at 26 (statement by Representative Alex McMillan (R-NC)).

270. French, supra note 14, at 15. But see The Double Standard, supra note 256, at 79 n.36 ("It is unclear how many businesses are compelled to move abroad by the costliness of compliance with U.S. laws. Several commentators indicate that relocation may be minimal.").

271. See supra notes 155-62 and accompanying text (EC regulations); notes 186-200 and accompanying text (OECD agreement); notes 204-20 and accompanying text (Basel Convention).

272. Cf. PIC, supra note 253, at 387 (arguing that prior informed consent systems are "impractical, bureaucratic, and burdensome" and would "interfere with the ability of Third World regulators to make quick decisions when needed."); French, supra note 14, at 15 ("Prior informed consent does not work").

273. See, e.g., supra notes 201-03 and accompanying text (problems with the OECD agreement and differences between that agreement and U.S regulations); notes
vention, it was agreed that countries exporting hazardous waste (particularly industrialized nations) should be sure that the receiving country was capable of properly handling the waste. This requirement raises questions about the proper environmental standards and the extent of review of a receiving country's facilities.

An early version of the Basel Convention addressed the issue of proper environmental standards by requiring exporting nations to ensure that their wastes were managed in a manner no less environmentally sound than that which would be required domestically. The "no less strict than" standard was criticized on several grounds. U.S. negotiators complained that since the United States has the strictest environmental standards in the world, this provision would be a de facto ban on all waste exports from the U.S.

Questions have also been raised about the vagueness of the provision. For example,

If five Canadian provisions are broader in scope, but two are not, is the Canadian system more, or less stringent? . . . If an approach to a given procedure is simply different (i.e., analytical methods) does the fact that it is different from U.S. protocols automatically make it less stringent?

221-37 (unresolved issues within the Basel Convention and differences between that treaty and U.S. regulations).

274. See Rublack, supra note 187, at 118-19, 124; Handley, International Legal Controls, supra note 91, at 10,181; Gilmore, supra note 30, at 903. This approach could avoid some of the problems, including corrupt foreign officials and economically pressed foreign governments, that are so desperate for cash that they fail to appreciate long term dangers. See supra notes 10-15, 258-59 and accompanying text.


276. Id. at 159 (statement of Jim Vallette, International Waste Trade, Project Coordinator, Greenpeace).

277. Id. at 84 (statement of Richard C. Fortuna, Executive Director, Hazardous Waste Treatment Council). See also id. at 93 (statement of Barry Malter, Counsel, International Environmental Policy Coalition, "In summary, our major concern is that the 'no less strict' approach is virtually impossible to implement when comparing facilities under different standards required by different sovereign governments."); at 22 (letter to Hon. Sam Gejdenson from the Hon. D.H. Burney, Canadian Ambassador, on the Canadian position regarding U.S Waste Exports). It is worth noting that Stablex, the Canadian facility that receives the majority of exported U.S. hazardous waste, does not have a double liner and leachate collection that would be required under U.S. law in accordance with RCRA. Handley, Canada, supra note 2, at 10,062.
Finally, the United States argued that by approving waste exports to a foreign country under a "no less strict than" standard, EPA might, in effect, be certifying that foreign disposal facilities are environmentally safe. As such, the United States might be held liable for any mishandling of U.S. waste by foreign government entities or private companies. In addition to these problems, a question remains concerning the extent to which an exporting country is obliged to assess the technical capacity and disposal capabilities of a country of import. While some argue that a "no less strict than" provision would require an expensive, complex international inspection program, others state that information provided by an importing country could be sufficient to satisfy EPA that its facilities are no less strict than those in the United States.

The Basel Convention adopted a standard to prohibit exports of hazardous waste with the importing countries consent "if [the exporting country] has reason to believe that the waste in question will not be managed in an environmentally sound manner." To what extent is the exporting country required to review the importing country's facilities? Under a "reason to believe" standard, "the exporting country may make its judgment solely on the basis of information provided by the exporter or the country of import." There is no need for an expensive and complex international inspection program by U.S. officials before a foreign waste disposal site could be deemed "environmentally

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278. Issues and Policy, supra note 8, at 389.

279. Id.

280. Compare Issues and Policy, supra note 8, at 390 ("Another difficulty with this approach is its demand for a sophisticated international inspection program, feasibility studies conducted in developing countries, and possibly public hearings in the United States."); Hearing on U.S. Waste Exports, supra note 1, at 121 (statement of William Y. Brown, Director of Environmental Affairs, Waste Management, Inc.) with Hearing on U.S. Waste Exports, supra note 1, at 20 (question by the Hon. John Miller and response by the Hon. Howard Wolpe (D-MI)); at 72 (question by the Hon. Peter H. Kostmayer and response by Scott Hajost, Acting Associate Administrator for International Activities, U.S. Environmental Protection Agency, "Because in general we rely on the importing country to make decisions on whether the waste is being managed properly."). See also Hearings on U.S. Waste Exports, supra note 1, at 62-75.

281. Basel Convention, supra note 177, at art. 4, § 2(e). See supra note 222 and accompanying text (once a receiving country has given consent, EPA has no authority to stop a hazardous waste shipment).

282. Rublack, supra note 187, at 124. See supra note, at 221. But see Hearing on U.S Waste Exports, supra note 1, at 73 (pointing out that under this level of review greater deference is given to foreign states than is given to U.S. corporations and State governments; suggesting that this delineation of trust should be reversed).
sound. 283

One major question still remains. What environmental standard should be met? The Convention never seemed to answer this question, using merely an indeterminate standard, "in an environmentally sound manner." The inherent vagueness of this provision of the Basel Convention, as well as the numerous conflicts between the Basel Convention and current U.S. law, 284 suggests that this international agreement may not be in the best interests of the United States.

C. Bilateral Agreements

The Bush Administration has suggested that it will introduce legislation requiring bilateral agreements, including prior informed consent provisions. 285 Both the Basel Convention and the OECD treaty contain provisions that allow for multilateral or bilateral agreements in place of treaty standards, if the provisions "are no less environmentally sound than those provided by [the] Convention." 286 Thus, the United States can avoid some of the vague provisions and inherent conflicts between these treaties and U.S. law. At the same time, the United States could continue to have a voice in these global agreements without having to obstruct further progress. The Bush Administration's suggestion is a creative and intelligent solution to a complicated international conflict which, if properly implemented, should satisfy all interested parties.

283. See generally Issues and Policy, supra note 8, at 390; Hearing on U.S. Waste Exports, supra note 1, at 62-75 (statement of Andrew Sens, Director, Office of Environmental Protection, U.S. Department of State).

284. See supra notes 221-26 and accompanying text.


286. See supra note 220 and accompanying text; OECD: Council Decision-Recommendation on Exports of Hazardous Wastes, 25 I.L.M. 1010-01 (July 1986) (reproduced from OECD Document C(86)64 (final) ("These measures should apply in the absence of a bilateral or multilateral agreement concerning the transfrontier movement of hazardous waste.")
Finally, waste exports provide a cheap solution to waste disposal and thereby discourage waste reduction.\textsuperscript{287} Only through waste reduction, rather than waste redistribution, can the U.S. hope to keep the environment safe for future generations.\textsuperscript{288}

\textit{Jack Isaacs}

\textsuperscript{287} Handley, \textit{International Legal Controls}, supra note 91, at 10,182; Parker, \textit{supra} note 3, at 4.

\textsuperscript{288} Porterfield \& Weir, \textit{supra} note 1, at 344 ("Like water running downhill, hazardous wastes invariably will be disposed of along the path of least resistance and least expense." (citing Representative James Florio (D-NJ)); Parker, \textit{supra} note 3, at 4.