

INTERNATIONAL TRANSFER OF TOXIC WASTE

By Graham Noyes

America has a new export on the world market but it's not likely to improve the nation's trade deficit. The product is toxic waste. Given the 2,530 lbs. of toxic waste that the average American generates each year, unregulated export of this product poses a serious threat to the global environment. (Monroy, An Overview of the International Aspects of Hazardous Waste Laws and the Transfrontier Movement of Hazardous Waste, UCLA Thesis, 1988, p. 64). In 1980, the EPA began regulating the export of waste classified as "hazardous" (Resource Conservation and Recovery Act (RCRA), Subtitle C, §261.3). In 1981 the EPA recorded only 45 exports, but by 1986 the number had increased to 975. (Monroy, p. 114). These figures do not include the more common export of waste potentially dangerous to human health but not in the EPA's "hazardous" category.

Waste contractors for the city of Philadelphia have been searching unsuccessfully for countries willing to accept some of the city's less desirable by-products such as sewage, sludge and ash residue. Both Honduras and Guatemala have refused to take the municipal sewage sludge. Philadelphia recently attempted to send 30,000 tons of ash residue to another Central American country, Panama. Although the ash poses a potential danger to human health and the environment, the EPA has not classified it as hazardous. As a result, the ash escaped requirements of a 1986 statute requiring that a country receiving hazardous waste from the US give prior written consent (RCRA §262.53). The Panamanian government learned about the shipment while the two barges were en route from Philadelphia. The barges were denied entrance to Panama and were forced to call elsewhere. One of the barges, the *Khian Sea*, was refused entry by 15 countries during the following year. Greenpeace trackers report that the ship later appeared in Singapore with a new name and empty holds. (Cody, "105 Nations Back Treaty on Toxic-Waste Shipping," Washington Post, March 23, 1989, A1). The other barge, *The Bark*, owned by a Norwegian firm, unloaded in Guinea without complying with that

country's permit laws. *The Bark* was required to reload and return her cargo to the US. (Bernthal, "US Views on Waste Exports," Department of State Bulletin, October 1988, p. 67).

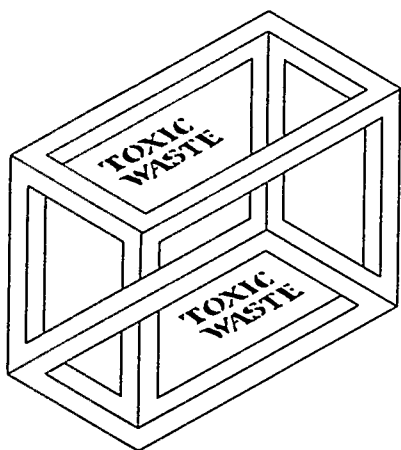
The Caribbean constitutes another attractive and inexpensive destination for American waste. Boston, Hartford, Los Angeles and Washington are investigating ways to export their municipal sludge to that area. The Turks and Caicos Islands plan to use imported sludge as fertilizer. State Department coordinator for Caribbean affairs, John Upton, wrote about the proposal, "This project represents a breakthrough in a ... way to deal with a growing problem for our cities. At the same time it helps in a major way the economy of a small friendly country in the Caribbean." (Porterfield & Weir, "The Export of US Toxic Wastes," Nation, October 3, 1987, p. 343).

Because of their desperate need for foreign capital, developing countries in Africa are another haven for Western waste. Guinea-Bissau recently negotiated with an international syndicate to receive up to 15 million tons of hazardous wastes from the United States over a period of five years. The waste slated for the country includes substances within the EPA's "hazardous" category: arsenic, phosgene (a chemical weapon component) and methyl isocyanate (the lethal gas released in the Bhopol disaster). After pressure from its West African neighbors, the tiny nation "regretfully" withdrew from the agreement which would have netted it \$600 million in much needed foreign capital. (Anderson, "The Global Poison Trade," Newsweek, November 7, 1988, p. 67).

A less direct form of waste transfer occurs in Mexico. Border factories called "maquiladoras" or "twin plants" thrive due to special US tariff rates and low labor costs in Mexico. The majority of the plants are American subsidiaries of multinational corporations. An increasing number of the maquiladoras are involved in "polluter industries" such as furniture and fiberglass manufacturing which generate large amounts of toxic

waste. Lenient environmental regulations attract these industries to Mexico. Approximately 1800 maquiladora plants operate just across the border. Industry and government figures indicate a rapid expansion rate of 25% a year. (McConnell, "Border Boom Feeding Hazardous Waste Ills," Los Angeles Times, September 10, 1989, Sec. M, p. 1).

This rapid border industrialization threatens the regional environment. In Tijuana, 261 registered businesses handle chemical substances which produce up to 100 gallons of waste solvent per month, yet only one facility has a recovery or recycling program. Because the city lacks an effective regulatory system, the actual disposal sites for the various wastes remain unknown. Mexican law requires that most maquiladora waste be returned to the US but as of September 1st, only 12 shipments to California and Arizona had been reported in 1989. Authorities on both sides of the border are uncertain where the waste is going and investigations are underway. (Monroy, p. 118).



The Hazards of Waste Export

Powerful economic incentives motivate waste transfer. Waste treatment costs in the United States often reach \$1250 a ton while disposal companies have paid as little as \$3 a ton to dump waste in Africa. Proponents of waste transfer point to the beneficial flow of foreign currency to Third World countries: the \$600 million Guinea-Bissau had expected to receive represented twice its foreign debt and 35 times the value of its annual exports. Proponents also argue that lower labor costs and reduced access to natural resources make it economically feasible for foreign industries to recover strategic minerals and to recycle material that would be treated as waste in the United States. (Phillips, "Poison in Poor Lands," Maclean's, August 1, 1988, p. 51).

This free-market approach fails to account for the environmental costs. The high cost of domestic treatment results from regulatory safeguards designed to minimize the well-documented threats posed to humans, animals and plant life by toxic waste. Love Canal and other human tragedies taught America to be wary of careless disposal of toxic wastes. The contamination of water supplies caused by chemicals leaching into groundwater and the creation of dangerous toxins during incineration have raised major concerns. Side effects on human health include cancer, central nervous system disorders and birth defects. (Andelman & Underhill, Health Effects from Hazardous Waste Sites, 1987, p. 4). The consequences of groundwater contamination in drought-ridden Africa could be even more disastrous particularly when the difficulty of effective clean up is considered. (Harris, in Toxic Chemical Contamination of Ground Water, House Subcommittee Hearings, 96th Congress, 2nd Session 13 (1980)). Transnational transfer may simply provide an opportunity to transfer the true costs of hazardous waste.

As the developed world's understanding of the risks of hazardous waste has increased, the human and environmental costs of waste generation have been translated into economic terms. As a result, producers have been forced to internalize the previously external costs. This internalization has led some countries to innovate in an effort to minimize the amount of waste produced. The United States currently produces 2,530 lbs of toxic waste per person every year whereas West Germany, the highest per capita producer in Western Europe, produces only 176 lbs. (Monroy, p. 64). A new opportunity for the United States to dump cheaply merely delays our country's cost internalization and thus postpones the search for improvements.

Looser controls and less stringent waste tracking in developing countries increase the risk that the waste will receive neither minimal treatment nor proper storage and disposal. Since proper disposal is expensive, there is a strong incentive to "lose" the waste next to a highway, in a river or at an isolated location. Those operators who charge the least for disposal may simply be the least scrupulous. In January 1988, several hundred barrels of hazardous paint sludge were found dumped in the desert 60 miles northwest of Monterrey, Mexico. The source of the sludge was a General Motors maquiladora in Matamoras. GM blames the incident on the contractor it hired to dispose of the waste. (Juffer, "US Plants turn Mexico's border into a toxic dump," Sacramento Bee, September 25, 1988, p. F1). Similarly, one

can only speculate on the ultimate resting place of Philadelphia's municipal ash last seen on the barge Khian Sea.

Even if the waste actually reaches a "treatment facility" in the receiving country, the methods used to treat it may be technologically insufficient. The Guinea-Bissau transfer involved up to 15 million tons of highly toxic wastes. The contract described the storage procedures as "100 percent ecological and without danger to the environment." The specifics of the contract demonstrate its potential danger: "a large hole" will be dug and "separation of layers of earth will isolate the products so there is no contact between them. As soon as the dump is full, it will be covered so as to protect the environment and avoid pollution. Another work site will then be opened, and so on." (Anderson, p. 67).

The immediate effects of international toxic dumping are already beginning to surface. Here in California, the New River, which originates on the Baja Peninsula and enters the United States at Calexico, contains at least 100 types of toxic chemicals. Health inspectors trace the toxics to Mexicali, a border city with over 100 maquiladoras. The river flows through the town of Calexico into the agricultural lands of the Imperial Valley and finally into the Salton Sea, a popular swimming and fishing spot near Palm Springs. Art Swajain, the executive officer of the California Regional Water Control Board, commented on the source of the pollution: "We can't prove that they're US-owned, because the US Department of Commerce won't give us the names of the companies in Mexico, but we know the companies have been discharging horribly toxic industrial wastes into the New River." (Juffer, p. F-2).

Third world disposal represents a political as well as an environmental time bomb. In the event of a large scale health tragedy caused by American waste, the source of waste would likely be traced first to a local business or government, then to its source in the United States. Senate majority leader George Mitchell noted in 1984, "If I were the US Secretary of State, I would want to make sure that no American ally or trading partner is saddled with US wastes it does not want or does not have the capacity to handle in an environmentally sound manner." (Porterfield & Weir, p. 344). Frederick Bernthal, the US Assistant Secretary for Oceans and International Environmental and Scientific Affairs, pointed out in 1988 that the US Government would likely be considered responsible for any waste problems created by US firms regardless of whether the receiving government consented to the transfer. (Bernthal, p. 68).

A tragedy of this nature would undermine the United States' interest in improving relations with the developing world.

In addition to posing environmental and political problems, the policy of exporting hazardous substances to developing countries that lack the facilities to treat the waste raises serious ethical questions. Aside from relatively rare immediate fatalities, the improper disposal of hazardous waste threatens long-term increases in cancer and birth defects. (Phillips, p. 51). Sweeping these wastes into the wells of third world nations should give pause to even the staunchest free market advocate.

Treating The Problem

Several countries in the developing world have begun to take action to protect themselves from hazardous imports:

- * Guinea sentenced four government officials to four years imprisonment for their role in importing and dumping 15,000 tons of toxic incinerator ash from Philadelphia.
- * Togo passed a law banning the import of toxic waste.
- * Nigeria announced that anyone convicted of dumping toxic waste in the country could be executed.

(Schierholz, "US Resists Limits on International Toxic Waste Trade," Christian Science Monitor, November 7, 1988, p. 8).

It is unlikely, however, that developing countries will be able to stop the increasing flow of toxic waste on their own. The lure of easy capital may be too tempting to citizens of a debt-ridden country. Furthermore, many wealthy first world industrialists will continue to enthusiastically advocate the transfers. While the Guinea-Bissau trade would have provided \$600 million of welcome foreign capital to that nation, those organizing the deal would hardly be classified as philanthropists. Richard Zeff, the Detroit attorney who helped set up the transfer, stood to make as much as \$400 million in one year. Given the cost savings and questionable ethics of third world disposal, some compare the profits made by waste dealers to those reaped by arms merchants and drug smugglers. (Anderson, p. 67).

The Basel Convention on the Transboundary Movements of Hazardous Wastes and Their Disposal represents the first significant international attempt to deal with the problem. On March 22, 1989, representatives from 116 countries met in Basel, Switzerland. 105

of those nations signed the convention which will go into effect once ratified by 20 nations. Although no nation has yet ratified it, the United Nations Environment Program expects sufficient ratification by fall of 1990. On March 21, 1990, following the endorsement of the Bush Administration, the United States signed the convention. (Daily Report for Executives, March 22, 1990).

The Basel convention prohibits hazardous waste exports except for recycling or recovery or except where the exports are environmentally sound and economically efficient. The exporting country must notify the importing country and receive written consent to the waste transfer. If the exporting country has reason to believe that the waste will not be treated in an environmentally sound manner, the convention requires the exporting country to ban the export of the waste. (Daily Report for Executives, March 22, 1990).

US environmental groups including Greenpeace, the Natural Resource Defense Council, and the US Public Interest Research Group have criticized the treaty for institutionalizing waste transfer. These groups supported amendments proposed by the Organization of African Unity and a number of Asian countries that would have strengthened the treaty. Proposed amendments included: a) ultimate waste disposal liability for the exporting country; b) a requirement that the importing country have the same level of waste management technology as the exporting country; and c) sophisticated verification procedures including inspection of disposal sites. Several developed countries, including the US and Japan, lobbied against these amendments and also against a total ban on waste transfer. (Abrahams & Hunt, "Treaty on Disposal of Hazardous Waste Agreed," Financial Times, March 23, 1989, p. 3).

While a total ban on toxic transfers would most effectively limit hazardous waste production and ensure proper disposal, it is likely to continue to face opposition. A ban on exports would require the United States to dispose of its own waste. However, no congressional districts are willing to host new hazardous waste disposal sites. In fact, the EPA estimates that within ten years more than half of the 50 states will have exhausted their landfills. In addition, American companies and individuals who reap the profits of the hazardous waste trade consistently lobby against any controls. (Porterfield & Weir, p. 341).

The immediate victims of hazardous waste transfer are poor individuals in developing countries, a group which is virtually powerless politically. However, for

developed countries to think that they can export this problem and then forget about it is short-sighted. That the world exists as a single ecological unit is graphically illustrated by the effects of global environmental disasters such as the Exxon Valdez oil spill, the Rhine River chemical spill, tropical deforestation, the decreasing ozone layer and the Chernobyl nuclear disaster. Ultimately, all nations will pay the costs of the overproduction and improper disposal of hazardous wastes. Simply dumping toxic waste farther in the backyard is a proven recipe for disaster.

The Basel Convention provides a first step toward limiting the dangers of international waste transfer but does not contain measures such as exporter liability and site verification that would have better ensured compliance. Another improvement to the convention would be a regulatory system which included tracking the waste from production to a certified treatment site. Such a "cradle to grave" tracking system already exists within the United States (RCRA §§260-271 (1984)). These and other improvements must be explored and promoted by the environmental community. Until the exporting country is held fully responsible for its own waste, toxic entrepreneurs will continue to treat the world as their dumping ground.

Graham Noyes is a second year law student at U.C. Davis and a member of the Environmental Law Society.

