

Poisoning the Developing World: The Exportation of Unregistered and Severely Restricted Pesticides from the United States

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Doctors have told me that as a result of my overseas exposure to the pesticides, including chlordane and heptachlor made by the Tennessee company Velsicol Chemical Corporation, my body has been made so toxic that if I were a building, I would be condemned and subject to immediate demolition.¹

I.

INTRODUCTION

In developing countries around the world, workers, families, and communities are slowly being poisoned by pesticides. Despite strict regulations and registration requirements for pesticides used within the United States, federal laws permit U.S. manufacturers to manufacture and export pesticides and other chemicals unregistered for use in the United States. In addition to the pesticides which were never registered in the United States, numerous pesticides have lost their registration because they present a danger to human health or the environment. Unregistered pesticides cannot be used within the United States, whether they were never registered, lost their registration through cancellation or suspension, or voluntarily were with-

* J.D., Stanford University, 1994.

1. *Circle of Poison: Impact of U.S. Pesticides on Third World Workers, 1991: Hearings on S. 898 Before the Senate Comm. on Agriculture, Nutrition, and Forestry, 102nd Cong., 1st Sess. (1991).* [hereinafter *1991 Hearing*] (statement of Kristen Phillips, Greenpeace Action). Mr. Phillips, formerly a professional symphonic tympanist, was sprayed with pesticides in 1987 during a rehearsal while touring in Hong Kong. No longer able to work or perform, he suffers from numerous illnesses, including severe liver damage, neurological damage, balance loss, and the strength and endurance of a six year old child, as a result of his exposure. Both chlordane and heptachlor were banned by the U.S. Environmental Protection Agency in the 1970s.

drawn from registration by the manufacturer,² yet all of these may be exported abroad.

Upon leaving the United States, these pesticides are no longer subject to American regulations. The pesticide, regardless of the environmental or health risks, can be shipped to any country and used for any purpose. Because developing nations are often dependent upon agriculture, developing nations are frequent destinations for banned and severely restricted substances. The limited resources of developing countries greatly reduce the government's ability to test, monitor, or regulate the pesticides imported across their borders. Many countries are not even able to identify the pesticides being imported. Compared to other pressing health, economic, and political problems, environmental concerns are generally given a much lower priority, and pesticides are viewed as an essential component of the country's growth and economic progress.

As a result, the populations of developing countries are widely exposed to pesticides unregistered or banned in the United States. For example, forty percent of the workers who handle pesticides in developing countries display symptoms of pesticide poisoning.³ Additionally, pesticides contaminate the ground and water supplies, further exposing unsuspecting residents and communities. Many pesticides which are banned or unregistered in the United States circulate through the country in unmarked containers.

The United States, in contrast, has an elaborate scheme for pesticide regulation. The U.S. Environmental Protection Agency (EPA) regulates the use and distribution of all pesticides. Pesticides must be registered with the EPA, including pesticides imported into the United States, and new pesticides must be tested for health or environmental dangers before being placed on the market. In addition, the U.S. Food and Drug Administration (FDA) regularly tests agricultural products to ensure that pesticide residues on food do not exceed certain levels of safety.

This regulatory "double standard" has been very controversial. Some developing countries accuse pesticide-exporting countries of "dumping" dangerous pesticides into their country. Others, including pesticide manufacturers and developed countries, disa-

2. General Accounting Office (GAO), *Export of Unregistered Pesticides Is Not Adequately Monitored by EPA*, (Report No. GAO/RCED-89-128) (April 1989) at 12 [hereinafter 1989 GAO Report].

3. RUTH NORRIS ET. AL., *PILLS, PESTICIDES & PROFITS* 16 (1982).

gree, arguing that export limits are "paternalistic" methods of preventing developing economies from becoming more developed. Different endeavors have attempted to solve the problem. The United States mandates that exports of unregistered pesticides comply with detailed labeling requirements, and the exporter must submit proof that the importing country consented to the export. International organizations have tried a similar consent system known as Prior Informed Consent. On a different level, residents of developing countries injured by U.S.-manufactured pesticides have sought redress in the United States legal system.

Most of these efforts have been to no avail. This paper analyzes the different components of the problem. Section II begins by outlining the effect of pesticide proliferation in developing countries. Section III describes U.S. laws which regulate the export of unregistered or severely restricted pesticides. Section IV briefly delineates schemes tried by different international organizations. Section V discusses litigation brought by foreign plaintiffs in the United States and the reasons why their efforts, for the most part, have failed.

II.

EXPORT OF BANNED, RESTRICTED, AND UNREGISTERED PESTICIDES

A. *History of Pesticide Use*

Over the last fifty years, the pesticide industry has dramatically expanded into a world-wide market. Pesticides first came into use following World War II, when the research and development into rubber and other polymers led to the development of the chemical industry.⁴ The production and sale of insecticides, herbicides, and commercial fertilizers quickly exploded, as DDT and other synthetic chemicals appeared to be easy solutions to perpetual pest control problems.⁵

There is no sign that the pesticide market is slowing down. Global pesticide use has doubled in every decade between 1945

4. *Id.* at 4-5.

5. GRETTA GOLDENMAN & SAROJINI RENGAM, *PROBLEM PESTICIDES, PESTICIDE PROBLEMS: A CITIZENS' ACTION GUIDE TO THE INTERNATIONAL CODE OF CONDUCT ON THE DISTRIBUTION AND USE OF PESTICIDES 3* (2nd ed. 1983) [hereinafter GOLDENMAN & RENGAM].

and 1985.⁶ Approximately four billion pounds of pesticides are currently produced in the world each year, three-fourths of which are used for agricultural purposes.⁷ Pesticide demand is unlikely to lessen in the near future. Roughly 37% of all crop production annually is lost to insects and other pests,⁸ and despite a ten-fold increase in pesticide amounts and toxicity over the last forty years, the share of crop yields lost to insects has nearly doubled over that same time span.⁹

The United States is a leading manufacturer and exporter of pesticides, exporting between 400 and 600 million pounds of pesticides each year.¹⁰ However, ten to twenty-five percent of these pesticides are not registered for use in the United States.¹¹ Twenty-seven of the unregistered pesticides are destined for food uses in other countries.¹² Forty-three pesticides have been banned by the EPA and ten have severely restricted uses.¹³

American corporations are still able to export these pesticides, and developing nations are often the destination. One large American oil company, for example, sells a host of banned or severely restricted pesticides to developing countries, including DDT, aldrin, dieldrin, heptachlor, chlordane, endrin, lindane, BHC, and silvex.¹⁴

Each country has its own registration scheme, and they tend to vary widely. Some of the unregistered pesticides exported from the United States, for example, are registered in other countries.¹⁵ This occurs even among groups of developed nations. Within the European Organization for Economic Cooperation

6. Margo Brett Baender, *Pesticides and Precaution: The Bamako Convention as a Model for an International Convention on Pesticide Regulation*, 24 N.Y.U. J. INT'L L. & POL. 557, 559 (1991).

7. 58 Fed. Reg. 9062-63 (1993) (measured as active ingredients).

8. David Pimental et al., *The Relationship Between "Cosmetic Standards" for Foods and Pesticide Use*, in THE PESTICIDE QUESTION: ENVIRONMENT, ECONOMICS, AND ETHICS 58, 95 (David Pimentel & Hugh Lehman eds., 1993).

9. *Id.*

10. 1989 GAO Report, *supra* note 2, at 11. The United States supplies half of the pesticides shipped to Latin American countries.

11. *Id.*; General Accounting Office (GAO), *Limited Testing Finds Few Exported Unregistered Pesticide Violations on Imported Food*, (Report No. GAO/RCED-94-1) (Oct. 1993) at 3 [hereinafter 1993 GAO Report].

12. *Id.* at 4.

13. U.S. ENVIRONMENTAL PROTECTION AGENCY, *SUSPENDED, CANCELLED AND RESTRICTED PESTICIDES* (1985).

14. DAVID WEIR & MARK SCHAPIRO, *CIRCLE OF POISON: PESTICIDES AND PEOPLE IN A HUNGRY WORLD* 79 (1981).

15. General Accounting Office (GAO), *A Comparative Study of Industrialized Nations' Regulatory Systems*, (Report No. GAO/PEMD-93-17) (July 1993) at 102

and Development (OECD), for example, some countries import pesticides that other countries have banned or severely restricted as unreasonably dangerous.¹⁶

1. Health Threat from Pesticide Poisonings

One of the first public warnings of the danger of pesticide use appeared in 1965, when Rachel Carson published *Silent Spring*.¹⁷ Since then, as information about the health effects of pesticides has spread, regulators have paid more attention to the problem of pesticide pollution. By 1986, pesticide pollution topped the EPA's list of the nation's most urgent environmental problems.¹⁸ At that time, the agency could provide safety assurances for only thirty-seven of the six hundred active ingredients in over 45,000 pesticides used in the United States.¹⁹

Just as pesticide use has doubled in every decade since 1945, the number of pesticide-related poisonings world-wide has increased at the same rate.²⁰ World Health Organization (WHO) studies have confirmed the rising rate of pesticide poisonings across the globe. A 1972 WHO study "conservatively estimated" that approximately 500,000 people were accidentally poisoned by pesticides each year world-wide.²¹ By 1989, the estimate increased to one million poisonings annually, with 20,000 resulting in death.²²

Pesticides can and do cause a multitude of health problems, ranging from dizziness or vomiting to nerve damage, sterility, birth defects, cancer, or blood and liver diseases.²³ Ingestion of some pesticides can cause immediate death.²⁴ Recent studies by the National Institute of Environmental Health Sciences support a growing consensus in the scientific community linking pesti-

[hereinafter July 1993 GAO Report] (finding that fourteen of seventeen unregistered U.S.-manufactured pesticides were registered in OECD countries).

16. *Id.*

17. RACHEL CARSON, *SILENT SPRING* (1965).

18. Philip Shabecoff, *Pesticides Finally Top the Problem List at E.P.A.*, N.Y. TIMES, Mar. 6, 1986, at B12.

19. *Id.*

20. Baender, *supra* note 7, at 559.

21. Karen A. Goldberg, Comment, *Efforts to Prevent Misuse of Pesticides Exported to Developing Countries: Progressing Beyond Regulation and Notification*, 12 ECOLOGY L.Q. 1025, 1026 (1985).

22. David Pimental et al., *Assessment of Environmental and Economic Impacts of Pesticide Use*, in THE PESTICIDE QUESTION: ENVIRONMENTAL, ECONOMIC, & ETHICS, *supra*, note 8, at 47-48.

23. Goldberg, *supra* note 21, at 1026.

24. *Id.*

cides and other chemicals in the environment to increases in various cancers of the human reproductive system.²⁵ A survey of Sudanese women, for example, found that pregnant women exposed to pesticides suffered from twice as many still-births as unexposed women.²⁶

DDT, which has been severely restricted in the United States since 1972, is an excellent example of how the use of a dangerous pesticide for pest control can be a double-edged sword. Many developing countries use pesticides to combat insect-transmitted diseases, such as malaria, yellow fever, river blindness, elephantiasis, or sleeping sickness.²⁷ Since the afflicted face either death or life-long disabilities, these countries need pesticides which can eradicate or control the disease-carrying insects.²⁸ Even though DDT has been banned in over forty countries, numerous developing countries, including India, Brazil, and Guatemala, use DDT widely to kill mosquitos which spread malaria.²⁹

The citizens of those countries pay a price. DDT is a well-known carcinogen; studies confirm, for example, that women exposed to DDT or DDT-like insecticides have a four-fold increased risk of breast cancer.³⁰ In Guatemala, the average DDT level in cow's milk is ninety times higher than the maximum allowable level in the United States, and Guatemalans generally carry thirty-one times more DDT in their blood than persons living in the United States.³¹

Additionally, over time mosquitos and other insects develop resistances to pesticides which reduce their effectiveness, yet without decreasing the threat to public health.³² After DDT was first introduced, the number of malaria cases in India quickly

25. 1994 Hearing (statement of Richard Wiles, Director, Agricultural Pollution Prevention).

26. Bill Lambrecht, *Crop Sprays Leave Residue of Ailments*, ST. LOUIS POST-DISPATCH, Dec. 12, 1993, at A1.

27. Faith Halter, *Regulating Information Exchange and International Trade in Pesticides and Other Toxic Substances to Meet the Needs of Developing Countries*, 12 COLUM. J. ENV'T'L L. 1, 3-4 (1987).

28. William C. Kalmbach, III, Note, *International Labeling Requirements for the Export of Hazardous Chemicals: A Developing Nation's Perspective*, 19 LAW & POL'Y INT'L BUS. 811, 817 (1987).

29. Charlotte Uram, *International Regulation of the Sale and Use of Pesticides*, 10 NW. J. INT'L L. & BUS. 460, 461 (1990); Meri McCoy-Thompson, *Brazil Enlists DDT Against Malaria Outbreak*, WORLD WATCH, July-August 1990, at 9. DDT has the advantages of being fast-acting, long-lasting, and relatively cheap. *Id.* at 9.

30. Lambrecht, *supra* note 26, at A1.

31. WEIR & SCHAPIRO, *supra* note 14, at 13.

32. NORRIS, *supra* note 3, at 24.

dropped from 75 million to 50,000. By 1976, however, the number had climbed up to 6.5 million.³³

B. *Developing Countries*

Historically, the fastest growing market for pesticides has been developing countries. Between 1980 and 1984, for example, pesticide sales in Africa increased 180 percent.³⁴ Banned or severely restricted pesticides are often exported to those nations because of the available market and limited regulation. In 1989, a survey found "very toxic pesticides" to be "widely available" in over eighty-five developing countries.³⁵

Thus, although developing nations only use one-fifth of the world's pesticides, they experience over one-half of the world's acute poisoning cases and three-fourths of the pesticide-related deaths.³⁶ The rate of pesticide poisoning in developing countries is more than thirteen times the rate in the United States, despite the greater overall amount of pesticide used in the United States.³⁷

1. *Insufficient Governmental Resources*

Developing nations generally lack the infrastructure to regulate pesticides imported across their borders. Of 115 countries surveyed in 1989, half did not have legislation to control pesticides, and 84% were unable to control potentially hazardous pesticides according to international standards.³⁸

Developing countries are already overwhelmed with problems of unemployment, malnutrition, and infectious disease. Governments cannot afford to make environmental hazards a priority, and even if they do, problems of air and water pollution, inadequate sewage treatment, and illegal dumping of hazardous and

33. McCoy-Thompson, *supra* note 29, at 9.

34. Baender, *supra* note 6, at 560.

35. Marlise Simons, *Concern Rising Over Harm From Pesticides in Third World*, N.Y. TIMES, May 30, 1989, at C4.

36. Emilie Sebesta, Note, *The End of the Free Reign: In Support of a Ban on the Export of Unregistered Pesticides from the United States*, 26 TEX. INT'L L. J. 561, 562 (1991).

37. WEIR & SCHAPIRO, *supra* note 14, at 11.

38. Sebesta, *supra* note 36, at 573 (regulatory controls far short of the U.N. FAO's standards in the Pesticide Code). A 1981 study by the U.N. FAO revealed that 81 developing countries had no detectable pesticide controls in place, and in 1988, the FAO estimated that 50 nations still had no controls. GOLDENMAN & RENGAM, *supra* note 4, at 5.

toxic wastes tend to receive more attention than pesticide poisonings.³⁹

In a developing country, the entire ministry of agriculture may consist of only one or two staffers who rarely travel through the countryside,⁴⁰ compared to the U.S. EPA with over 300 employees solely to register pesticides. Government officials also do not have access to information regarding the pesticides and other hazardous products being imported into their country. Some nations rely solely upon the export notices of U.S.-manufactured pesticides and other chemicals to track the pesticides being imported into their country and their regulatory status.⁴¹ Of the 115 developing countries surveyed by the FAO, seventy-six usually did not receive any information regarding the hazards of the pesticides being imported and thirty-nine were not given notice that the imported pesticides were banned or severely restricted in the exporting country.⁴² The governments lack the resources to independently monitor U.S. regulatory activities.⁴³

There is a large inequality of bargaining power inherent in the trade dealings between developed and developing countries. The economy of a developing country may depend heavily upon a single crop, or the country may desperately desire trade to bring hard currency into its economy. Sometimes developing countries try to conceal local pesticide poisonings because they are concerned that developed countries such as the United States will reject the food exported from their country, which could destroy a local economy dependent on that crop.⁴⁴ The countries may also be afraid of driving away tourists or be reluctant to admit internal health problems.⁴⁵

Developing countries are also actively trying to industrialize. Agricultural exports are an opportunity for relatively poor countries to bring in hard currency and raise their standard of living. To many citizens in developing countries, American activism about pollution and other environmental concerns in developing countries appears paternalistic. As one expert states, "to them,

39. Joseph La Dou, *First World Exports to the Third World - Capital, Technology, Hazardous Waste, and Working Conditions - Who Wins?*, W. J. MED., May 1992, at 553.

40. Goldberg, *supra* note 21, at 1030.

41. Halter, *supra* note 27, at 29.

42. *Id.* at 568.

43. *Id.* at 25.

44. WEIR & SCHAPIRO, *supra* note 14, at 15.

45. *Id.*

pollution is a 'rich man's disease' which they would like to contract."⁴⁶ To advance their agricultural economy, developing nations often actively subsidize pesticide imports. A survey of nine African, Asian, and Latin American countries revealed that their governments subsidized from nineteen to eighty-six percent of the retail price of pesticides sold in that country.⁴⁷

Unfortunately, developing countries have difficulty anticipating long-term environmental impacts of pesticides.⁴⁸ Many governments simply do not have the ability or resources to evaluate the long-term implications of industries that produce subtle or long-term environmental hazards.⁴⁹ These countries are not able to conduct sufficient research or stay abreast of the research conducted in other countries such as the United States.⁵⁰ These gaps in knowledge and resources exacerbate the danger posed by pesticide poisoning.

2. Insufficient Knowledge of Pesticide Dangers

Farmers and field workers in developing nations frequently face obstacles which prevent the safe handling of pesticides, such as widespread illiteracy, lack of access to adequate health care, lack of safety training, and restrictions on the right to organize for safe working conditions.⁵¹ Employers at large plantations rarely educate their employees on safe pesticide handling, and self-employed farmers do not have access to information about the dangers of unsafe pesticide handling. As a result, pesticides are frequently mixed together improperly and applied excessively or too frequently.⁵²

The varied languages and cultures in developing countries makes communication very difficult. Developing nations often consist of many different ethnic groups, each with their own lan-

46. Goldberg, *supra* note 21, at 1033 (quoting Leonardo Caltagirone, Professor of Entomology at the Center for Biological Control, University of California, Berkeley).

47. Sebesta, *supra* note 36, at 573.

48. H. Jeffrey Leonard, *Confronting Industrial Pollution in Rapidly Industrializing Countries: Myths, Pitfalls, and Opportunities*, 12 *ECOLOGY* L.Q. 779, 800 (1985).

49. *Id.*

50. *Id.*

51. GOLDENMAN & RENGAM *supra* note 5, at 5.

52. Halter, *supra* note 27, at 4-5.

guage, making effective pesticide labeling practically impossible.⁵³

Without sufficient information about the pesticides, the pests, the health hazards, and alternative methods of pest control, farmers in developing countries become dependant upon pesticides.⁵⁴ In some countries, farmers refer to the pesticides as "plant medicine," probably because they protect the crops from insects and appear to help the plants subsist.⁵⁵

The lack of public education regarding the dangers of pesticides also lead to improper usage. In some countries, peasants wrap the pesticides into their turbans and carry the deadly chemicals on their heads into the fields.⁵⁶ One African tribe caught fish by pouring an insecticide into Lake Volta. The tribespeople were unaware that the insecticide contained lindane, a highly poisonous chemical with serious health risks. When the contamination became clear, they believed simply cutting off the fish's head made the fish safe to eat.⁵⁷

Overaggressive marketing by product exporters exacerbated the problems of poor communication. As an example of how miscommunication can cause serious consequences, one can remember the infamous scandal surrounding Nestle's marketing of infant formula in developing nations. Nestle was accused of promoting the false belief that infant formulas were "modern" and more nutritious for babies and that breastfeeding was "old-fashioned", "inconvenient," and less nutritious for babies.⁵⁸ Mothers who switched to formula would mix the concentrate incorrectly, either using contaminated water or diluting the formula to save money.⁵⁹ Nestle also sent "milk nurses," salespeople dressed as

53. In Kenya, the official languages are Standard Swahili and English. The country, however, has between thirty and forty different ethnic tribes, each with their own language. Kalmbach, *supra* note 28, at 820.

54. Goldberg, *supra* note 21, at 1031.

55. *The Uncontrolled Export of Unregistered Pesticides, 1989: Hearings Before the Subcomm. on Environment, Energy and Natural Resources of the House Comm. on Government Operations*, 101st Cong., 1st Sess. 23 (1989) [hereinafter *1989 Hearing*] (testimony of Michael Hansen, Ph.D, Research Scientist, Institute for Consumer Policy Research, Consumers Union, Mount Vernon, NY); Stuart Diamond, *Disaster in India Sharpens Debate on Doing Business in Third World*, N.Y. TIMES, Dec. 16, 1984, at A1.

56. WEIR & SCHAPIRO, *supra* note 14, at 15.

57. NORRIS, *supra* note 3, at 14. The natives eventually stopped using lindane, but not before large numbers of plants and animals in the lake died from contamination. *Id.*

58. Kalmbach, *supra* note 28, at 822; NORRIS, *supra* note 3, at 76-78.

59. Kalmbach, *supra* note 27, at 822.

doctors and nurses, into maternity wards to promote the formula.⁶⁰ The end result was widespread malnutrition among infants in developing nations.

Pesticides are also aggressively advertised through sales representatives, promotions, billboards, newspapers and journals, radio and television, posters, cinemas, and even cars and vans with loudspeakers.⁶¹ Misleading advertising distorts the relative merits and dangers of pesticides.⁶² Advertisements commonly describe pesticide products as "safe" and boast of their effectiveness.⁶³ Persistent yet untrained sales staff comb the countryside selling pesticides without adequate warnings.⁶⁴

Pesticides are often shipped in bulk to developing countries and are relabeled and repackaged prior to distribution.⁶⁵ The new packaging often lacks safety warnings. In many developing countries, extremely hazardous pesticides can be purchased from small shops, repackaged in unlabeled containers such as sugar sacks, milk cartons, or Coke bottles.⁶⁶ In Kenya, one researcher purchased several hazardous pesticides over-the-counter, including aldrin, dieldrin, BHC, paraquat, and chlorfenvinphos, that are banned or severely restricted in the United States for health and environmental reasons. Each pesticide was repackaged in innocuous containers without labeling or warnings.⁶⁷

Containers containing pesticide residues are used by residents in need of materials, further increasing their exposure. Families often reuse the plastic bottles used to distribute Gramoxone and other toxic chemicals as containers for drinking water.⁶⁸ Workers also use the plastic lining from bags of pesticide as raincoats during the rainy seasons.⁶⁹

60. *Id.* at 822.

61. DAVID BULL, A GROWING PROBLEM: PESTICIDES AND THE THIRD WORLD POOR 92 (1982).

62. *Id.* at 97-123; Sebesta, *supra* note 36, at 568-69 (1989 FAO survey that found frequent deceptive advertising in developing countries).

63. BULL, *supra* note 61, at 96-97. Chlordane, a known carcinogen which is severely restricted pesticide in the United States, was described in a Malaysian advertisement as "safe," and on the picture of the container it says, "Comparatively, it is the safest insecticide for . . . control of insects, ants . . . termites." *Id.*

64. Sebesta, *supra* note 27, at 568-69.

65. Halter, *supra* note 27, at 4.

66. WEIR & SCHAPIRO, *supra* note 13, at 15. The pesticide Gramoxone, which contains the deadly ingredient paraquat, is not only sold in Coke bottles but possesses a striking resemblance to Coca-Cola. *Id.*

67. NORRIS, *supra* note 4, at 18-19.

68. WEIR & SCHAPIRO, *supra* note 14, at 15-16.

69. *Id.*

Finally, pesticides are disposed unsafely. A pesticide importer in Cameroon once ordered excessive amounts of dieldrin one time and disposed of the extra drums in the jungle near a village. Over time, the drums deteriorated and dieldrin leaked into the ground and water nearby, exposing the villagers to a serious health risk.⁷⁰

3. Exposure to Pesticides Through Application

To be properly protected from pesticide exposure in the fields, workers and pesticide applicators should wear safety equipment, such as facial masks, heavy rubber protective clothing, and respirators. Workers avoid wearing protective clothing, however, even if aware of the health risks because the equipment is too hot, too uncomfortable, or too expensive.⁷¹ The safety equipment is not designed for the hot and humid tropical climate of many developing nations, and heat stroke can fell those who dress safely.⁷² Instead, farmers usually wear more comfortable clothing, such as a light shirt, shorts, and sandals. Even when protected by safety equipment, the extreme toxicity of the more hazardous pesticides and long-term exposure still subjects the workers to considerable risk.⁷³

In developing countries, pesticides tend to be applied either manually or by spraying. With manual applications, workers wear backpack sprayers and apply the pesticide through a handheld spraygun. Unless fully protected with safety equipment from head to toe, the workers come into contact with the pesticide through inhalation and through exposure to their hands, arms, legs, and feet.⁷⁴

Cropdusting is another common method of pesticide application that presents serious dangers. Many times field workers are not warned when crop dusters are about to fly overhead, leaving them without protection from exposure to the hazardous chemicals.⁷⁵ An investigation of Honduran pineapple plantations revealed that pregnant women, women breastfeeding babies, and

70. *Id.* at 16-17.

71. 1991 Hearing, *supra* note 1 (statement of Sandra Marquardt, Greenpeace).

72. *Circle of Poison: Impact of U.S. Pesticides on Third World Workers, 1991: Hearing Before the Senate Comm. on Agriculture, Nutrition, and Forestry*, 102nd Cong., 1st Sess. 128 (1991) [hereinafter *Thrupp Statement*] (statement of Lori Ann Thrupp, World Resources Institute).

73. *Id.*

74. Halter, *supra* note 27, at 5; *Thrupp Statement*, *supra* note 72, at 31.

75. Goldberg, *supra* note 21, at 1031.

young children regularly worked in the fields during pesticide sprayings.⁷⁶ One nurse in Guatemala recounts how the cases of pesticide poisonings dramatically increased at the height of spraying season:

At this time of year, we treat 30 to 40 people a day for pesticide poisoning. The farmers often tell the peasants to give another reason for their sickness, but you can smell the pesticide in their clothes.⁷⁷

These workers often do not have facilities to wash or change clothes after work.⁷⁸ Without these facilities, they wash in irrigation ditches laden with pesticide runoff.⁷⁹ On many plantations, the workers live adjacent to the fields, so entire families drink and wash from the same pesticide-contaminated water.

The public health clinics in most developing countries do not have the drugs necessary to treat severe pesticide poisonings.⁸⁰ Workers often do not make the connection between their symptoms and the slow poisoning from pesticides, and doctors are not trained to recognize the signs of pesticide poisoning.⁸¹ Some employers even operate their own health clinics to conceal high numbers of pesticide poisonings from local public health officials.⁸²

C. *Multinational Corporations*

Multinational corporations play a significant role in the international pesticide market. Pesticides which are banned or severely restricted in the United States can still be exported to foreign markets. For example, one American company, a manufacturer of DBCP, simply shifted its sales abroad following the ban on DBCP in the United States:

There's no problem with the ban of DBCP [within the United States]. In fact, it was the best thing that could have happened for us. You can't sell it here anymore but you can still sell it anywhere else. Our big market has always been exports anyway.⁸³

76. Lambrecht, *supra* note 26, at A1.

77. BULL, *supra* note 61, at 41.

78. Halter, *supra* note 26, at 5.

79. BULL, *supra* note 26, at 42.

80. 1991 *Hearings*, *supra* note 1, at 69 (statement of Dr. Rob McConnell, Mount Sinai School of Medicine, New York, NY).

81. Simons, *supra* note 35, at C4.

82. WEIR & SCHAPIRO, *supra* note 14, at 12-13.

83. *Id.* at 21 (quoting unnamed Amvac executive).

The story of the pesticide Phosvel, the brand name for a nerve toxin called leptophos, illustrates the problem. Produced and marketed by an American corporation, the EPA has never allowed Phosvel to be sold in the United States.⁸⁴ The dangers of Phosvel were well-publicized in 1976 when workers at the production facility developed serious nerve disorders and coordination problems.⁸⁵ The company closed the plant but continued to market the pesticide overseas. A one-year experimental use permit was deceptively used as "proof" to foreign countries that the pesticide was registered in the United States.⁸⁶ Despite the growing number of developing countries which banned Phosvel upon hearing news of its danger, the company simply shipped unsold stock to other uninformed countries.⁸⁷ In Egypt, Phosvel was responsible for killing more than one thousand water buffalo and poisoning dozens of farmers.⁸⁸

Many pesticide exporters argue that the pesticides are necessary for developing nations to feed their rapidly growing populations.⁸⁹ However, evidence seems to point in the opposite direction. Between the years of 1964 and 1978, pesticide sales in Africa increased five-fold while the continent's food production decreased by one percent.⁹⁰

Furthermore, many of the pesticides used in developing countries are sprayed on luxury crops which are exported to developed countries such as the United States.⁹¹ Land throughout Latin America, for example, has been reallocated from production for local consumption to the more profitable export crops, such as cotton, coffee, or bananas.

Large multinationals argue that increased government regulation of manufacturers is not the solution. The multinational corporations argue that their influence deters unscrupulous conduct by local suppliers: "If you don't have companies of size and quality out of the U.S. and Europe policing these products, you're going to have a disaster on your hands."⁹²

84. *Id.* at 23.

85. *Id.*

86. *Id.* at 23-24.

87. *Id.* at 24.

88. Norris, *supra* note 3, at 2.

89. GOLDENMAN & RENGAM, *supra* note 5, at 5.

90. *Id.*

91. *Id.*

92. Bill Lambrecht, *U.S. Agencies Wearing Blinders on Pesticide Exports*, *St. LOUIS POST-DISPATCH*, Oct. 25, 1993, at A1.

To escape domestic regulation, multinationals ship the separate chemical ingredients of a banned pesticide to a developing country. From there, the pesticide is reformulated and sent around the world, free of labeling and other "burdensome" export requirements.⁹³ The pesticide is given a new trade name and advertising strategy. Some developing countries offer incentives to host these formulation plants. In Costa Rica, home to at least nineteen pesticide formulation plants, none of the labels disclose the reformulated pesticide's ability to cause cancer, birth defects, neurological damage, or other chronic effects.⁹⁴

The international policies of developed nations and international organizations has contributed to the proliferation of hazardous pesticides in developing countries. For several years, the United States Agency for International Development (AID) subsidized efforts to ship U.S.-banned pesticides to fifty countries as part of the U.S. foreign aid program.⁹⁵ The World Bank has lent almost one billion dollars to India to create a pesticide and fertilizer industry.⁹⁶ The industry concentrates in the production of pesticides such as DDT and BHC, which are banned or restricted in most developed countries, and most of the pesticides are applied to domestic agricultural projects. At one point in the 1980s, Indian farmers were using 77% of the DDT manufactured worldwide, 94% of the BHC, and 64% of the world's malathion.⁹⁷

D. Circle of Poison

Ironically, many of the banned and severely restricted pesticides exported from the United States return as residues on imported fruit. The United States imports over 21 million tons of food each year, constituting fifteen percent of the agricultural products consumed in the United States.⁹⁸ For some crops, such as coffee or bananas, the percentage of imports is even higher.

Significant gaps exist in the federal government's ability to test for pesticides, including those pesticides which are banned or severely restricted. Between the years 1989 and 1991, the FDA did

93. WEIR & SCHAPIRO, *supra* note 14, at 41.

94. 1991 Hearings, *supra* note 1, at 64-65 (statement of Catharina Wesseling, National University, School of Environmental Sciences, Heredia, Costa Rica).

95. WEIR & SCHAPIRO, *supra* note 14, at 23.

96. Bruce M. Rich, *The Multilateral Development Banks, Environmental Policy, and the United States*, 12 *ECOLOGY L.Q.* 681, 697 (1985).

97. *Id.*

98. Alice Crowe, *Breaking the Circle of Poison: EPA's Enforcement of Current FIFRA Export Requirements*, 4 *GEO. INT'L ENVTL. L. REV.* 319, 321 (1992).

not test imported fruit for residues of thirteen of the twenty-seven unregistered pesticides exported for food uses abroad.⁹⁹ The FDA cannot identify all exported unregistered pesticides, does not know on which crops these pesticides are used, and generally cannot test for these pesticides.¹⁰⁰ A 1993 report by the Environmental Working Group, an environmental research institute, concluded that the entire federal pesticide tolerance and regulatory system was inadequate, especially in protecting young children from pesticide residues.¹⁰¹

For example, in 1978 the EPA banned most uses for two highly toxic and carcinogenic pesticides, chlordane and heptachlor.¹⁰² An American company was the sole manufacturer and exporter of both products, and, subsequent to the ban, the company continued to produce and export the chemical throughout the world.¹⁰³ In April 1988, the United States Food and Drug Administration (FDA) detected chlordane on Honduran imported beef at eight times the level allowed under FDA standards.¹⁰⁴ Excessive levels of heptachlor have been found on many imported fruits, vegetables, and cheeses as well.¹⁰⁵

The preferences of Americans and other consumers in developed nations have caused increased exposure of farmworkers to pesticides. First, market surveys repeatedly indicate that consumers in Europe, North America, and Japan demand blemish-proof fruit, even though studies have shown that the minor blemishes caused by insects are harmless.¹⁰⁶ To meet these demands, crops are sprayed with extra pesticides to eradicate every possible pest that could damage the fruit. The amount of extra pesticides can be considerable. Ten to fifteen percent of the pesticides applied in the United States are used solely to ensure that the appearance of the fruit is acceptable to American consumers.¹⁰⁷

99. GAO REP., *supra* note 11, at 7. For six of those thirteen, the FDA was not aware that the particular pesticide existed. *Id.* Of the other fourteen pesticides, however, the FDA found only a few violations of residue tolerances by exported unregistered pesticides. *Id.* at 26-27.

100. *Id.* at 9; 1994 Hearing, *supra* note 25 (statement of Richard Wiles, Director, Agricultural Pollution Prevention).

101. *Id.*

102. 43 Fed. Reg. 12,372 (1978).

103. Crowe, *supra* note 98, at 320-21.

104. *Id.* at 321.

105. *Id.*

106. WEIR & SCHAPIRO, *supra* note 14, at 33-34.

107. *Id.* at 34.

The same trend holds true in the developing world, except farmworkers there are unaware of the necessary safety precautions. Multinational corporations exporting fruit back to developed countries often require, as an explicit provision in their contract with the farmer, the exact amount of pesticides to be applied to ensure blemish-free fruit.¹⁰⁸ Since the multinationals do not own the land or directly employ the workers, they can escape direct responsibility for the workers poisoned by the extra pesticides.¹⁰⁹

Second, the pressure to lessen pesticide residue on foods imported into the United States has led to the exposure of workers in developing nations to increasingly toxic pesticides. Previously, farmers primarily used a pesticide called organochlorines, such as DDT, chlordane, and dieldrin, which are effective but extremely durable, and consequently are more likely to leave a residue.¹¹⁰ Organophosphates, on the other hand, decompose much more quickly. Fruit applied with these pesticides will retain lower levels of residue and thus are less likely to be rejected by the importing countries. Even though they dissipate much faster, however, organophosphates are far more acutely toxic and present a much more dangerous health risk to farmworkers than do organochlorines.¹¹¹

The FDA uses the same rationale for deciding which pesticides to test for. DBCP and ethylene dibromide, both of which are cancelled pesticides, are fumigants that dissipate quickly without leaving significant residue.¹¹² As a result, the FDA does not test for either pesticide because the residue is so low. This creates an incentive for farmers to increase the use of that pesticide. Both substances pose significant health risks. By creating an incentive to increase usage, the FDA increases the health risks to farm workers in developing countries.

E. *Alternatives to Pesticides*

The goal of alternative methods of farming is to maintain productivity and profitability of the crop with less input and environmental damage. Crop rotations are a typical farming practice which disrupt the habitat of insects which congregate around the

108. *Id.* at 34-35.

109. *Id.* at 36.

110. Sebesta, *supra* note 36, at 574.

111. *Id.*

112. GAO REP., *supra* note 11, at 6.

roots of the plants.¹¹³ Farmers have increasingly turned to biological control or natural pest enemies as a method to control pests.¹¹⁴

One reason for biological control is that many pests eventually become resistant to pesticides. This can lead to a vicious cycle as farmers use increasing amounts of the same or new pesticides to try to combat the new "superpests," thus increasing environmental harm and human exposure.¹¹⁵ The world's largest pecan orchard, located in Mexico, used nine different pesticides over a period of forty-two years, never able to fully eradicate the aphids. After switching to ladybugs in 1988, the orchard immediately reduced its costs and still was able to harvest one of its best crops in history.¹¹⁶

The organic food industry has grown forty percent in the United States in recent years.¹¹⁷ By the year 2000, the federal government estimates that organic farm production will constitute ten percent of the United State's agriculture.¹¹⁸ Studies support the theory of pesticide-free farming. A Cornell University study showed that a fifty percent pesticide use reduction would not reduce crop yields while increasing food prices less than one percent.¹¹⁹ Sweden has reduced pesticide use by fifty percent and the Netherlands, the world's second-largest food exporter, plans to reduce use by eighty percent.¹²⁰

In the developing world, many governments are encouraging Integrated Pest Management (IPM) methods. IPM seeks to reduce the cost and long-range efficiency of pest management, which includes decreased dependance on pesticides.¹²¹ IPM has slowly spread. In 1986, Indonesia banned fifty-seven pesticides and instituted a national campaign to encourage farmers to use IPM.¹²² The campaign has been a success; rice yields increased, production costs decreased, and crop damage by pests was re-

113. Baender, *supra* note 6, at 572.

114. *Id.*

115. Halter, *supra* note 27, at 6.

116. Uram, *supra* note 29, at 462-63.

117. Baender, *supra* note 6, at 573.

118. Uram, *supra* note 29, at 463.

119. Al Meyerhoff, *Clinton's Next Challenge: Pesticide Reform*, S.F. EXAMINER, Feb. 16, 1994, at A17.

120. *Id.*

121. Goldberg, *supra* note 21, at 1049.

122. Baender, *supra* note 6, at 574.

duced.¹²³ Indonesia has accomplished a sixty percent reduction in pesticide use.¹²⁴

Some developed countries are providing technical assistance and equipment to developing countries to educate farmers, field workers, and government officials about safe pesticide use. The EPA currently collaborates with AID and the Peace Corps in pilot programs to improve pest and pesticide management in developing countries.¹²⁵ The agency provides technical assistance and training designed to promote safe pesticide usage.

III.

U.S. LAWS AND LEGISLATION

A. *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*

Until 1972, pesticides exported from the United States were not subject to regulation under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which regulates all pesticides manufactured in the United States. The Federal Environmental Pesticide Control Act of 1972 required for the first time that exported pesticides be packaged according to the foreign purchaser's specifications and mandated certain record-keeping requirements for the pesticide manufacturers.¹²⁶ In 1978, Congress amended FIFRA to include additional notification, labeling, and reporting provisions for pesticides solely intended for export.¹²⁷

Pesticides used in the United States must be registered with the Environmental Protection Agency (EPA).¹²⁸ To determine whether or not to register a pesticide, the EPA decides if the pesticide causes an "unreasonable adverse effect" on the environment or human health. If so, the agency must establish that the benefits of the pesticide outweigh its risks. The EPA also has the power to cancel, suspend, and significantly restrict the registration of pesticides due to unreasonable hazards posed to humans or the environment. Most of the 45,000 pesticide products used

123. Baender, *supra* note 6, at 574.

124. Meyerhoff at A17.

125. 58 Fed.Reg. 9062, 9083-84 (1993).

126. 7 U.S.C. § 136(a)(1), (2)(b).

127. Federal Pesticide Act of 1978, Pub. L. No. 95-396, 92 Stat. 833 (1978)(codified at 7 U.S.C. §§ 136o(a)(1), (2)(b)(1988)).

128. *Id.* § 136a(a).

today were registered before the usage of modern scientific techniques; thus their long-range effects are not well-known.¹²⁹

1. Regulating the Export of Unregistered or Severely Restricted Pesticides

The EPA cannot prohibit the export of unregistered pesticides. As a matter of policy, the agency opposes the institution of a general ban on the exports of unregistered pesticides. First, the EPA believes that banning exports will not solve the pesticide problems of developing nations, since most if not all of the banned pesticides would be available from other pesticide-exporting countries.¹³⁰ Second, concentrating on controlling the use and management of all pesticides will be more effective than concentrating upon a few.¹³¹ Third, the agency's regulatory decisions are based upon risk-benefit evaluations specific to the United States. The risk-benefit balance in other countries may differ due to different growing conditions, pest control problems, and environmental and public health considerations.¹³² Fourth, pesticide manufacturers may choose not to register a pesticide in the United States simply because there is no market for it.¹³³ Another concern is that a complete ban might violate the open market provisions of the General Agreement on Trade and Tariffs (GATT).¹³⁴

FIFRA sets out certain requirements for pesticide exports. Section 17(a)(1) mandates that exported pesticides comply with labeling requirements. An exported pesticide would be mislabeled if it were imitating another pesticide, lacking a registration number of the production site and the name of producer or registrant, lacking adequate warning and caution statements, or missing the pesticide's ingredient statement, net weight, and use classification or restriction.¹³⁵ All items on the label must be written in English and in the language of the importing country.¹³⁶ Labels for unregistered pesticides must prominently bear

129. 1989 GAO Report, *supra* note 2, at 9.

130. 58 Fed. Reg. 9062, 9064 (EPA 1993).

131. *Id.*

132. *Id.*

133. *Id.*

134. See Janet McDonald, *Greening the GATT: Harmonizing Free Trade and Environmental Protection in the New World Order*, 23 ENV'T'L. L. 397 (1993).

135. 7 U.S.C. § 136o(a)(1).

136. 45 Fed. Reg. 50,274 (1980).

the statement "Not Registered for Use in the United States of America."¹³⁷

Foreign purchasers of unregistered or severely restricted pesticides must sign statements indicating that the purchaser understands that the pesticide is not registered and cannot be sold in the United States.¹³⁸ Within seven days of receiving the statement from the purchaser and before shipping the pesticide, the American exporter must submit this statement to the EPA who in turn sends it to the appropriate government official in the importing country.¹³⁹ This statement must be submitted annually for the first shipment of each unregistered product to a particular purchaser for each importing country.¹⁴⁰

Section 17(b) of FIFRA requires that the EPA also send notices to importing countries and the appropriate international agencies of regulatory actions taken by the EPA, such as cancellation or suspension of the registration of a pesticide.¹⁴¹ For many years, the EPA never developed a regulation to interpret this part of FIFRA. Instead, the agency issued notices to foreign governments and international agencies regarding those cancellations and suspensions which the EPA considered to be of "national or international significance."¹⁴² The notices explain the action and the health and safety concerns which prompted the action, and the agency provides additional information upon request.¹⁴³

2. EPA Enforcement of FIFRA

The EPA has done a poor job of informing foreign governments of significant registration actions. Starting in the late 1970s, the General Accounting Office (GAO) has studied the EPA's performance three times and each time concluded that the agency failed to properly implement and execute an effective system of notification.¹⁴⁴

137. 7 U.S.C. § 136(q)(1)(H).

138. 7 U.S.C. § 136o(a)(2).

139. 7 U.S.C. § 136o(a); 45 Fed. Reg. 50,274 (1980).

140. 1989 GAO Report, *supra* note 2, at 12.

141. 7 U.S.C. § 136o(a).

142. 1989 GAO Report, *supra* note 2, at 13. The notices are channelled through the Department of State, which forwards the information to the appropriate U.S. embassy for transmittal to the host government. *Id.*

143. *Id.*

144. *Id.*; GENERAL ACCOUNTING OFFICE (GAO), NEED TO NOTIFY FOREIGN NATIONS OF U.S. PESTICIDE SUSPENSION AND CANCELLATION ACTIONS (Report No. GAO/CED-78-103) (April 1978); GENERAL ACCOUNTING OFFICE (GAO), BETTER

The 1989 report found that the agency lacked a program to determine if GAO exporters are complying with the export notification provisions of FIFRA Section 17(a) for unregistered provisions.¹⁴⁵ The report also found that the contents of the notices often lacked clarity or detailed information necessary for foreign governments to properly identify and control the pesticide.¹⁴⁶ Information was sometimes illegible or incomplete, such as missing the chemical name of the product.¹⁴⁷ EPA's database of annual production data lacked the detailed information necessary to properly identify unregistered pesticide exports.¹⁴⁸ Because of the dearth of information, the report found it "very difficult, and sometimes impossible" to properly identify products beyond the trade name, and thus difficult to determine if industry is complying with the notice provisions.¹⁴⁹

The GAO identified a major loophole that manufacturers and exporters frequently used to escape the FIFRA's notification and labeling requirements. Although FIFRA does not expressly provide for any exceptions to the notification and labeling requirements, the EPA created an exception for unregistered pesticides that are minor variations on registered pesticide formulations and that contain only active ingredients that are registered.¹⁵⁰ This exception effectively exempted seventy-five percent of the unregistered pesticide exports, constituting roughly ninety percent of bulk pesticide exports.¹⁵¹

The report also found that the EPA lacked internal procedures to determine when to notify foreign governments and international organizations concerning significant agency actions taken on a pesticide.¹⁵² The agency did not have criteria establishing the definition of "national or international importance,"¹⁵³ and

REGULATION OF PESTICIDE EXPORTS AND PESTICIDE RESIDUES IN IMPORTED FOODS IS ESSENTIAL (Report No. GAO/CED-79-43) (June 1979).

145. 1989 GAO Report, *supra* note 2, at 18-26.

146. *Id.* at 20.

147. *Id.* at 21.

148. *Id.*

149. *Id.* at 22.

150. *Id.* at 23; 45 Fed. Reg. 50,274 (1980). To be considered "similar," the pesticide product must contain the same active ingredients as a registered pesticide, possess the same level of acute toxicity, and have the same use pattern. 45 Fed. Reg. 50,274 (1980).

151. 1989 GAO Report, *supra* note 2, at 24.

152. *Id.* at 27-36. For example, the EPA sent out notifications of DBCP's cancellation in 1985, over five years after the agency actually made the decision. *Id.* at 30.

153. *Id.* at 27.

its booklet of suspended, cancelled, and restricted pesticides had not been updated since 1985.¹⁵⁴ The GAO also found that the agency did not send out notices on voluntarily canceled pesticides.¹⁵⁵

Many times, the notices are sent to the wrong foreign government official.¹⁵⁶ Many officials in developing countries are simply unaware of the significance of the FIFRA notice, and circulating such a notice through these government officials can be practically impossible.¹⁵⁷ Of seven developing countries contacted by one researcher, for example, only in one country did a government official recall ever having received a FIFRA notice.¹⁵⁸ Developing countries want to know if unregistered or severely restricted pesticides are being imported into their country, and notices signaling the EPA's regulatory decisions are given considerable weight.¹⁵⁹ FIFRA notices usually do not state the risks of using the pesticide and why the pesticide was unregistered.¹⁶⁰ Without this information, it is difficult for the foreign officials to make an informed decision on the pesticide at issue.

Stung by the criticisms in the 1989 GAO report, EPA conducted investigations of twenty-six pesticide production facilities which manufactured approximately sixty-nine percent of American pesticide exports.¹⁶¹ These manufacturers had made "similarity" claims for forty pesticides, which exempted the pesticide from the purchaser acknowledgment requirements.¹⁶² The EPA discovered, however, that no more than a few of the forty products were in reality similar to other pesticides.¹⁶³ Some were wholly distinct.¹⁶⁴ In some cases, the exporter could not even identify the registered products claimed to be similar.¹⁶⁵

154. *Id.* at 34.

155. *Id.* at 35. Although the agency claimed to send out notices for voluntarily withdrawn pesticides which presented a health risk, the GAO found that of four voluntarily withdrawn pesticides that presented serious health risks, only one notice was ever sent out. *Id.* at 32-34.

156. Halter, *supra* note 27, at 20.

157. *Id.*

158. *Id.*

159. *Id.* at 21, 26.

160. *Id.* at 23-24.

161. Crowe, *supra* note 98, at 340.

162. *Id.*

163. *Id.*

164. *Id.* at 340-41.

165. *Id.* at 341.

Following the investigation and for the first time in its history, the EPA levied heavy fines against these exporters for violations of FIFRA's export provisions.¹⁶⁶ The agency sanctioned five manufacturers over six hundred thousand dollars for violating FIFRA's labeling requirements and for exporting overly-formulated pesticides.¹⁶⁷

The difficulty of the similarity exception as it currently exists is that the manufacturer makes the initial determination of similarity. EPA review only occurs in the rare circumstances when the agency inspects the exporter's facility and documents. Since the industry invariably possesses more documentation about the pesticide than EPA, agency cannot easily rebut a claim of similarity. Additionally, the criteria which determine similarity can be interpreted in varying manners.¹⁶⁸

3. New Regulations for Exports of Unregistered or Severely Restricted Pesticides

In response to these and other concerns, EPA revised its regulations in 1993 to tighten and clarify FIFRA's requirements for exporting unregistered and severely restricted pesticides.¹⁶⁹ The EPA expressly eliminated the "similarity" exception, acknowledging that industry had abused the exception and that it was difficult to enforce.¹⁷⁰ Any variations in formula or in use classification which are not consistent with a registered pesticide renders the product "unregistered" and subject to the requirements for exporting unregistered pesticides.¹⁷¹ The agency did create an exception for pesticides exported for research and development. Pesticides intended for "small-scale research applications" are exempt from the labeling and notification requirements, and the regulations sets out certain criteria.¹⁷²

The EPA permitted exporters to add explanatory language to the label to explain why the product is not registered, its registration status, or its use classification.¹⁷³ Exporters are also required to use multilingual labeling: English, the language of the

166. Sebesta, *supra* note 36, at 572.

167. *Id.* The violations included failing to use bilingual labeling and failing to state "Not Registered for Use in the United States of America" on labels. *Id.*

168. Crowe, *supra* note 98, at 344-47.

169. 58 Fed. Reg. 9062 (1993).

170. 58 Fed. Reg. 9062, 9070 (1993).

171. *Id.* Variations in color or odor do not change the product's registration. *Id.*

172. 40 C.F.R. § 168.75(b)(5) (1993).

173. 40 C.F.R. § 168.65(b)(1)(iii), 65(b)(2) (1993).

importing country, and the language of the country of final destination, "if known or reasonably ascertainable."¹⁷⁴

In a potentially dangerous move, the agency permitted exporters to meet the labeling requirements by use of supplemental labeling. The agency justified the decision by pointing out that exporters need to comply with the labeling requirements of importing countries.¹⁷⁵ Consequently, the labeling requirements of Section 17(a)(1) may be met by supplemental labeling on the shipping containers instead of a label directly attached to the product container.¹⁷⁶ The supplemental labeling requirement only applies while the pesticide product is "shipped or held for shipment in the United States."¹⁷⁷ While unclear, the language seems to indicate that exporters could use supplementary labeling until the product leaves the United States, after which the product could be repackaged without any of the labeling required under FIFRA.

The new regulations require purchaser acknowledgement statements to be obtained on a per-shipment basis instead of an annual basis.¹⁷⁸ Exporters may use the annual system only if a purchaser acknowledgement statement is obtained prior to the first export of each unregistered pesticide to a particular purchaser, and the exporter submits to EPA an annual summary of all exports of that product to that purchaser.¹⁷⁹ EPA directly transmits statements and annual summaries to the appropriate official in the importing country,¹⁸⁰ and the statements include, in addition to the previously required information, the Chemical Abstracts Service (CAS) registry number for each active ingredient, the International Union of Pure and Applied Chemists (IUPAC) chemical name, other common or trade names for the product, and the country of final destination.¹⁸¹ This indicates the EPA's decision to move toward a world-wide system of identification and acknowledges that developing countries frequently are not able to identify pesticides merely by their trade names.

EPA also expanded the scope of its international notification program. The agency will send notices for proposed and final

174. 40 C.F.R. § 168.65(b)(4) (1993).

175. 58 Fed. Reg. 9062, 9067 (1993).

176. 40 C.F.R. § 168.65(c) (1993).

177. 40 C.F.R. § 168.65(c)(2) (1993).

178. 58 Fed. Reg. 9062, 9074 (1993).

179. 40 C.F.R. § 168.75(c)(2) (1993).

180. 40 C.F.R. § 168.75(d) (1993).

181. 40 C.F.R. § 168.75(c)(1) (1993).

suspensions and cancellations made because of the "pesticide's potential to cause unreasonable adverse effects," for major proposed actions affecting health and safety, and an annual summary of all pesticide regulatory actions.¹⁸² All notifications and statements are sent directly to specified foreign officials in each country instead of through the State Department and American embassies.¹⁸³

F. Toxic Substances Control Act (TSCA)

Section 12(a) of the Toxic Substances Control Act¹⁸⁴ permits the EPA to restrict the export of a chemical substance, mixture, or article if found to pose "an unreasonable risk of injury to health within the United States or to the environment of the United States."¹⁸⁵ Section 12(b) requires exporters to notify the EPA of their intent to export, and the EPA notifies the importing country.¹⁸⁶ However, TSCA contains a large loophole for potentially dangerous substances which are not found to be an "unreasonable risk." The notice provisions of Section 12 do not apply to exported substances which are not intended for use in the United States.¹⁸⁷ The only requirement is that the substance must be labeled as "intended for export."¹⁸⁸ Additionally, testing of exported substances to determine "unreasonable risk" is required only at the discretion of the EPA Administrator.¹⁸⁹

The exporter of a chemical subject to the notice requirement must notify the EPA of the first shipment each calendar year to a particular country, but the EPA notifies each country only for the first annual shipment of a particular chemical, regardless of the importer.¹⁹⁰ TSCA does not require the EPA to notify other

182. 58 Fed. Reg. 9062, 9081 (1993). Actions where the EPA will send notices include: denial of a tolerance; denial of application to register; voluntary cancellation or withdrawal where there is evidence of health or environmental concerns; reregistration; setting of new tolerances or exemptions; revoking or amending tolerance; registration of new active ingredient; any actions which practically eliminate all significant registrations for an active ingredient; and any other action which the EPA believes is of international significance. *Id.*

183. *Id.*

184. 15 U.S.C. § 2601.

185. 15 U.S.C. § 2611(a)(2).

186. 15 U.S.C. § 2611(b)(1).

187. 15 U.S.C. § 2611(a)(1)(A).

188. 15 U.S.C. § 2611(a)(1)(B).

189. 15 U.S.C. § 2611(a)(2) ("The Administrator may require . . . testing of any chemical substance or mixture exempted from this chapter by paragraph (1). . .").

190. Halter, *supra* note 27, at 11. The notice must be sent within seven days of execution of the sales contract or by the date of export, whichever is sooner. *Id.*

governments of regulatory decisions, but in practice the agency sends notices to the OECD.¹⁹¹

Generally, however, TSCA's notification system only operates to inform foreign governments about regulatory restrictions placed on imports by the United States government. The notices usually arrive too late and without sufficient information for the importing country to stop unwanted shipments.¹⁹²

G. Other Regulation of Hazardous Exports

1. Carter Executive Order

Shortly before leaving office, President Jimmy Carter issued an executive order which tightened U.S. controls on the export of hazardous products by establishing a United States Hazardous Substances Export Policy.¹⁹³ The order required the State Department to notify foreign governments of all American regulatory actions on exported products; products found "extremely hazardous" would be placed on the State Department's commodity control list; and the Commerce Department would grant export licenses for products on the list only after informed consent by the importing country.¹⁹⁴

One month later, newly-elected President Ronald Reagan revoked the Carter Executive Order and substituted his own.¹⁹⁵ The Reagan Executive Order directed the Departments of State and Commerce to review existing policy on hazardous exports and propose new policies which accomplished the same goals at a lower cost.¹⁹⁶ Reagan feared that Carter's Policy would place American businesses at a competitive disadvantage abroad.¹⁹⁷ Environmental groups strongly protested, characterizing Reagan's strategy as the "meat-ax approach to federal health, safety, and environmental regulation."¹⁹⁸

191. *Id.* at 12.

192. *Id.* at 25.

193. Exec. Order No. 12,264, 3 C.F.R. 86.

194. Clyde H. Farnsworth, *Reagan to Drop an Export Curb*, N.Y. TIMES, Feb. 16, 1981, at D2.

195. Exec. Order No. 12,290, 3 C.F.R. 127.

196. *Id.*

197. Craig D. Galli, *Hazardous Exports to the Third World: The Need to Abolish the Double Standard*, 12 COLUM. J. ENV'T L. 71, 75 (1987).

198. Norris, *supra* note 3, at 87.

2. Consumer Product Safety Commission

The Consumer Product Safety Commission (CPSC) possesses the authority to ban an export if it presents an "unreasonable risk of injury to consumers within the United States."¹⁹⁹ Since this coverage does not include those who live outside the United States, the law only addresses "Circle of Poison" concerns and therefore has limited relevance in the context of exported pesticides.

3. Export Administration Act

The Export Administration Act (EAA) provides the President with the power to restrict the export of goods and technology if "necessary to further significantly the foreign policy of the United States or to fulfill its declared technological obligations."²⁰⁰ This provision is usually invoked when the President wishes to prohibit the export of technology, such as in the case of the Soviet pipeline embargo.²⁰¹ The EAA also permits export restrictions on the grounds of national security and to protect scarce resources in the United States.²⁰²

4. Hazardous Substances Control Act

The Hazardous Substances Control Act requires notification to foreign governments before the export of certain misbranded or banned corrosives, irritants, combustibles, and other similar products.²⁰³

H. Clinton Proposals

In April 1994, President Bill Clinton issued a legislative reform bill proposing to revise FIFRA and the Federal Food, Drug, and Cosmetic Act (FFDCA). The bill includes a proposal to completely prohibit the export of pesticides which have their registration was cancelled, suspended, or denied, their registration withdrawn or cancelled voluntarily, or if the pesticide tolerance was revoked under the FFDCA.²⁰⁴ Never-registered pesticides could be exported only if an American tolerance already existed

199. 15 U.S.C. § 2067(a)(1)(B).

200. 50 U.S.C. § 2405(a)(1).

201. Galli, *supra* note 197, at 73.

202. 50 U.S.C. § 2405-06.

203. 15 U.S.C. § 1273(d).

204. *Long-Awaited Reform Bills Released*, DAILY REPORT FOR EXECUTIVES (BNA), April 28, 1994, at A80.

or if the pesticide has been approved by three other countries using internationally acceptable standards.²⁰⁵ The proposal has received significant criticism and both industry and environmental groups oppose the president's proposal and support different bills pending in the House.²⁰⁶

I. *Industry Opposition to Regulation and Counterarguments*

Pesticide manufacturers and exporters cite several arguments supporting decreased regulation of unregistered and severely restricted pesticide exports. The most common concern is that the United States should respect the sovereignty of developing nations by not making judgments about the pesticides they wish to import. However, these same developing countries have directly appealed for stricter export controls in developed nations: "Ecuador does not have an effective regulatory apparatus to control hazardous pesticides . . . [American export controls] would be a direct benefit to Ecuador and in very practical terms will assist our ability to regulate the imports of these hazardous products."²⁰⁷

Industry often contends that the proliferation of pesticides is the price the world must pay to prevent world-wide famine. As one executive says, "We see nothing wrong with helping the hungry world eat."²⁰⁸ This argument seems compelling, but the evidence points in the opposite direction. Over one-half of the pesticides used in developing countries are applied to crops destined for export to consumers in Europe, Japan, and the United States.²⁰⁹ In Central America, for example, seventy percent of the agricultural products grown there are exported,²¹⁰ and the growth rate of these export crops usually exceeds the growth rate

205. *Id.*

206. John H. Cushman, *Clinton Proposes Revising Pesticide Regulations*, *N.Y. Times*, April 27, 1994, at A12.

207. Sebesta, *supra* note 36, at 591 n.256 (quoting Mercedes Bolanos de Moreno, Chief, Plant Protection Program, Ministry of Agriculture and Livestock, Ecuador); Simons, *supra* note 35, at C4 ("How can a country forbid a poison at home and yet manufacture it and sell it to other countries? Where is the morality in this? Are we supposed to be more resistant?" (quoting Arif Jamal, Sudanese agronomist and pesticide specialist)).

208. WEIR & SCHAPIRO, *supra* note 14, at 32 (unnamed executive at Velsicol Chemical Corporation).

209. *Id.* at 32.

210. *Id.*

of the crops used to feed the populations of the developing countries.²¹¹

American pesticide manufacturers and exporters also contend that American legislation limiting American export of hazardous pesticides will be futile, since exporters located in other developed countries will easily fill the void.²¹² Ironically, European manufacturers have made the same arguments.²¹³ Regardless, this argument also not account for those developing countries which may choose American exports because they are "safer."²¹⁴

Industry has claimed that limits on exports would cost several hundred million dollars per year in lost trade and American jobs.²¹⁵ Investigations into these estimates, however, reveal that they were made on incorrect and exaggerated assumptions regarding the actual impact on pesticide exports.²¹⁶ An analysis by the Senate Agriculture Committee concluded that only 700 to 1,000 jobs would be lost, less than one-tenth of one percent of the jobs in the U.S. chemical industry.²¹⁷

IV. INTERNATIONAL AGREEMENTS

There are no international conventions which directly address the problem of exported pesticides deemed by the exporting country to be too dangerous to use within its own borders. Under recognized norms of customary international law, however, individual countries have an obligation not to use their territory for purposes which are injurious to other countries.²¹⁸ The United Nations Charter, for example, declares that countries should cooperate to help prevent trans-boundary conflict.²¹⁹ The 1972 Stockholm Declaration of the United Nations Conference

211. Goldberg, *supra* note 21, at 1029.

212. Sebesta, *supra* note 36, at 591; Michael P. Walls, *Disclosure Responsibilities for Exporters*, NAT. RESOURCES & ENV'T, WINTER 1990, at 46 ("Anecdotal evidence indicates that if U.S. export regulations were to impose too great a burden on the importer, sources other than the United States would be sought." (quoting Michael Walls, assistant general counsel at the Chemical Manufacturers Association)).

213. Sebesta, *supra* note 36, at 591.

214. *Id.*

215. *Id.* at 592.

216. *Id.* at 592-94 (discussing errors in estimate).

217. 1991 Hearings, *supra* note 1, at 88 (letter from Senator Patrick Leahy to William Reilly, EPA Administrator, and Edward Madigan, Secretary of the Department of Agriculture).

218. John Picarazzi, *Regulating the Exports of Hazardous Pesticides: In Search of an Ecological World Order*, 15 BROOKLYN J. INT'L L. 431, 449-50 (1989).

219. *Id.* at 449.

on the Human Environment calls for international cooperation to develop international law governing trans-boundary environmental harm in the spirit of "good neighborliness."²²⁰

Several international organizations have sought to create agreements to solve the problems of the pesticide trade. Developing countries usually outnumber developed countries in these international organizations, so the governments of industrialized countries have often been willing to compromise in the face of rising anger at the regulatory "double standard."²²¹

F. *Prior Informed Consent*

The concept of Prior Informed Consent (PIC) has been hotly debated in recent years. As defined by the FAO, PIC means that "no international shipment of a banned or severely restricted pesticide (or a pesticide which may pose special severe hazards to health and the environment in an importing country) should proceed without the prior consent of the competent national authority in the importing country."²²²

In certain respects, implementing PIC is the ideal solution. Importing countries are consulted before receiving a potentially dangerous import, thus avoiding sovereignty concerns, and the international pesticide industry is still able to export pesticides. Developing countries concerned with the health or environmental effects of a particular pesticide can simply choose not to consent. PIC's major disadvantage, however, is that the system by itself does not develop the regulatory expertise of developing countries.²²³ In addition, the bureaucratic inefficiencies and reluctance to take affirmative responsibility for decisions common to many developing countries may make the process of obtaining consent difficult in some countries.²²⁴

The FAO and UNEP have developed PIC systems for pesticides and industrial chemicals, respectively. In 1985, the Netherlands established a domestic system of PIC for banned and severely restricted chemicals.²²⁵ Instead of binding regulations, however, the system only asks for the Dutch chemical industry's

220. *Id.* at 450-51.

221. Uram, *supra* note 29, at 469.

222. GOLDENMAN & RENGAM, *supra* note 5, at 10 (working definition used by the FAO).

223. *Id.* at 11.

224. Halter, *supra* note 27, at 24.

225. Marc Pallemaerts, *Developments in International Pesticide Regulation*, ENVTL. POL'Y & L., June 1988, at 65.

voluntary compliance with the notification and consent requirements.²²⁶ The United States has strongly endorsed the PIC system developed by the FAO and UNEP, and the EPA has committed itself to implementing PIC to the extent it is compatible with the provisions of FIFRA.²²⁷

G. U.N. Food and Agricultural Organization

In 1985, the General Conference of the U.N. Food and Agricultural Organization approved the *International Code of Conduct on the Distribution and Use of Pesticides* ("Pesticide Code").²²⁸ Though voluntary, the Pesticide Code sought to define and clarify the responsibilities of the respective parties involved in the development, distribution, and use of pesticides.²²⁹ The Pesticide Code establishes basic definitions, outlines regulatory processes, and sets out certain guidelines for the pesticide industry.²³⁰ The Pesticide Code also calls for uniform international standards and contains provisions on packaging, labeling, and advertising.²³¹

The biggest disadvantage of international codes of conduct such as the Pesticide Code is that they are entirely voluntary and unenforceable.²³² Reports from several developing countries indicate that the pesticide industry routinely violates the provisions and standards of the Pesticide Code.²³³ However, the Code provides useful information to developing nations, acting as a "measuring tape" and an expression of support for measures to regulate pesticide exposure.²³⁴ Unfortunately, the developing countries still require the resources to implement the regulatory mechanism necessary to enforce the Pesticide Code.

The Pesticide Code originally lacked any notification mechanism such as PIC. Developing nations strongly pushed for incorporating PIC into the Pesticide Code, despite resistance from industry and pesticide-exporting countries.²³⁵ The 1987 FAO

226. *Id.* at 65.

227. 58 Fed. Reg. 9062, 9083 (1993) ("The United States is a strong supporter of the PIC procedures. . . . EPA intends to implement the PIC system as fully as possible, consistent with U.S. law.")

228. GOLDENMAN & RENGAM, *supra* note 5, at 3.

229. Picarazzi, *supra* note 218, at 446.

230. GOLDENMAN & RENGAM, *supra* note 5, at 17.

231. *Id.*

232. *Id.* at 3.

233. Baender, *supra*, note 6, at 583.

234. GOLDENMAN & RENGAM, *supra* note 5, at 3.

235. Baender, *supra*, note 6, at 581.

General Conference agreed to adopt PIC in principle and integrated it into the Pesticide Code by 1989.²³⁶ Under the new guidelines, a pesticide that is banned or severely restricted for health or environmental reasons cannot be exported to countries participating in PIC that have stated their desire to not receive that pesticide.²³⁷ Pesticides banned or severely restricted for health or environmental reasons by five or more governments are subject to PIC, although pesticides which are unregistered or voluntarily withdrawn from registration are not covered.²³⁸

The FAO initiates the PIC system by developing "PIC decision guidance documents" which summarize the pesticide's chemical and physical properties, its uses, and its toxicity.²³⁹ These documents are circulated to participating governments along with notices of any actions taken to control the pesticide, and the importing countries inform the FAO as to whether they will accept shipments of those pesticides.²⁴⁰

H. *United Nations Environment Programme (UNEP)*

The U.N. Environmental Programme (UNEP) has actively facilitated nearly thirty binding multilateral international environmental agreements.²⁴¹ In May 1989, the UNEP Governing Council adopted the Amended London Guidelines for the Exchange of Information on Chemicals in International Trade.²⁴² The Guidelines set up a PIC system for dangerous industrial chemicals, defined as banned or severely restricted in any participating country.²⁴³

UNEP first began addressing the problem of international trade of pesticides in the 1970s, establishing the International Register of Potentially Toxic Chemicals (IRPTC).²⁴⁴ The IRPTC, based in Geneva, Switzerland, publishes a newsletter of general information on chemicals and circulates notices of national regulatory actions affecting particular chemicals.²⁴⁵ Indi-

236. GOLDENMAN & RENGAM, *supra* note 5, at 10.

237. Baender, *supra* note 6, at 581.

238. *Id.* at 581.

239. *Id.* at 582.

240. *Id.*

241. Carol Annette Petsonk, *The Role of the United Nations Environment Programme (UNEP) in the Development of International Environmental Law*, 5 AM. U.J. INT'L L. & POL'Y 351, 352 (1990).

242. *Id.* at 381.

243. *Id.*

244. GOLDENMAN & RENGAM, *supra* note 5, at 6.

245. *Id.*

vidual governments can request information on specific chemicals or pesticides, but since the IRPTC information is provided voluntarily, its effectiveness is limited.²⁴⁶ Because of these concerns, since 1983 the U.N. General Assembly has published a directory of hazardous products titled "Consolidated List of Products Whose Consumption and/or Sale have been Banned, Withdrawn, Severely Restricted, or Not Approved by Governments."²⁴⁷ Over one-third of the products listed are pesticides.²⁴⁸

Under the Amended London Guidelines, UNEP creates an "alert list" of chemicals that ten or more countries have banned or severely restricted for health or environmental reasons. The alert list, accompanied with technical guidance documents, is circulated among participating governments.²⁴⁹ After reviewing the alert list, importing countries register their PIC decisions with UNEP and their decisions are made available to all countries.²⁵⁰ UNEP also reviews chemicals which five to nine countries have banned and adds those which present health or environmental risks, according to standards outlined in the agreement.²⁵¹ The designated national authority in each country has the responsibility to ensure that substances are not exported into countries which have placed that substance on their PIC list.²⁵² If an importing country fails to declare its PIC decision for a particular chemical, the status quo regarding its importation continues.²⁵³

I. OECD

The Organization for Economic Cooperation and Development (OECD) functions as the main forum for the United States, Japan, and Europe to create international agreements on chemical control.²⁵⁴ The OECD emphasizes placing the responsibility on the importing nations, and in 1984 adopted the "Recommendation on Information Exchange" and "Guiding Principles on In-

246. *Id.*

247. Pallemarts, *supra* note 225, at 64. The United States and other developed countries have reacted to the list with strong hostility. *Id.*

248. GOLDENMAN & RENGAM, *supra* note 5, at 6.

249. Petsonk, *supra* note 241, at 384.

250. *Id.*

251. *Id.*

252. *Id.*

253. *Id.* at 384-85.

254. GOLDENMAN & RENGAM, *supra* note 5, at 6.

formation Exchange Related to Export of Banned or Severely Restricted Chemicals.”²⁵⁵

These principles provide for one-time notification whenever a government takes action to control a pesticide and when a banned or severely restricted pesticide is about to be exported for the first time.²⁵⁶ However, information about the pesticide is only supplied upon request by an importing country, and only information following final regulatory actions.²⁵⁷

J. *European Economic Community*

Since an estimated sixty percent of the world's pesticide exports originate from the European Economic Community (EEC), the EEC has been a major forum for pesticide exporting countries to debate their international responsibilities for problems caused by pesticides in developing nations.²⁵⁸ The EEC has the power to issue regulations that are legally binding on its member countries. The EEC has debated whether the member countries should institute a system of mandatory export notification and “prior informed choice,” which would require the importing country to approve or disapprove the import within a short period of time.²⁵⁹

After fierce opposition from France, the United Kingdom, and Germany, neither scheme was approved, and the EEC adopted a system for one-time notification of export of those pesticides severely restricted under EEC law.²⁶⁰ The Commission still recognized that the principle of PIC was “the only acceptable basis for the Community's exports of chemical products whose use is banned or strictly limited in the Community,” noting the “growing international pressure for its adoption.”²⁶¹

K. *Codex Alimentarius Commission*

The Codex Alimentarius Commission was created by the United Nations in 1962 to encourage the international trade of food products and protect the health and economic interests of

255. *Id.*

256. *Id.*

257. *Id.*

258. *Id.* at 7. The EEC's major pesticide exporters are Germany, France, and the United Kingdom.

259. *Id.*

260. *Id.*

261. Pallemarts, *supra* note 225, at 67.

consumers.²⁶² The Commission has developed the Codex Alimentarius, a lengthy code covering all aspects of food production.²⁶³ While the Codex Committee on Pesticide Residues devises the standards for pesticide residues, it has historically been concerned with eliminating trade concerns rather than the health and safety effects of pesticides.²⁶⁴

Traditionally, industry has dominated the standard-setting process of the Codex Commission and consumer groups have had very little involvement.²⁶⁵ This influence is reflected in the weak standards. Codex standards for acceptable residue levels range from two to fifty times the levels acceptable by the EPA and FDA.²⁶⁶

V.

LITIGATING FOREIGN TORT CLAIMS IN THE UNITED STATES

Citizens of foreign countries injured by products exported from the United States have brought their tort claims to the United States court system for adjudication.²⁶⁷ From the perspective of the foreign plaintiff, American courts possess numerous substantive and procedural advantages over foreign courts.

In general, the United States legal system provides greater rights, remedies, and procedures to litigants than other countries. Strict liability, primarily an American innovation, is available in almost all states.²⁶⁸ Foreign plaintiffs can select from fifty different jurisdictions, each with different choice-of-law rules.²⁶⁹ Unlike the rest of the world, jury trials are available and often are accompanied by significantly higher verdicts in personal injury

262. Lewis Rosman, *Public Participation in International Pesticide Regulation: When the Codex Commission Decides, Who Will Listen?*, 12 VA. ENVTL. L.J. 329 (1993).

263. *Id.*

264. *Id.*

265. *Id.*

266. Baender, *supra* note 6, at 578.

267. Aliens and foreign plaintiffs are expressly given the right to have their cases heard in the federal courts. 28 U.S.C. § 1332(a) (1988).

268. *Piper Aircraft Co. v. Reyno*, 454 U.S. 235, 252 n.18 (1981), *reh'g denied*, 455 U.S. 928 (1981). France, Belgium, Luxembourg, West Germany, and Japan offer different versions of strict liability. *Id.*

269. *Id.* at 252 n.18. American courts have substantial discretion to decide which law should apply. Alex W. Albright, *In Personam Jurisdiction: A Confused and Inappropriate Substitute for Forum Non Conveniens*, 71 TEX. L. REV. 351, 354 n.13 (1992).

cases.²⁷⁰ The availability of expanded damages and liability, strict liability in particular, are added incentives.²⁷¹ Unlike most foreign forums, plaintiffs can recover punitive damages and compensatory damages for the loss of future earnings, loss of society, loss of parental guidance, pain and suffering, and fear of impending death.²⁷² Some countries cap the amount that a plaintiff can receive. In Costa Rican courts, for example, banana workers made sterile by U.S.-manufactured DBCP could not recover more than roughly \$1,800, the statutory maximum.²⁷³

Unlike most countries, American courts permit contingent attorney's fees, a must for indigent foreign plaintiffs,²⁷⁴ and does not tax the losing party.²⁷⁵ Pretrial discovery is much more extensive in American courts than other countries.²⁷⁶ Most civil law countries view discovery in a much different light. Discovery is almost entirely controlled by the trial judge rather than the litigants, the scope is much more limited, and unilateral extraterritorial discovery requests from the United States are often opposed.²⁷⁷

270. *Piper Aircraft*, 454 U.S. at 252 n.18. American plaintiff lawyers publicize this information. Following the Texas Supreme Court's decision in *Dow v. Alfaro*, 786 S.W.2d 674 (Tex. 1990), *cert. denied*, 111 S. Ct. 671 (1991), one Texas law firm sent letters to lawyers in many different foreign countries advertizing the "bonanza" available in Texas: "As you may know, verdicts in Texas courts are now considered by many to be the highest in the United States and probably in the world." Albright, *supra* note 269, at 355 n.15.

271. Albright, *supra* note 269, at 353.

272. WARREN FREEDMAN, *PRODUCT LIABILITY ACTIONS BY FOREIGN PLAINTIFFS IN THE UNITED STATES*, 13 (1988).

273. Barry Siegel, *Going an Extra Mile for Justice: At Distant Costa Rican Sites, Worker Illnesses Were Linked to a U.S.-Made Pesticide*, L.A. TIMES, March 23, 1991, at A1.

274. Allison F. Aranson, Note, *The United States Percentage Contingent Fee System: Ridicule and Reform from an International Perspective*, 27 TEX. INT'L L.J. 755, 758-59 (1992); *Piper Aircraft*, 454 U.S. at 252 n.18.

275. Aranson, *supra* note 274, at 778 ("In Great Britain, as in most countries, the losing parties of a law suit must pay their fees, their opponents fees, and any court costs."); *Piper Aircraft*, 454 U.S. at 252 n.18.

276. *Piper Aircraft*, 454 U.S. at 252 n.18.

277. GARY B. BORN & DAVID WESTIN, *INTERNATIONAL CIVIL LITIGATION IN UNITED STATES COURTS: COMMENTARY AND MATERIALS* 264-65 (1989). Practically all of the signatories to The Hague Convention on the Taking of Evidence Abroad in Civil or Commercial Matters, except the United States, has chosen not to permit the common-law pre-trial discovery of documents. FREEDMAN, *supra* note 272 at 13.

There is no doubt that many foreign plaintiffs are attracted to the United States for these reasons.²⁷⁸ American plaintiff lawyers, tempted by the potential for huge jury awards, are equally attracted to developing countries for clients. For example, within one month of the Bhopal disaster in December 1984, numerous American plaintiff attorneys filed lawsuits in U.S. courts seeking damages in excess of 100 billion dollars.²⁷⁹

A. *Doctrine of Forum Non Conveniens*

Fearful of the potentially immense liability in mass toxic tort cases, American corporate defendants fight hard to avoid or delay actual litigation. When the plaintiffs are not residents of the forum, the defendants employ an array of different procedural mechanisms at the outset of the case: asserting lack of subject matter or personal jurisdiction; challenging venue; arguing that court must apply the law of the foreign forum (usually favorable to defendants); convincing a federal court to enjoin the state court proceeding; invoking the state's forum non conveniens doctrine; and removing to federal court and invoking the federal forum non conveniens doctrine.²⁸⁰

Most of these mechanisms will not succeed. State court dismissals based upon a lack of subject matter jurisdiction are highly unlikely in personal injury or wrongful death cases.²⁸¹ To remove the case to federal court, where procedural mechanisms or the substantive law may be to the defendant's advantage, requires that none of the parties are residents of the forum state and that complete diversity exists. Motions to change venue also rarely succeed when there is an international plaintiff, for little is gained by moving the case to a different state or federal court.²⁸² By

278. "As a moth is drawn to the light, so a litigant is drawn to the United States." *Smith Kline & French Laboratories, Ltd. v. Block*, [1983] 2 All E.R. 72, 74 (C.A. 1982) (Denning, M.R.).

279. David Boyce, *Foreign Plaintiffs and Forum Non Conveniens: Going Beyond Reyno*, 64 TEX. L. REV. 193, 193 (1985).

280. Albright, *supra* note 269, at 355; David Robertson & Paula Speck, *Access to State Courts in Transnational Personal Injury Cases: Forum Non Conveniens and Antisuit Injunctions*, 68 TEX. L. REV. 937, 940-41 (1990).

281. Albright, *supra* note 269, at 355. State courts can hear practically any case. Plaintiffs will satisfy the subject matter jurisdiction of the federal courts under federal question jurisdiction, admiralty jurisdiction, or diversity jurisdiction. FREEDMAN, *supra* note 272, at 38.

282. Albright, *supra* note 269, at 355. Venue is proper against a corporation when it is sued in any judicial district in which it is incorporated, licensed to do business, or actually is doing business. FREEDMAN, *supra* note 272, at 33. Venue transfers cannot

carefully choosing forums where defendants have territorial presence or minimum contacts, plaintiffs can avoid motions to dismiss due to lack of personal jurisdiction.²⁸³

1. Rationales for Forum Non Conveniens

The doctrine of forum non conveniens, on the other hand, has developed into the premier tool for American multinationals to avoid being sued in the United States for their actions abroad. The doctrine permits American courts to dismiss actions initiated by American or foreign plaintiffs if the court determines that the plaintiff's choice of forum "imposes a heavy burden on the defendant or the court."²⁸⁴ The issue usually is raised on a motion to dismiss filed by the defendant. If granted, the action is dismissed and the plaintiff has no alternative but to bring the action in a different forum, which could be a different state or country.

Three rationales are commonly cited as justifications for the doctrine of forum non conveniens. First, if all defendants were required to litigate in the forum chosen by the plaintiff, defendants repeatedly would be subject to great inconvenience, usually because of the distance between the forum and the defendant's home, the site of the dispute, or the sources of evidence.²⁸⁵ Second, those courts which acquired the reputations of being advantageous plaintiffs forums would become overcrowded and drain the resources of that forum.²⁸⁶ Third, the country with the most connections to the dispute should hear the case. The rationale proceeds as follows: assuming the toxic tort occurs in Country A,

be used to transfer to a different state or a different country. Albright, *supra* note 269, at 355 n.19.

283. See generally Albright, *supra* note 269. Courts have the power to decline jurisdiction when the defendant could suffer an excessive hardship. Five factors must be considered: burden on the defendant; interests in the forum state in adjudicating the dispute; plaintiff's interest in obtaining convenient and effective relief; interstate judicial system's interest in obtaining the most efficient resolution of controversies; and the shared interest of the several states or the international community in furthering fundamental substantive social policies. *Asahi Metal Industry Co. v. Superior Court*, 480 U.S. 102, 113 (1987). These factors are very similar to a forum non conveniens analysis, and defendants unable to dismiss by forum non conveniens will certainly challenge jurisdiction using the *Asahi* factors. Albright, *supra* note 269, at 389.

284. *Piper Aircraft*, 454 U.S. at 249.

285. David Robertson, *Forum Non Conveniens in America and England: "A Rather Fantastic Fiction,"* 103 L.Q. Rev. 398, 398 (1987).

286. *Id.*

for Country B to hear the case would violate Country A's sovereignty and potentially thwart its public policies.²⁸⁷

2. Historical Development of the Doctrine

As a doctrine, *forum non conveniens* originated in Scotland.²⁸⁸ The doctrine was not formally exercised in a U.S. court until 1929²⁸⁹ and, until 1947, was predominately applied only in admiralty cases.²⁹⁰ In *Gulf Oil Corporation v. Gilbert*,²⁹¹ the Supreme Court first opened the door for *forum non conveniens* to be applied in a broad range of cases, including domestic, transnational, admiralty, and non-admiralty actions.²⁹² In 1981, the Supreme Court took a step further in *Piper Aircraft v. Reyno*,²⁹³ holding that courts could properly dismiss under *forum non conveniens* when a plaintiff from a foreign country sues an American defendant in the United States.²⁹⁴

Forum non conveniens originally was designed for courts to decline jurisdiction "where the suit is between aliens or non-residents or where for kindred reasons the litigation can more appropriately be conducted in a foreign tribunal."²⁹⁵ The doctrine would only apply after the court had determined venue and jurisdiction to be proper.²⁹⁶ Additionally, the doctrine cannot be employed unless there exists an alternate forum, such as the plaintiff's home country, where the defendant would be available for suit.²⁹⁷

287. *Id.*

288. *Piper Aircraft*, 454 U.S. at 248 n.13.

289. *Dow v. Alfaro*, 786 S.W.2d 674 (Tex. 1990), *cert. denied*, 111 S. Ct. 671 (1991); Michael T. Manzi, *Dow Chemical Company v. Castro Alfaro: The Demise of Forum Non Conveniens in Texas and One Less Barrier to International Tort Litigation*, 14 FORDHAM INT'L L.J. 819, 823 (1991).

290. Robertson, *supra* note 285, at 400.

291. *Gulf Oil Corp. v. Gilbert*, 330 U.S. 501 (1947).

292. Robertson, *supra* note 285, at 400-401. *Gulf Oil* involved two forums within the United States. In 1948, the U.S. Congress enacted a statute which codified the federal courts ability to transfer a civil case to another American district court. 28 U.S.C. § 1404(a) (1988). As a common law doctrine, *forum non conveniens* became limited to state courts and to federal courts where the alternative forum is a foreign country. Manzi, *supra* note 289, at 826.

293. *Piper Aircraft Co. v. Reyno*, 454 U.S. 235 (1981), *reh'g denied*, 455 U.S. 928 (1981).

294. *Id.* at 251-52.

295. *Canada Malting Co., Ltd., v. Paterson Steamships, Ltd.*, 285 U.S. 413, 422-423 (1932).

296. *Gulf Oil*, 330 U.S. at 504.

297. *Id.* at 507-507.

Plaintiffs often file suit in states which have abolished forum non conveniens or the forum non conveniens law is more favorable than in federal courts.²⁹⁸ As of 1990, thirty-six states and the District of Columbia have adopted the federal doctrine or a similar variant.²⁹⁹ Louisiana has abandoned the doctrine except in limited circumstances,³⁰⁰ and Georgia seems to reject the doctrine entirely.³⁰¹ The Texas Legislature recently adopted forum non conveniens in response to a controversial state Supreme Court decision prohibiting application of the doctrine.³⁰²

In cases where the doctrine has been abolished or restricted, defendants usually attempt to remove the case to federal court.³⁰³ To properly remove these cases from a state court, the district court must be able to exercise original jurisdiction over the claims, unless complete diversity exists among the parties and none of the defendants are citizens of that state.³⁰⁴ The Supreme Court has not addressed the *Erie* question,³⁰⁵ whether federal courts in diversity actions should apply the federal forum non conveniens law or state forum non conveniens law.³⁰⁶ Characterizing the forum non conveniens doctrine as a rule of venue rather than a rule of decision, the Eleventh Circuit held *Erie* inapplicable in diversity actions.³⁰⁷ Other courts and commentators disa-

298. See, e.g., *Dow Chem. Co. v. Alfaro*, 786 S.W.2d 674 (Tex. 1990), *cert. denied*, 111 S. Ct. 671 (1991).

299. *Robertson & Speck*, *supra* note 280 at 950-51.

300. See *Kassapas v. Arkon Shipping Agency, Inc.*, 485 So. 2d 565 (La. App. 5th Cir.), *writ denied*, 488 So. 2d 203, *cert. denied*, 107 S. Ct. 422 (1986) (holding that Louisiana statute does not authorize forum non conveniens dismissals when the alternate forum is not a Louisiana court); *Adrian G. Duplantier, Louisiana: A Forum, Conveniens Vel Non*, 48 LA. L. REV. 761 (1988).

301. *Id.* at 951.

302. *Dow Chem. Co. v. Alfaro*, 786 S.W.2d 674 (Tex. 1990), *cert. denied*, 111 S. Ct. 671 (1991).

303. 28 U.S.C. § 1441 (1988).

304. 28 U.S.C. § 1441 (1988).

305. *Erie Railroad v. Tompkins*, 304 U.S. 64 (1938).

306. *Piper Aircraft v. Reyno*, 454 U.S. 235, 248 n.13 (1981), *reh'g denied*, 455 U.S. 1981 (reserving decision on the *Erie* question). Many times, the Court has not addressed the issue because the same result would have occurred according to either federal or state law. *Id.*

307. *Sibaja v. Dow Chem. Co.*, 757 F.2d 1215, 1219 (11th Cir. 1985), *cert. denied*, 474 U.S. 948 (1985) (“[T]he trial court’s decision, under the circumstances presented here, whether to exercise its jurisdiction and decide the case was not a decision going to the character and result of the controversy. . . . A trial court only reaches the state rule of decision, relating to the character and result of the litigation, once it has decided to try the case and determine whether the plaintiff has a valid claim for relief.”); see *In Re Air Crash Disaster Near New Orleans, Louisiana on July 9, 1982*,

gree,³⁰⁸ and the issue is ripe for decision by the Supreme Court. A similar issue revolves around whether states should be permitted to depart from the federal forum non conveniens standard, in essence a "reverse-*Erie*" question.³⁰⁹

3. Modern Application of Forum Non Conveniens

In *Gulf Oil Corp. v. Gilbert*³¹⁰ and *Piper Aircraft v. Reyno*,³¹¹ the United States Supreme Court carefully outlined the criteria and standards for lower courts to apply when considering dismissal on the grounds of forum non conveniens. Throughout the forum non conveniens analysis, the defendant carries the burden of proving that the current forum is inconvenient.

In *Gulf Oil* and *Piper Aircraft*, the Supreme Court listed the "public" and "private" factors related to the litigation that the trial court is required to consider as part of a forum non conveniens analysis. The public interest factors include the administrative difficulties of hearing the case, burden on the local community, the local community's relationship to the dispute, and whether the court will need to apply domestic or foreign law.³¹²

Of the private interests of the litigants, courts must weigh the relative ease of access to sources of proof, availability of witnesses (especially third-party witnesses), enforceability of judgment, and any other practical problems related to trying the case in that jurisdiction.³¹³ Other factors include the location of witnesses and documents, presence of physical evidence, cost of producing evidence at trial, cost of translating documents and

821 F.2d 1147 (5th Cir. 1987) (holding that federal courts should apply federal forum non conveniens law in diversity cases).

308. Compare Allan R. Stein, *Erie and Court Access*, 100 YALE L.J. 1935, 1938 (1991) with Earl M. Maltz, *Choice of Forum and Choice of Law in the Federal Courts*, 79 KY. L. J. 231, 250 (1991).

309. Laurel E. Miller, *Forum Non Conveniens and State Control of Foreign Plaintiff Access to U.S. Courts in International Tort Actions*, 58 U. CHI. L. REV. 1369, 1370 (1991). The issue revolves around whether the federal government's interest in international tort cases should bind the state courts to the federal standard. *Id.*

310. *Gulf Oil Corp. v. Gilbert*, 330 U.S. 501 (1947).

311. *Piper Aircraft Co. v. Reyno*, 454 U.S. 235 (1981), *reh'g denied*, 455 U.S. 928 (1981).

312. *Gulf Oil*, 330 U.S. at 508-509.

313. *Id.* at 508. In a companion case, the Court held that forum non conveniens would be appropriate when the plaintiff's choice of forum would establish "oppressiveness and vexation to a defendant . . . out of all proportion to plaintiff's convenience" or because it would cause "administrative and legal problems" in the court. *Koster v. Lumbermens Mut. Cas. Co.*, 330 U.S. 518, 524 (1947).

testimony, amount of travel required, local practices necessary to understand part of the case, and ability to implead third-party witnesses.³¹⁴

Evidence that the substantive law of the alternate forum would be less favorable to the plaintiff than the law of the present forum cannot be used to defeat a motion to dismiss on the ground of forum non conveniens.³¹⁵ Only when the alternative forum is "so clearly inadequate or unsatisfactory that it is no remedy at all" may the district court give substantial weight to the law in the alternate forum.³¹⁶ Courts rarely make this finding, rejecting as insufficient evidence that the foreign forum has different procedures, no jury trials, substantial delays, financial burden on the plaintiff, no contingent fees, or differences in relief, including damages.³¹⁷

In products liability actions, some courts have recognized that states have some degree of interest in deterring the manufacture of unsafe products within its borders.³¹⁸ Causation tends to be clear in these cases, such as in a plane crash, and the plaintiffs

314. William L. Reynolds, *The Proper Forum for a Suit: Transnational Forum Non Conveniens and Counter-Suit Injunctions in the Federal Courts*, 70 TEX. L. REV. 1663, 1673-75 (1992).

315. *Piper Aircraft*, 454 U.S. at 247 ("The possibility of a change in substantive law should ordinarily not be given conclusive or even substantial weight in the forum non conveniens inquiry."). The Court justified the decision by pointing out a host of practical problems: the issue would arise in almost every case since plaintiffs tend to select the forum with the most advantageous law; trial courts would be inundated with motions requiring inquiries into complex notions of choice-of-law doctrine and comparative law; by making dismissal more difficult, American courts would become even more attractive to foreign plaintiffs and "further congest already crowded courts." *Id.* at 251. The practical result has been, however, that courts still must analyze choice of law and foreign laws as part of balancing the public interest factors. See, e.g., *Lony v. E.I. Du Pont De Nemours*, 886 F.2d 628, 642-43 (3rd Cir. 1989).

316. *Piper Aircraft*, 454 U.S. at 254. An example would be when the alternate forum does not permit litigation in the subject matter of the dispute. *Id.* at 254 n.22. *But see* *Acapolon Corp. v. Ralston Purina Co.*, 827 S.W.2d 189 (Mo. 1992) (holding that fact that Guatemala does not recognize products liability law does not suffice to avoid forum non conveniens dismissal). In reality, this holding does not substantially alter the forum non conveniens determination. Before beginning a forum non conveniens analysis, a trial court must ensure that an adequate alternative forum exists. Evidence that the defendant is "amenable to process" in the alternate forum has been held to be satisfactory to meet this requirement. *Piper Aircraft*, 454 U.S. at 254 n.22; *Gulf Oil Corp. v. Gilbert*, 330 U.S. 501, 507 (1947).

317. Reynolds, *supra* note 314, at 1668-69.

318. *Lacey v. Cessna Aircraft Co.*, 862 F.2d 38, 48 (3rd Cir. 1988); *Lony*, 886 F.2d at 642; *Hodson v. A.H. Robins Co.*, 528 F. Supp. 809 (E.D.Va. 1981), *aff'd*, 715 F.2d 142 (4th Cir. 1983) (court holds that Virginia has strong interest in regulating safety of products manufactured within its borders); *Chan Tse Ming v. Cordis Corp.*, 701 F.

seek damages for the faulty design or manufacturing which occurred in the United States. Other courts hold that when a foreign plaintiff sues a defendant in the forum where the defendant's corporate headquarters and plants are located, the evidence carries considerable weight in showing that the plaintiff's choice was made out of convenience.³¹⁹ For the most part, however, most courts hold that these interests do not outweigh the other factors causing inconvenience to the defendant.³²⁰

After considering the public and private interest factors, the court must balance their relative merits. In cases involving American plaintiffs, courts are not permitted to dismiss under *forum non conveniens* unless the balance is "strongly in favor of the defendant,"³²¹ not if the balance is even or tipped only slightly in favor of the defendant.³²² The analysis must establish "oppressiveness and vexation to a defendant . . . out of all proportion to the plaintiff's convenience."³²³

However, foreign plaintiffs do not receive the same deference. Reasoning that the forums chosen by American plaintiffs receive deference because their choice was likely made out of convenience, the Supreme Court held that foreign plaintiffs should not receive the same consideration.³²⁴ The reluctance to assume con-

Supp. 217 (S.D.Fla. 1989) (holding that Florida had significant interest in litigation over pacemaker manufactured in Florida).

319. *Lony*, 886 F.2d at 634.

320. *Piper Aircraft*, 454 U.S. at 260 (holding that liability in the United States only provides "incremental deterrence" with an "insignificant" impact); *Dahl v. United Technologies Corp.*, 632 F.2d 1027 (3rd Cir. 1980); *Rubenstein v. Piper Aircraft Corp.*, 587 F. Supp. 460 (S.D.Fla. 1984) (holding that plaintiff's assertion that the plane crash was caused by the negligent design and manufacture of the plane in Florida did not support the retention of jurisdiction in Florida).

321. *Gulf Oil Corp. v. Gilbert*, 330 U.S. 501, 508 (1947). The language of the court's opinion reflected the infrequent application of the doctrine during the mid-century. The Court declared that *forum non conveniens* should only apply in "rare cases" and emphasized that the "plaintiff's choice of forum should rarely be disturbed." *Id.* at 508-509. In dissent, Justice Black astutely foresaw the tangled caselaw which has resulted from the widespread application of the doctrine: "The Court's new rule will thus clutter the very threshold of federal courts with a preliminary trial of fact . . . [which will] produce a complex of close and indistinguishable decisions from which accurate prediction of the proper forum will become difficult, if not impossible." *Id.* at 516 (Black, J., dissenting).

322. *Lony v. E.I. DuPont De Nemours*, 886 F.2d 628, 640 (3rd Cir. 1989).

323. *Koster v. Lumbermens Mut. Cas. Co.*, 330 U.S. 518, 524 (1947).

324. *Piper Aircraft*, 454 U.S. at 255-56. *But see* *Lacey v. Cessna Aircraft Co.*, 862 F.2d 38, 45-46 (3rd Cir. 1988) ("Piper's language about according less deference to a foreign plaintiff's forum choice is 'not an invitation to accord a foreign plaintiff's selection of an American forum no deference since dismissal for *forum non conveniens* is the exception rather than the rule.'"). Interestingly, the Court in *Piper*

venience can be overcome by a strong showing of convenience by the foreign plaintiff.³²⁵

Cases which would require the application of foreign law in an American courtroom are strong candidates for a *forum non conveniens* dismissal.³²⁶ Similarly, courts have held that dismissal is proper when the case requires the laws of two different forums to be applied in the same case, reasoning that the jury would be too confused to properly decide the case.³²⁷ It is hard to imagine, however, that the legal system of a developing country would be better equipped to handle a case involving two sets of laws, and one could make a reasonable argument that in this type of case, an alternate forum does not exist.

While the trial judge's decision can only be reversed after a "clear abuse of discretion,"³²⁸ failure to develop and list specific reasons for a dismissal under *forum non conveniens* is considered reversible error.³²⁹ As a result, appellate courts usually pay only lip service to the deference standard, preferring to engage in a careful *de novo* review of the trial courts's analysis.³³⁰

Failure to require the defendants to uphold their burden of proof on a *forum non conveniens* motion or a clear error in weighing the factors also constitutes an abuse of discretion.³³¹ The court must indicate the amount of deference given to the plaintiff's choice of forum, and, if the plaintiff makes a strong showing of convenience, to what degree that showing of convenience goes toward putting the foreign plaintiff "on the same foot-

Aircraft did not consider the jurisdictional provisions of the Friendship, Commerce, and Navigation treaties the United States has signed with many nations. The treaties accord foreign plaintiffs with the same jurisdictional footing as domestic plaintiffs. FREEDMAN, *supra* note 272, at 78.

325. *Lony*, 886 F.2d. at 634.

326. *Piper Aircraft*, 454 U.S. at 260; *Gulf Oil Corp. v. Gilbert*, 330 U.S. 501, 512 (1947).

327. *See, e.g., Piper Aircraft*, 454 U.S. at 260 ("[A] trial involving two sets of laws would be confusing to the jury.").

328. *Id.* at 257; *Gulf Oil*, 330 U.S. at 508. "The *forum non conveniens* determination is committed to the sound discretion of the trial court. It may be reversed only when there has been a clear abuse of discretion; where the court has considered all relevant public and private interest factors, and where its balancing of these factors is reasonable, its decision deserves substantial deference." *Piper Aircraft*, 454 U.S. at 257.

329. *Lacey v. Cessna Aircraft Co.* 862 F.2d 38, 45-49 (3rd Cir. 1988); *In Re Air Crash Disaster Near New Orleans, Louisiana on July 9, 1982*, 821 F.2d 1147, 1166 (5th Cir. 1987); *La Seguridad v. Transytur Line*, 707 F.2d 1304, 1303-10 (11th Cir. 1983).

330. Reynolds, *supra* note 314, at 1686-87.

331. Lacey, 862 F.2d at 43.

ing as a domestic plaintiff."³³² The defendant carries the burden of supporting its allegations that the plaintiff's forum selection is overly burdensome.³³³ The court must determine how critical or relevant information located in the respective forums are to the defendants' potential defenses or the plaintiff's cause of action.³³⁴

B. *Dow Chemical Co. v. Castro Alfaro*³³⁵

In 1990, in a highly controversial decision, the Texas Supreme Court allowed a personal injury lawsuit initiated by eighty-two Costa Rican banana workers against Dow Chemical Company and Shell Oil Company to remain in the Texas state courts.³³⁶ The plaintiffs alleged that as a result of handling DBCP, they suffered serious mental and physical problems, including irreversible sterility, and sought tort recovery under theories of product liability, strict liability, and breach of warranty.³³⁷ Prior to this action, members of the plaintiffs group had unsuccessfully filed similar claims in Florida and California state courts.³³⁸

For over ten years, Dow and Shell manufactured and shipped DBCP to Castle & Cooke, parent company to Standard Fruit, a banana company owning numerous banana plantations in Costa Rica and throughout Central America. Used to kill parasites and other pests around the banana plants, DBCP singlehandedly increased banana yields by thirty percent.³³⁹ The workers manually applied the pesticide for several years, and Standard Fruit

332. *Lony v. E.I. DuPont De Nemours*, 886 F.2d 628, 634 (3rd Cir. 1989).

333. *Lacey*, 862 F.2d at 45. In *Piper Aircraft*, the Supreme Court insinuated that the plaintiff must show "specific reasons of convenience" for its forum selection should remain. *Piper Aircraft*, 454 U.S. at 249.

334. *Van Cauwenberghe v. Biard*, 486 U.S. 517, 108 S.Ct. 1945, 1953 (1988).

335. *Dow Chem. Co. v. Alfaro*, 786 S.W.2d 674 (Tex. 1990), *cert. denied*, 111 S.Ct. 671 (1991).

336. *Id.*

337. *Id.* at 681 (Doggett, J., concurring)

338. All three cases originated in state court and, after being removed to federal court, were dismissed under *forum non conveniens*. The first case in 1983 was filed in Florida and the dismissal was upheld on appeal. *Sibaja v. Dow Chem. Co.*, 757 F.2d 1215 (11th Cir.), *cert. denied*, 474 U.S. 948 (1985). The same result occurred in California in 1985. *Aguilar v. Dow Chem. Co.*, No. 86-4753 JGD (S.D. Cal. 1987) (cited in Dow at 691). In 1987, a different Florida suit also found no success. *Cabalceta v. Standard Fruit Co.*, 667 F. Supp. 833 (S.D. Fl. 1987), *aff'd in part and rev'd in part*, 883 F.2d 1553 (11th Cir. 1989).

339. David Weir & Constance Matthiessen, *Will the Circle Be Broken?*, MOTHER JONES, June 1989, at 24.

never provided them with safety equipment or precautions.³⁴⁰ Dow and Shell allegedly knew of the dangers of DBCP since the early 1960s but suppressed the information until forced to release it in 1977.³⁴¹

Despite the EPA's suspension of DBCP's registration on November 3, 1977,³⁴² the workers alleged that both companies continued to ship the pesticide to Costa Rica.³⁴³ EPA cancelled DBCP's registration in 1979.³⁴⁴

Castle & Cooke chose to continue purchasing and applying DBCP even after evidence that it caused sterility and the EPA's ban. In an internal memo, a company official emphasized that "there is no evidence that people who apply the chemical, as opposed to those who manufacture it, have been rendered sterile or have been harmed in other ways."³⁴⁵ Only after large numbers of banana workers came forward with evidence of sterility did the government successfully pressure Standard Fruit and Castle & Cooke to stop importing the pesticides.³⁴⁶

Costa Rican banana workers earn on average \$75 per week.³⁴⁷ Costa Rican law prevents workers from receiving more than \$1,800 as compensation for their injuries, and Costa Rican attorneys do not work on a contingency fee basis.³⁴⁸

After failing to remove the case to federal court, Dow and Shell filed a motion to dismiss under the doctrine of forum non conveniens.³⁴⁹ After finding that the court had jurisdiction to hear the case, the trial court granted the motion and dismissed the case.³⁵⁰ The Court of Appeals, however, reversed based upon an interpretation of Texas Code Section 71.031.³⁵¹ By guaranteeing foreign plaintiffs the right to remain in Texas state

340. *Thrupp Statement*, *supra* note 72, at 31.

341. *Id.* at 32-37.

342. 42 Fed. Reg. 57,543 (1977).

343. *Dow Chem. Co. v. Alfaro*, 786 S.W.2d 674, 681 (Tex. 1990), *cert. denied*, 111 S.Ct. 671 (1991).

344. 44 Fed. Reg. 65,169 (1979).

345. *Weir & Matthiesson*, *supra* note 339, at 24.

346. *Id.*

347. *David Scanlan, Sterilized Banana Workers Sue*, S.F. CHRON., March 15, 1994, at A8.

348. *Siegel*, *supra* note 273, at A1.

349. *Dow Chem. Co. v. Alfaro*, 786 S.W.2d 674, 675 (Tex. 1990), *cert. denied*, 111 S. Ct. 671 (1991). The case could not be removed because complete diversity did not exist.

350. *Id.* at 675

351. *Alfaro v. Dow Chem. Co.*, 751 S.W.2d 208, 208 (Tex. Ct. App. 1988). Section 71.031 provides:

courts, the state statute stripped the trial court of its discretion to dismiss under *forum non conveniens*.³⁵²

The Texas Supreme Court, in a bitterly divided seven-part opinion, affirmed the court of appeals holding by a slim 5-4 majority.³⁵³ Finding that *forum non conveniens* had existed in Texas prior to 1913, the majority concluded that the Texas Legislature abolished the doctrine when it passed the Act of 1913,³⁵⁴ that the Act confers compulsory jurisdiction on Texas courts,³⁵⁵ and that a 1932 decision by the Texas Court of Civil Appeals was binding precedent that the court had no discretion to dismiss.³⁵⁶ The Court's internal conflicts were most apparent in the strongly con-

(a) An action for damages for the death or personal injury of a citizen of this state, of the United States, or of a foreign country may be enforced in the courts of this state, although the wrongful act, neglect, or default causing the death or injury takes place in a foreign state or country, if

(1) a law of the foreign state or country or of this state gives a right to maintain an action for damages for the death or injury;

(2) the action is begun in this state within the time provided by the laws of this state for beginning the action; and

(3) in the case of a citizen of a foreign country, the country has equal treaty rights with the United States on behalf of its citizens.

(b) All matters pertaining to procedure in the prosecution or maintenance of the action in the courts of this state are governed by the law of this state.

(c) The court shall apply the rules of substantive law that are appropriate under the facts of this case.

TEX. CIV. PRAC. & REM. CODE ANN. § 71.031 (Vernon 1986).

352. *Alfaro*, 751 S.W.2d at 210 ("This court indicates a legislative intent that foreign plaintiffs be allowed not only to file suit in a Texas court, but to remain in a Texas court throughout the enforcement of the action through execution."). Foreign plaintiffs must first satisfy three requirements: the law of their home country (Costa Rica) must permit a similar action, the statute of limitations must not have expired, and the foreign country must have equal treaty rights with the United States. TEX. CIV. PRAC. & REM. CODE ANN. § 71.031(a) (Vernon 1986). The court found all three to be satisfied in *Alfaro*. *Alfaro*, 751 S.W.2d at 209.

353. *Dow Chem. Co. v. Alfaro*, 786 S.W.2d 674 (Tex. 1990), *cert. denied*, 111 S. Ct. 671 (1991).

354. *Id.* at 677-678. The Act of 1913 conferred a right to bring actions in Texas courts for wrongful death or personal injury on citizens of Texas or foreign countries with equal treaty rights with the United States. Act of April 8, 1913, ch. 161 § 1, 1913 Tex. Gen. Laws 338 (codified at TEX. CIV. PRAC. & REM. CODE ANN. § 71.031 (1986)); Manzi at 837-38. The Act was amended by the Act of 1917 to include actions brought by citizens of foreign countries. Act of March 30, 1917, ch. 156, § 1, 1917 TEX. GEN. LAWS 365.

355. *Dow*, 786 S.W.2d at 674.

356. *Id.* at 678 (discussing *Allen v. Bass*, 47 S.W.2d 426 (Tex. Civ. App. 1932), *writ ref'd* (Tex.) (holding under Act of 1917 that New Mexico plaintiff had absolute right to bring personal injury case in a Texas court and that the trial court had no discretion to dismiss)).

trasting opinions of Justice Doggett and Justice Gonzalez.³⁵⁷ Moving beyond the court's holding of whether the doctrine was preempted by the statute, each justice passionately argued the policy arguments as to why *forum non conveniens* should or should not exist in Texas.

In a lengthy concurrence, Justice Doggett challenged the contention that the litigation would be inconvenient to the corporate defendants. He pointed to the presence of Shell's world headquarters literally three blocks from the courthouse and the presence of Dow's chemical plant in Freeport, Texas, the largest chemical manufacturing plant in the world.³⁵⁸ All of the defendant's witnesses and evidence were already located in Texas, and the plaintiff had offered to make its witnesses and evidence readily available to the defendants in Houston. In a cutting tone, Justice Doggett harshly criticized the defendants' actions:

The banana plantation workers allegedly injured by DBCP were employed by an American company on American-owned land and grew Dole bananas for export solely to American tables. The chemical allegedly rendering the workers sterile was researched, formulated, tested, manufactured, labeled and shipped by an American company in the United States to another American company. The decision to manufacture DBCP for distribution and use in the third world was made by these two American companies in their corporate offices in the United States. Yet now Shell and Dow argue that the one part of this equation that should not be American is the legal consequence of their actions.³⁵⁹

Justice Doggett proceeded to analyze and challenge the justifications put forth for *forum non conveniens*. Starting by declaring the "private interests" enunciated in *Gulf Oil Corp. v. Gilbert* to be obsolete due to modern communications technology and jet travel,³⁶⁰ Doggett challenged the dissenter's argument that Texas would be made "an irresistible forum for all mass disaster lawsuits."³⁶¹ Doggett argued that Texas has a strong interest in this litigation because the defendants do extensive business in the state and because the litigation arises out of acts and events which occurred in Texas.³⁶²

357. *Dow*, 786 S.W.2d at 680 (Doggett, J., concurring); *id.* at 690 (Gonzalez, J., dissenting).

358. *Id.* at 681

359. *Id.* at 681 (Doggett, J., concurring).

360. *Id.* at 683-84 (Doggett, J., concurring).

361. *Id.* at 690 (Gonzalez, J., concurring).

362. *Id.* at 686 (Doggett, J., concurring).

He argued that international judicial comity is only harmed by allowing multinational corporations to adhere to a double standard in accountability and that the best solution would be the abolition of *forum non conveniens*.³⁶³ "Some United States multinational corporations will undoubtedly continue to endanger human life and the environment with such activities until the economic consequences of these actions are such that it becomes unprofitable to operate in this manner."³⁶⁴

In separate opinions, Justices Gonzalez, Cook, and Hecht fiercely dissented to the majority's holding,³⁶⁵ declaring that " 'Bhopal'-type litigation, with little or no connection to Texas will *add* to our already crowded dockets, forcing our residents to wait in the corridors of our courthouses while foreign causes of action are tried."³⁶⁶ Each justice challenged the majority's interpretation of the 1913 state statute and criticized the holding for policy reasons. Characterizing the banana workers as "turn-of-the-century wildcatters," Justice Cook accused the plaintiffs of nation-wide forum-shopping until they "hit pay dirt in Texas."³⁶⁷ He suggested that the *forum non conveniens* doctrine satisfied the notion of "fair play" which was missing in the due process test for *in personam* jurisdiction.³⁶⁸ Justice Hecht challenged Justice Doggett's analysis of why the Texas Legislature "abolished" *forum non conveniens* and asked why the plaintiffs should be entitled to recover more against an American corporate defendant in an American courthouse than against a Costa Rican corporate defendant in a Costa Rican courthouse.³⁶⁹

1. Reaction to the Decision

The Texas Supreme Court decision set off a firestorm of protest from the Texas business community. Thirty-nine Fortune 500

363. *Id.* at 687-89 (Doggett, J., concurring).

364. *Id.* at 689 (Doggett, J., concurring).

365. *Id.* at 690 (Gonzalez, J., dissenting); *id.* at 697 (Cook, J., dissenting); *id.* at 702 (Hecht, J., dissenting). Chief Justice Phillips also dissented but strictly on the grounds that the doctrine of *forum non conveniens* was not preempted by state statute. *Id.* at 689 (Phillips, J., dissenting). He did not discuss the appropriateness of *forum non conveniens* in this case or as a general policy matter. *Id.* (Phillips, J., dissenting).

366. *Id.* at 690 (Gonzalez, J., dissenting) (emphasis in original).

367. *Id.* at 697 (Cook, J., dissenting). Justice Cook felt quite strongly that the case should be dismissed: "No reason exists, in law or in policy, to support [the plaintiff's] presence in this state." *Id.* (Cook dissenting).

368. *Id.* at 697-702 (Cook, J., dissenting).

369. *Id.* at 707 n.11 (Hecht, J., dissenting).

companies are headquartered in Texas and hundreds of U.S. corporations manufacture products in Texas.³⁷⁰ Texas business argued that it would expose Texas businesses to litigation filed anywhere in the world.³⁷¹ There has been no indication that the Texas economy has suffered from the decision, however. The state economy continued to grow, and as of October 1991, Texas was ranked 15th among the 50 states in creation of new jobs.³⁷²

The Texas legislature recently amended their Code to permit forum non conveniens dismissals in state courts. Texas courts now expressly retain the discretion to decline jurisdiction after determining that another jurisdiction would be better equipped to hear the case.

A grandfather clause permitted numerous other plaintiffs from Central America to file similar cases before the statute took effect. Numerous lawsuits involving over 8,000 Costa Rican banana workers were filed before August 30, 1993, the effective date of the new statute.³⁷³ In 1992, 981 Costa Rican workers accepted settlements with Dow, Shell, Occidental Chemical, and Standard Fruit that averaged \$7,500 per worker.³⁷⁴ Workers in the United States, on the other hand, have received \$240,000 to \$2.4 million per worker for injuries suffered from exposure to DBCP.³⁷⁵ The companies have also sought out workers in Costa Rica and offered them between \$700 and \$6,000 to drop their legal actions.³⁷⁶

370. Lis Wiehl, *Texas Courts Opened to Foreign Damage Cases*, N.Y. TIMES, May 25, 1990, at B6. Forty large corporations filed amicus briefs to the Texas Supreme Court in Dow arguing that forum non conveniens should exist in Texas. Siegel, *supra* note 273, at A1.

371. Joseph M. House, *Dow Chemical Company & Shell Oil Company v. Domingo Castro Alfaro, et. al.*, 786 S.W.2d 674 (Tex. 1990): *The End of Forum Non Conveniens?* TEX. B. J., June 1991, at 559 ("Corporations will likely view the removal of such protection as a disincentive to establishing corporate offices in Texas since such action could subject them to a burdensome forum of plaintiffs from anywhere in the world."); Russell J. Weintraub, *The Need for Forum Non Conveniens Legislation in Texas*, TEX. B. J., April 1992, at 346 ("The inability of a Texas state court to grant a forum non conveniens dismissal discourages corporations from incorporating here or establishing their principal place of business in Texas."); Wiehl, *supra* note 370, at B6.

372. George Fleming & John Grayson, *Forum Non Conveniens: The Other Side of the Story*, TEX. B. J., Sept. 1992, at 809.

373. *More Costa Rican Lawsuits Seek Payment for Pesticide Damages*, ENV'T WATCH LATIN AM., September 1993.

374. *Id.*

375. *Id.*

376. *Id.*

DBCP litigation could continue into the future. Some experts believe that as many as 100,000 banana workers world-wide have been made sterile from contact with DBCP.³⁷⁷

C. Policy Considerations and Future Applications

By dismissing foreign plaintiffs from the United States, American courts effectively cut off any hope of relief. By the time the case is dismissed, the plaintiff may have already devoted considerable resources to finding an attorney and pursuing the case to the point of exhaustion.³⁷⁸ American plaintiff attorneys will likely not represent the plaintiff in forums where contingent attorney fees arrangements are not permitted. In developing countries, indigent plaintiffs must rely on legal aid programs which are usually of little or no help.³⁷⁹ These plaintiffs also must pay court fees before initiating their case, which could singlehandedly prevent recovery.³⁸⁰

A study by Professor David Robertson revealed that almost none of the transnational cases dismissed from American courts for forum non conveniens ever made it to trial in a foreign forum.³⁸¹ Of fifty-five personal injury cases, none were won in foreign courts and one lost on the merits.³⁸² Most plaintiffs essentially gave up, either abandoning the case or settling for a small fraction of the estimated value.³⁸³ Hence, these statistics belie the assertion by U.S. courts that forum non conveniens is "not a decision going to the character and result of the controversy."³⁸⁴

The Costa Rican plaintiffs almost certainly would have received very little compensation for their injuries. The tort laws in Costa Rica are undeveloped, not because of a conscious decision by the government but due to the lack of legal evolution.³⁸⁵ Very few of the workers own phones and many don't have mailing ad-

377. Scanlan, *supra* note 347, at A1.

378. Robertson, *supra* note 285, at 418.

379. Boyce, *supra* note 279, at 198-99.

380. *Id.* at 199.

381. Robertson, *supra* note 285, at 419.

382. *Id.* Nine cases were still pending. *Id.* at 419.

383. *Id.* at 419-420.

384. *Sibaja v. Dow Chem. Co.*, 757 F.2d 1215, 1219 (11th Cir. 1985), *cert. denied*, 474 U.S. 948 (1985).

385. Siegel, *supra* note 273, at A1.

dresses.³⁸⁶ Plaintiff's attorneys usually resort to announcements over the local radio station to contact their clients.³⁸⁷

1. Policy Arguments

Foreign lawyers are astounded when told that the home forum of an American defendant can and will decline jurisdiction on the grounds of *forum non conveniens*.³⁸⁸ The reality is that courts in the United States are not willing to hear foreign toxic tort cases, and they will sending foreign plaintiffs back to their country if given the opportunity.³⁸⁹

Advocates of *forum non conveniens* dismissals contend that the doctrine is necessary to ensure that American litigation does not perpetuate U.S. imperialism by disrupting the social policies and legal systems of developing nations. This analogy is frequently raised when U.S.-based multinational corporations are haled into an American courtroom to be held responsible for their actions in developing countries.

Applying U.S. laws to U.S. multinationals cannot be analogized with a colonial power's application of its laws to repress the laws and culture of a developing nation.³⁹⁰ Rather than disrupting the social policies of a developing nation, U.S. courts which retain these international tort cases are only imposing their forum's standards upon a U.S.-based company operating or exporting products to another nation.³⁹¹ The corporations have benefited from the weak governments and lax regulation in the developing nations.

Additionally, imposing American tort liability on an American multinational corporation does not prevent the developing nation from formulating its own policies.³⁹² There is no evidence that foreign countries are substantially affected when their citizens pursue tort remedies in the United States.³⁹³

386. *Id.*

387. *Id.*

388. Robertson & Speck, *supra* note 280, at 953.

389. Robertson, *supra* note 285, at 405 ("[The] prevailing judicial attitude is that the injuries done by American business to foreign nationals abroad are not America's problem.").

390. Note, *Forum Shopping Reconsidered*, 103 HARV. L. REV. 1677, 1694 (1990) [hereinafter *Note*].

391. Miller, *supra* note 309, at 1384.

392. *Id.*

393. *Id.*

One commentator described the liability in terms of international competition and the "cost of doing business." By increasing the cost of doing business for American multinationals in developing countries, foreign corporations operating in those countries will not have that cost and will have a competitive advantage.³⁹⁴ The end result of this logic is that the United States will be blamed for shipping dangerous products to the developing world. The term "Made in U.S.A." will become better-known as a sign of hazard than of quality.

More likely, the "legal imperialism" is a smokescreen created by industry and pesticide-exporting countries to avoid being held responsible for their exported products. That reasoning ignores the efforts by the governments in the developing world to become aware of dangerous products being shipped into their countries. Since then, the argument of "environmental imperialism" has been raised, not by developing nations whose sovereignty is supposedly at stake but by Germany itself.³⁹⁵

Fear of liability in a U.S. courtroom will act as a much stronger incentive to pesticide exporters and manufacturers than the unsophisticated regulatory system currently present in developing countries:

[T]he realization at corporate headquarters that liability for any [industrial] disaster would be decided in the U.S. courts, more than pressure from Third World governments, has forced companies to tighten safety procedures, upgrade plants supervise maintenance more closely, and educate workers and communities.³⁹⁶

Standard Fruit Corporation certainly was motivated by fear of U.S. tort liability. To protect itself from more lawsuits, Standard Fruit offered plantation workers small settlements of money in exchange for agreements never to sue.³⁹⁷

Evidence is appearing that state courts use *forum non conveniens* simply to clear their docket,³⁹⁸ which clearly would be a misapplication of the doctrine. Federal judges have been com-

394. Albright, *supra* note 269, at 361 n.59.

395. *Id.*

396. *Dow Chem. Co. v. Alfaro*, 786 S.W.2d 674, 687 n.10 (Tex. 1990), *cert denied*, 111 S. Ct. 671 (1991) (Doggett, J., concurring) (citing *WALL STREET JOURNAL*, at 22, Nov. 26, 1985) (quoting Harold Corbett, senior vice-president for environmental affairs at Monsanto Co.),

397. Bill Lambrecht, *Farm Chemical Robs Couples of Dreams*, *ST. LOUIS POST-DISPATCH*, Nov. 14, 1993, at A1.

398. Stuart A. Schlesinger & Edward J. Sanocki, Jr., *Forum Non Conveniens*, *N.Y. B. J.*, May 17, 1990, at 3.

plaining about their workload since the 1970s.³⁹⁹ U.S. courts are generally reluctant to apply foreign law, so this consideration no doubt weighs heavily in the forum non conveniens analysis.⁴⁰⁰ As one California federal judge observed:

[T]he law on Choice of Law in the various states and in the federal courts is a veritable jungle which if the law can be found out, leads not to a Rule of Action but a reign of chaos dominated in each case by the judge's Informed Guess as to what some other state than the one in which he sits would hold its law to be.⁴⁰¹

However, no hard evidence has been presented showing that state or federal courts have been or will be backlogged with foreign claims, and the U.S. Supreme Court has rejected docket congestion as a consideration in virtually every context other than forum non conveniens.⁴⁰²

2. Conditioning Forum Non Conveniens Dismissals

In an attempt to ensure that foreign plaintiff will be able to bring an action in the foreign forum, many courts have required defendants to agree to certain conditions before granting a motion to dismiss under forum non conveniens. Typical conditions include: consent to jurisdiction in alternative forum;⁴⁰³ waiver of statute of limitations defenses;⁴⁰⁴ making witnesses and evidence available in the foreign forum;⁴⁰⁵ permission to use discovery materials gathered prior to dismissal;⁴⁰⁶ agreement to not contest liability and proceed to trial only on damages;⁴⁰⁷ agreement to

399. Reynolds, *supra* note 314, at 1682; Robertson, *supra* note 285, at 407.

400. FREEDMAN, *supra* note 272, at 181.

401. In Re Paris Air Crash, 399 F. Supp. 732 (C.D. Cal. 1975).

402. Dow Chem. Co. v. Alfaro, 786 S.W.2d 674 (Tex. 1990), *cert. denied*, 111 S. Ct. 671 (1991); Robertson, *supra* note 285, at 408.

403. La Seguridad v. Transytur Line, 707 F.2d 1304 (11th Cir. 1983); Dahl v. United Technologies Corp., 632 F.2d 1027 (3rd Cir. 1980). Some courts have further required the plaintiff to file suit in the foreign forum within a certain time period. See La Seguridad; Ali v. Offshore Co., 753 F.2d 1327 (E.D.La. 1984).

404. Piper Aircraft Co. v. Reyno, 454 U.S. 235 (1981), *reh'g denied*, 455 U.S. 928 (1981); Dowling v. Richardson-Merrell, Inc., 727 F.2d 608 (6th Cir. 1984); Ahmed v. Boeing Co., 720 F.2d 224 (1st Cir. 1983).

405. See Piper Aircraft (suggesting that defendants should be required, as a general practice, to make records available in the foreign forum); Ahmed v. Boeing Co., 720 F.2d 224 (1st Cir. 1983).

406. Vaz Borralho v. Keydril Co., 696 F.2d 379 (5th Cir. 1983).

407. Pain v. United Technologies Corp., 637 F.2d 775 (D.C. Cir. 1980).

satisfy any foreign judgment;⁴⁰⁸ and acceptance of jurisdiction by the foreign forum.⁴⁰⁹

VI. CONCLUSION

Despite the efforts of the United States, developing countries, international organizations and other countries, the problem of pesticide poisonings in the developing world has yet to be solved. Residents of developing countries are still being poisoned today by unregistered or severely restricted pesticides. Progress certainly has been made. Domestic and international laws related to the export of hazardous substances are moving toward full disclosure of the hazards and regulatory status of pesticides and other substances on the international market.

As developed nations and exporters correctly point out, however, isolated bans on exports by pesticide exporting countries do not solve the problem. Other exporters not subject to the ban quickly fill the gap. International codes, while well-intentioned and helpful, fail as enforcement tools because they are voluntary in nature. Neither solution resolves the problem common to nearly all developing countries: the lack of resources to test, regulate, and monitor pesticides.

Corporate liability, however, has the potential to be an effective deterrent to the distribution of excessively hazardous products. By bringing American exporters into an American courtroom, exporters can be held accountable for sending unsafe products abroad. Litigating these cases in the United States may not be the perfect solution, but it is better than abandoning them altogether. Practically speaking, cases which are not heard in the United States will never be heard. While being forced to litigate in a state where they have limited contacts is an understandable concern, not permitting litigation in their home jurisdiction allows corporations to act without accountability. Similar to the undeveloped status of pesticide regulation, most developing

408. *Ahmed v. Boeing Co.*, 720 F.2d 224 (1st Cir. 1983); *Vaz Borralho v. Keydril Co.*, 696 F.2d 379 (3rd Cir. 1980); *Dahl v. United Technologies Corp.*, 632 F.2d 1027 (3rd Cir. 1980). *But see In Re Union Carbide Corp. Gas Plant Disaster*, 64 F.Supp. 842 (S.D.N.Y. 1986), *modified*, 809 F.2d 195 (2nd Cir. 1987).

409. *Calavo Growers v. Belgium*, 632 F.2d 963 (2nd Cir. 1980), *cert. denied*, 449 U.S. 1084 (1981); *Hodson v. A.H. Robins Co.*, 528 F. Supp. 809 (E.D.Va. 1981), *aff'd*, 715 F.2d 142 (4th Cir. 1983).

countries have unevolved tort schemes unable to deal with mass tort cases.

The doctrine of *forum non conveniens* has become a complex doctrine without any clear rules. The outcome of a motion to dismiss in any given case can be quite unpredictable; very similar cases have opposite results.⁴¹⁰ The issues are ripe for another Supreme Court decision. Hopefully, the Court will make the proper decision and allow foreign litigants to hold American defendants accountable for their actions.

410. Robertson, *supra* note 285, at 415; Allan R. Stein, *Forum Non Conveniens and the Redundancy of Court-Access Doctrine*, 133 U. PA. L. REV. 781, 785 (1985) (forum non conveniens doctrine has become a "crazy quilt of ad hoc, capricious, and inconsistent decisions").

