PIC, POPS AND THE MAI APOCALYPSE: OUR ENVIRONMENTAL FUTURE AS A FUNCTION OF INVESTORS' RIGHTS AND CHEMICAL MANAGEMENT INITIATIVES

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I. INTRODUCTION

An increase in the environmentally destructive capabilities of humankind can be quite vividly linked with the development of the corporate form. Recently, however, these legal entities have grown and developed into multi-national giants, which have begun to assume tremendous political and economic power.

In the 1990s large business enterprises, even some smaller ones, have the technological means and strategic vision to burst old limits—of time, space, national boundaries. language, custom, ideology. By acquiring earth-spanning technologies, by developing products that can be produced anywhere and sold everywhere, by spreading credit around the world, and by connecting global channels of communication that can penetrate any village or neighborhood, these institutions we normally think of as economic rather than political, private rather than public, are becoming the world empires of the twenty-first century.1

While some industrial sectors have more potential for environmental harm than others, the chemical industry would be at the top of such a list. Its destructive acts have been researched back to the mid-1800s in relation to aniline dye manufacturers,² and it has also been immortalized in literature. Rachel Carson's book, *Silent Spring*, exposed the dangerous use of Dichloro Diphenyl Trichloroethane (DDT) in 1962.³

International environmental attention has recently focused on the dangers of allowing certain chemicals and pesticides to continue to be utilized in a predominately unregulated fashion. To this end, two draft conventions on Prior Informed Consent (PIC)⁴ and Persistent Organic

^{1.} RICHARD J. BARNET & JOHN CAVANAGH, GLOBAL DREAMS: IMPERIAL CORPORATIONS AND THE NEW WORLD ORDER 14 (1994).

^{2.} See Anthony S. Travis, Poisoned Groundwater and Contaminated Soil: The Tribulations and Trial of the First Major Manufacturer of Aniline Dyes in Basel, 2 Envtl. Hist. 343, 343–45 (1997) (highlighting contamination of the groundwater serving the canton of Basel that led to the Aniline [Dye] Manufacturing Law of December 24, 1864).

^{3.} RACHEL CARSON, SILENT SPRING (1962).

^{4.} See discussion *infra* Section III.A–C (reviewing the PIC procedure and several voluntary initiatives to implement it); see also discussion *infra* Section III.D (reviewing the Draft PIC Convention).

Pollutants (POPs)⁵ have been initiated. However, a new Multilateral Agreement on Investment (MAI)⁶ will likely liberalize and internationalize the capitalist market economy and thereby serve to undermine any benefits which would have been gained by the PIC and POPs conventions. It is through an examination of chemical use, the chemical industry, the negotiating processes, and draft conventions that the potential fate of the global environment is revealed.

II. CONTEXTUALIZING THE CHEMICAL INDUSTRY

A glance through magazine advertisements demonstrates that the world has become a place of startling anthropocentric contrasts. Contrast an advertisement for Elf Autochem, a French chemical manufacturer, containing a slogan to promote bromine derivatives stating, "There are faster routes to building your molecules!" with an advertisement for a "Chemical-Free Christmas Tree" to "[p]rotect your own health." What the Elf Autochem advertisement fails to state is that the chemicals they manufacture can be deadly. Methyl bromide is a pesticide produced by Elf Autochem⁹ and is most commonly used as a soil fumigant. This product has been characterized as the "almost perfect pesticide" because "[w]ith one application you can kill weeds, insects, rodents... you name it." The unstated disadvantage is that

[t]he features which make methyl bromide "almost the perfect pesticide"—its high toxicity to pests and its ability to penetrate fumigated substances—also increases its toxicity to humans. Exposure to methyl

7. Elf Autochem, *There are Faster Routes to Building Your Molecules!*, CHEM. & ENG'G NEWS, Mar. 24, 1997, back cover.

^{5.} See discussion infra Section IV.A–C (relating the developments occurring during the POP's Convention).

^{6.} See discussion infra Section V.

^{8.} Ecology Action Ctr., *This Year Decorate a Chemical-Free Christmas Tree*, BETWEEN THE ISSUES, Fall 1997, at 24, 24.

^{9.} See Elf Autochem, supra note 7, back cover.

^{10.} See Joshua Karliner et al., The Barons of Bromide: The Corporate Forces Behind Toxic Poisoning & Ozone Depletion, ECOLOGIST, May–June 1997, at 90, 90 (citing Office of Air and Radiation, Environmental. Protection Agency (EPA), Aug. 7, 1995, at 3). The EPA estimates that 71 percent of worldwide sales of methyl bromide are for the purpose of soil fumigation. See id.

^{11.} Paul Rogers & Mitchel Benson, *Pesticide-Use Extension Raises Concerns*, SAN JOSE MERCURY NEWS, Jan. 8, 1996, at A1 (quoting Jim Wells, Director of the California Department of Pesticide Regulation).

bromide can cause acute damage to the central nervous system, lungs, kidneys, eyes and skin. In their "risk assessment" research, scientists have not found a dose of methyl bromide low enough for them to deem "safe". 12

Furthermore, since 1992 methyl bromide has been listed as an ozone depleter under the *Montreal Protocol on Substances* that Deplete the Ozone Layer.¹³

This is the reality of the world in which we live. One in which the benefits of chemical use, whether for agricultural production or vector-borne disease control, has distorted our perception of what these chemicals are—poison. In short, the "miracles" of chemical use have helped to reinvent our perception of nature so that what we used to describe and enjoy as nature has been reduced to "environment."

Nature, when she becomes the object of politics and planning, turns into 'environment'. It is misleading to use the two concepts interchangeably for it impedes the recognition of 'environment' as a particular construction of 'nature' specific to our epoch. Contrary to its connotations we are currently being socialized into accepting, there has rarely been a concept that represented nature in a form more abstract, passive, and void of qualities than 'environment'. . . . Sticking the label 'environment' on the natural world makes . . . nature appear passive and lifeless, merely waiting to be acted upon. 14

The benefits of such an environmental construction ultimately flow to chemical industry shareholders, while the burdens flow to an often unsuspecting public. For example, in April 1997, Denmark's Environmental Protection Agency suggested that flexible PVC toys be withdrawn from the market due to the potential for negative toxic effects on

^{12.} Karliner, *supra* note 10, at 90 (noting that nearly half of all reported methyl bromide illnesses result from exposures due to accidental drift from agriculture fields and fumigated structures).

^{13.} See Report of the Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, U.N. Doc. UNEP/OzL.Pro.4/15 (1992), reprinted in 32 I.L.M. 874, 878, 887 (amending the Protocol to include Annex E which lists methyl bromide as an ozone depleting substance).

^{14.} Wolfgang Sachs, *Environment*, in The Development Dictionary: A Guide to Knowledge as Power 26, 34 (Wolfgang Sachs ed. 1992).

babies from the phthalates found in PVC.¹⁵ The Danish EPA concluded that up to seventy percent of phthalates in plastic could be released,¹⁶ and therefore the Danish government is preparing legislation to ban the use of phthalates in products used by small children.¹⁷

Burdens of risk are also carried by agricultural workers, especially in developing countries, for whom exposure to chemicals has become a daily reality. One example can be found in relation to the production of bananas. Pesticides such as Chlorotlalonil, Dithane, and DBCP are used to protect bananas which are exported to developed countries. The result of pesticide exposure for some workers has been sterility. Their living conditions also bear the unsavory mark of exposure. Pervasive is the sweet-and-sour stench of decaying banana stems and pesticide fallout. ... More bothersome but less frequent are the burning clouds of Chlorotlalonil and Dithane spray, dropped from small airplanes over entire plantations on a biweekly basis to control the spread of the leaf fungus Black Sigatoka."

While a new strain of banana promises to break free from chemical dependency,²¹ developing economies in general will not. Not until foreign debts are forgiven²² or cash crops are no longer required to pay foreign debt will developing countries be capable of becoming chemical-free.

15. See Endocrine Disruption: U.S. Agencies, Industry Work to Block Ban on PVC Toys Considered in European Union, Int'l Env't Daily (BNA) (May 13, 1998), available in LEXIS, BNA Library, BNAIED File.

^{16.} See id. The European Union scientific committee also found that teething rings made from PVC leak up to ten times the acceptable level of phthalates. See id.

^{17.} See id. The Spanish government has also requested that the EU consider a total European-wide ban on PVC toys. See id.

^{18.} See David Redwood, Split Decision on Bananas, SUSTAINABLE TIMES, Winter 1997, at 14, 14 (noting the use of Chlorotlalonil and Dithane to control a leaf fungus common to banana plants); see also Costa Rica: The Price of Bananas, Economist, Mar. 12, 1994, at 48, 48 (citing the use of DBCP to fight minute worms that attack banana plants).

^{19.} See Costa Rica: The Price of Bananas, supra note 18, at 48.

^{20.} Redwood, *supra* note 18, at 14 (quoting Phillip Bourgois, French anthropologist, who lived on Central American plantations in the mid-1980s).

 $^{21.\} See\ id.$ (noting that the Mona Lisa banana is resistant to the Black Sigatoka disease that attacks bananas).

^{22.} See generally Patricia Adams, Odious Debts: Loose Lending, Corruption, and the Third World's Environmental Legacy (1991) (discussing forgivement of debt incurred by developing countries).

Developed countries are also not immune to the effects of pesticide use, and consumers located in these countries are beginning to realize that imported produce may contain more than they expected. Some stores concerned about the presence of pesticide residues in produce test for its presence and then market produce as being "clean," "as if a commercially grown vegetable that is safe to eat were a horticultural phenomenon."²³ Part of the motivation for this testing has come from a finding that the United States Food and Drug Administration (FDA) only tests approximately one percent of all of the country's fresh food, whether grown nationally or imported, and finds excessive residues in two to five percent of these samples.²⁴

In light of its citizens' growing concern over environmental matters, the United States, under the *Emergency Planning and Community Right-to-Know Act*,²⁵ has developed the Toxics Release Inventory (TRI).²⁶ TRI acts as a pollutant accounting system that requires industrial plants to disclose yearly levels of pollutants "discharged into the air, water, and land or transferred to other sites for incineration, recycling, and disposal."²⁷ Opposition to the TRI primarily results from concerns regarding confidentiality and the human resource burden of compliance.²⁸

Another initiative developed by the United States Environmental Protection Agency (EPA) is an on-line database called "Envirofacts" that provides accessible information about a company's emissions records, its pollutant types, and related risk information.²⁹ Companies have not been supportive of this initiative fearing that the data, although not confidential, will expose them to toxic tort

^{23.} Jerry Adler et al., *Pesticide Protection: California Markets are Testing Their Own Produce*, NEWSWEEK, Nov. 9, 1987, at 69, 69 (noting that two California grocery stores engaged a commercial testing laboratory to test fresh fruits and vegetables for illegal pesticide residues).

^{24.} See id. at 69-70.

^{25. 42} U.S.C. §§ 11,001–50 (1994).

^{26.} See Shelley A. Hearne, *Tracking Toxics: Chemical Use and the Public's "Right-to-Know"*, Environment, July-Aug. 1996, at 5, 5.

^{27.} Id.

^{28.} See id. at 31.

^{29.} See Linda Raber, Toxics Data: How Much Is Too Much?, CHEMICAL & ENGINEERING NEWS, June 2, 1997, at 26, 26–27.

suits or citizen-initiated suits to enforce environmental laws.³⁰

A. The Chemical Industry Perspective

While consumers and governments may question the need for chemical residues in produce, the chemical industry itself is bravely moving into the next century, prepared to expand and increase its share of world profits. In the article Global Chemical Outlook Bright, economists forecasted a "rosy" future for U. S. chemical manufacturers as they increased their business in foreign markets.³¹ The chemical manufacturers' eagerness to invest in developing countries resulted from liberalized trade policies, majority ownership positions, and the ability to take their profits home.³² Industry saw this expansion as a benefit to developing countries and asked governments worldwide "not to fear large companies like DuPont, but instead to embrace them."33 "Large companies such as DuPont have the global reach, the and the financial strength to make research, technological transitions that . . . are ahead of us."34

DuPont is unafraid of foreign investment as it expects to double its business in Central and Eastern Europe, the Middle East, and Africa from the 1997 amount of US\$650 million to US\$1.4 billion by the year 2000.³⁵

Industry has had and continues to have a role in negotiations for international environmental agreements. Its lobbying proved to be successful at the 1992 United Nations Conference on Environment and Development (UNCED) when the final text of $Agenda\ 21^{36}$ failed to include any mention of

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^{30.} See id. at 27 (noting industry concerns that the relative ease with which information is now available makes litigation less costly and more attractive).

^{31.} Marc Reisch, Global Chemical Outlook Bright, Chemical & Engineering News, Mar. 24, 1997, at 11, 11.

^{32.} See id.

^{33.} Marc Reisch, *Improve Business Climates, DuPont Urges Governments*, CHEM. & ENG'G NEWS, Mar. 3, 1997, at 12, 12 (noting that DuPont plans to withhold advanced technologies from countries that do not provide intellectual property protection).

^{34.} Id. (quoting John A. Krol, DuPont's president and chief executive officer).

^{35.} See id

^{36.} See Comm'n on Envil. Law of the World Conservation Union, Int'l Union for the Conservation of Nature and Natural Resources, 4 Agenda 21 & the UNCED Proceedings (Nicholas A. Robinson et al. eds., 1992) [hereinafter Agenda 21].

the need to control the activities of multi-national corporations.³⁷ More recently its involvement has consisted of encouraging governments to oppose controls over methyl bromide.³⁸ Understanding that despite its efforts, methyl bromide will soon be phased out of industrialized nations,

[corporations are] lobbying hard for the Montreal Protocol to institute a later phase-out date for Third World countries while simultaneously circumnavigating the globe to create thriving methyl bromide markets throughout Asia, Africa and Latin America, in particular, Mexico, Kenya, Morocco, Jordan and China. Global methyl bromide sales increased by more than 50 per cent from 1984 to 1992, growing from roughly 45,000 tonnes to more than 75,000 tonnes.³⁹

In addition, the chemical industry continues to dodge issues relating to health concerns of human and wildlife populations. When statements such as "[s]o far, the scientific evidence linking chemicals to health problems is murky"⁴⁰ are made by the Executive Vice President of Exxon Chemical Company, it can only be interpreted as a means to justify continued expansionism. Arguably it is also a way to try and maintain credibility in the face of an increasingly skeptical public.

In its latest efforts to try and earn public respect, the chemical industry, under the auspices of the Chemical Manufacturers Association (CMA), has undertaken two initiatives: (1) to supply US\$16 million in funding for research to "investigate the basic mechanisms by which chemicals react with the human body"⁴¹ and (2) to develop its

^{37.} See Matthias Finger & James Kilcoyne, Why Transnational Corporations Are Organizing to 'Save the Global Environment,' ECOLOGIST, July-Aug. 1997, at 138, 139.

^{38.} See Karliner, supra note 10, at 97 (noting that the industry formed an association to lobby national governments to influence the Montreal Protocol's ban on methyl bromide).

^{39.} *Id*

^{40.} John E. Akitt, 'A Natural' For Industry, Chemical & Engineering News, Feb. 3, 1997, at 5, 5 (noting the Chemical Manufacturer's Association's funding of health and environmental effects research to address public concern).

^{41.} *Id.* (noting that US\$3.2 million of the US\$16 million commitment will be used to expand CMA's on-going endocrine research program over the next two years).

Responsible Care Program.⁴² This program was designed to improve the chemical industry's appearance in the eyes of legislators, regulators, and the general public after the Union Carbide accidents occurred in Bhopal, India and Institute, West Virginia in 1984 and 1985, respectively.⁴³ CMA companies are expected to sign the program's guiding principles, "communicate a commitment to Responsible Care to their employees," and implement its six codes.44 Private codes of environmental management, such as Responsible Care, are predicated upon "four elements: corporate environmental management systems, complete life-cycle management, sustainability and environmental protection policies, and interaction with outside stakeholders."45

While these measures may serve to relax consumer fears about the impact of chemical use in developed countries, the industry's use of lower environmental standards in developing countries presents another facet of the problem.

B. The Environmental Differential

Another factor that plays heavily in the chemical industry's global politics is the wide discrepancy in income between developed and developing countries. Poverty plays an enormous role in global politics and impacts both national and international environmental initiatives. The fact that some use poverty as an excuse to condone locating "dirty" industries within the third world is appalling.

[T]he migration of industries, including "dirty" industries, to the third world is indeed desirable. Not because life there is cheap; if anything, for the opposite reason. Those who insist on "clean growth everywhere" must either deny that there is ever a trade-off between growth and population control-or else argue that imposing rich-country standards for clean air worldwide matters more than helping

^{42.} See Jennifer Nash & John Ehrenfeld, Code Green: Business Adopts Voluntary Environmental Standards, Environment, Jan.-Feb. 1996, at 16, 18-19. The CMA's Public Perception Committee originally recommended adoption of the Responsible Care Initiative. See id. at 18.

^{43.} See id. at 18-19.

^{44.} Id. at 19. "The codes address community awareness and emergency response, chemical distribution, pollution prevention, process safety, employee health and safety, and product stewardship." Id.

^{45.} Id. at 38. The authors argue that these four elements are generally not addressed by government regulation, even though they "represent society's evolving expectation of business." Id.

millions of people in the third world to escape their poverty.⁴⁶

Such an opinion is obviously based on the assumption that economic growth will have a "trickle-down" effect within developing economies—an effect which has yet to be observed.

Lower environmental standards are undoubtedly an attractive factor to some corporations when deciding whether to locate in a developing country. Environmental standards are lower because the governments of developing countries cannot afford the regulatory and technical infrastructure required to implement standards comparable to those found in developed countries. This inability has been recognized in numerous international environmental agreements, such as in Principle 11 of the Rio Declaration on Environment and Development.⁴⁷ Principle 11 declares that "states shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries."48

While this environmental differential remains, it will continue to induce chemical companies into developing countries and thereby accelerate environmental destruction.

III. PRIOR INFORMED CONSENT

International concerns regarding the growing chemical trade led to the development of the *International Code of Conduct on the Distribution and Use of Pesticides*⁴⁹ in 1985 by the UN Food and Agriculture Organization (FAO) and the *London Guidelines for the Exchange of Information on*

^{46.} Pollution and the Poor, ECONOMIST, Feb. 15, 1992, at 18, 19.

^{47.} The Rio Declaration on Environment and Development, U.N. Conference on Environment and Development, Principle 11, U.N. Doc. A/CONF.151/5/Rev.1 (1992), reprinted in 31 I.L.M. 874, 878. [hereinafter Rio Declaration].

^{48.} Id.

^{49.} International Code of Conduct on the Distribution and Use of Pesticides, F.A.O. Res. 10/85, U.N. F.A.O., 25th Sess. (1989), reprinted in BASIC DOCUMENTS OF INTERNATIONAL ENVIRONMENTAL LAW 173 (Stanley P. Johnson & Günther Handl eds., 1989) [hereinafter International Code]. (The original 1985 document was amended in 1989 to include Prior Informed Consent in Article 9.).

Chemicals in International Trade⁵⁰ in 1987 by the UN Environment Programme (UNEP). These documents were designed to increase access to information regarding hazardous chemicals for all of the world's countries. In 1989 the PIC procedure was approved to help control imports of unwanted chemicals that had been banned or severely restricted.51 At that time, PIC was incorporated into the two instruments and jointly implemented by FAO and UNEP through the FAO/UNEP Joint Programme Implementation of PIC.52 The aim of the PIC procedure was to promote a shared responsibility between importers and exporters over the health and environmental risks associated with their trade.53

The objective of countries in agreeing to the PIC procedure was to improve the protection of human health and the environment from the potential adverse effects of certain chemicals, recognising the limitations of some countries in not having sufficient legal/regulatory systems or the financial and human resources to gather the necessary information and to make and implement informed decisions concerning the use of chemicals in their national situation.⁵⁴

Although voluntary, the PIC procedure was accepted unanimously by the member countries of FAO and UNEP and was "supported by the leading chemical industry associations and a variety of non-governmental organizations." ⁵⁵

53. See id.

^{50.} London Guidelines for the Exchange of Information on Chemicals in International Trade, reprinted in BASIC DOCUMENTS OF INTERNATIONAL ENVIRONMENTAL LAW 157 (Stanley P. Johnson & Günther Handl eds., 1989) [hereinafter London Guidelines].

^{51.} See United Nations Env't Programme, PIC: Prior Informed Consent for Certain Hazardous Chemicals in International Trade (visited Nov. 16, 1998) http://irptc.unep.ch/pic.

^{52.} See id.

^{54.} United Nations Env't Programme, *Implementation of Existing, Voluntary PIC Procedure* (visited Nov. 16, 1998) http://irptc.unep.ch/pic/volpic/h2.html. Stated in other terms, the PIC procedure allows participating countries to become educated on hazardous chemicals, allows decision-making on the future importation of these chemicals, and communicates these decisions to the exporting countries that are then encouraged to ensure that such chemicals are not exported. *See id.*

^{55.} United Nations Env't Programme, *PIC—A Brief Overview of What it is and How it Operates* (visited Nov. 16, 1998) http://irptc.unep.ch/pic/volpic/h3.html [hereinafter *Brief Overview of PIC*].

A. The International Code

The objectives of the International Code focus upon pesticide⁵⁶ use, and are designed to apply to a broad range of including "international actors, organizations; governments of exporting and importing countries; industry, including manufacturers, trade associations, formulators and distributors; users; and public-sector organizations such as environmental groups, consumer groups and trade unions."57 The standards of conduct expected from these actors are as follows: to engage in responsible and accepted trade practices, to assist countries lacking an adequate regulatory structure for pesticides in the safe handling and use of these products, to promote the safe and efficient usage of pesticides thereby minimizing adverse effects to humans and the environment, and to ensure that pesticides are used effectively to promote agricultural production and human, animal, and plant health.⁵⁸

A regime for the handling of pesticides is established for the areas of pesticide management; testing of pesticides; the reduction of health hazards; regulatory and technical requirements; availability and use; distribution and trade; information exchange and PIC; labeling, packaging, storage, and disposal; and advertising.⁵⁹ Of these areas, the PIC procedure is the most interesting.

56. The term "pesticide" is defined in Article 2:

Any substance or mixture of substances intended for preventing, destroying or controlling any pest, including vectors of human or animal disease, unwanted species of plants or animals causing harm during or otherwise interfering with the production, processing, storage, transport, or marketing of food, agricultural commodities, wood and wood products or animal feedstuffs, or which may be administered to animals for the control of insects, arachnids or other pests in or on their bodies. The term includes substances intended for use as a plant growth regulator, defoliant, desiccant, or agent for thinning fruit or preventing the premature fall of fruit, and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport.

International Code, supra note 49, art. 2, at 175-76.

^{57.} Id. art. 1.4, at 174.

^{58.} See id. art. 1.5, at 174.

^{59.} See id. arts. 3–11, at 177–86. In each of these areas, governments and industries are given guidelines and standards under which to operate. For instance, under the regime of pesticide management governments are charged with the overall responsibility to regulate pesticide use in its country, while under the regime of distribution and trade industry is charged with taking

PIC is defined as: "the principle that international shipment of a pesticide that is banned or severely restricted in order to protect human health or the environment should not proceed without the agreement, where such agreement exists, or contrary to the decision of the designated national authority in the participating importing country." Whereas the PIC procedure is defined as "the procedure for formally obtaining and disseminating the decisions of importing countries as to whether they wish to receive further shipments of pesticides that have been banned or severely restricted."

This procedure works by disseminating information through a Designated National Authority (DNA) in each participating country. When a country decides to ban⁶² or severely restrict⁶³ the use or handling of a pesticide, it contacts the FAO, who in turn notifies all other countries of the action.⁶⁴ This exchange of information allows other countries to "assess the risks associated with the pesticides, and to make timely and informed decisions as to the importation and use of the pesticides concerned, after taking into account local, public health, economic, environmental and administrative conditions."⁶⁵ All banned or severely restricted pesticides in member countries become subject to the PIC procedure.⁶⁶

steps to ensure that all pesticides conform to the required specifications. *See id.* arts. 3, 7, at 177–78, 181–82.

- 60. Id. art. 2, at 176.
- 61 *Id*
- 62. The term "banned" is defined as "a pesticide for which all registered uses have been prohibited by final government regulatory action, or for which all requests for registration or equivalent action for all uses have, for health or environmental reasons, not been granted." *Id.* art. 2, at 175.
- 63. The term "severely restricted" is defined as "a pesticide for which virtually all registered uses have been prohibited by final government regulatory action but certain specific registered use or uses remain authorized." *Id.* art. 2, at 177.
 - 64. See id. art. 9.1, at 182.
- 65. *Id.* art. 9.2, at 183. The minimum quantity of information should include the following: (1) the identity, including the common, distinguishing, and chemical name; (2) a summary of the control action taken and the reasons for such action; (3) whether additional information is available, and (4) a contact in the country to which requests for additional information may be directed. *See id.*
- 66. See id. art. 9.7, at 183. The article states that "[n]o pesticide in these categories should be exported to an importing country participating in the PIC procedure contrary to that country's decision made in accordance with the FAO operational procedures for PIC." *Id.*

An importing country notified of a control action should do the following: decide whether it will continue to allow importation of the pesticide; ensure that its decision is coordinated with national procedures as applied to the same pesticide, if manufactured domestically or obtained from another exporter; and ensure that its decision is not incompatible with the General Agreement on Tariffs and Trade (GATT).67

In order for chemicals to be eligible for the PIC procedure, they must either have been banned or severely restricted prior to January 1, 1992 by five or more countries or banned or severely restricted in one country after that date.⁶⁸

Because it is voluntary, the *International Code*, does not contain any mechanisms to ensure compliance but rather relies upon the collaborative efforts of all actors for its success.⁶⁹

B. The London Guidelines

The London Guidelines is addressed to governments "with a view to assisting them in the process of increasing chemical safety in all countries through the exchange of information on chemicals in international trade." The general principles are to protect human health and the environment against potential harm through the exchange of information; to encourage countries to act, in so far as it is applicable, with Principle 21 of the 1972 Stockholm Declaration; to ensure

States have, in accordance with the Charter of the United Nations and the principle of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

^{67.} See id. art. 9.10, at 184. GATT is now known as the World Trade Organization (WTO). See Paul Richter, Mandela Feted, But Business is Wary, L.A. TIMES, Oct. 6, 1994, at A4.

^{68.} See Brief Overview of PIC, supra note 55.

^{69.} See International Code, supra note 49, at 186 (stating that "[t]he Code should be published and should be observed through collaborative action on the part of governments . . . , appropriate organizations and bodies of the United Nations system, international governmental organizations and the pesticide industry" and that "[a]ll parties addressed by this Code should observe this Code and should promote the principles and ethics expressed by the Code").

^{70.} London Guidelines, supra note 50, at 157.

^{71.} Principle 21 provides:

that countries' regulatory efforts with respect to chemicals do "not create unnecessary obstacles to international trade" to ensure the harmonization of import decisions between domestic and other export sources of the chemical, to encourage the sharing of experiences with other countries, and to strengthen countries' existing institutions and infrastructure.⁷² Chemicals exempted from the *London Guidelines* are pharmaceuticals, radioactive materials, chemicals imported in small quantities for research, chemicals imported as personal or household effects, and food additives.⁷³

The definitions for the PIC principle and the PIC procedure with respect to banned⁷⁴ or severely restricted⁷⁵ chemicals echo those found in the *International Code*. The PIC principle is defined as "the *principle* that international shipment of a chemical that is banned or severely restricted in order to protect human health or the environment should not proceed without the agreement, where such agreement exists, or contrary to the decision, of the designated national authority in the importing country."⁷⁶ The PIC procedure is defined as "the *procedure* for formally obtaining and disseminating the decisions of importing countries as to whether they wish to receive future shipments of chemicals which have been banned or severely restricted."⁷⁷

Part II of the London Guidelines is devoted to the operation of the PIC procedure. While its provisions are more detailed than those found in the International Code, it operates in the same manner. Specific provisions of the PIC procedure detail the following: notification of control action; operation of the PIC procedure by determining participation in the procedure, identification of chemicals to be included, response to notification of a control action, and dissemination of information; information regarding exports;

Declaration of the United Nations Conference on the Human Environment, U.N. Doc. A/CONF.48/14 (1972), reprinted in 11 I.L.M. 1416, 1420.

^{72.} London Guidelines, supra note 50, at 158-59.

^{73.} See id. at 159.

^{74.} The term "banned chemical" is defined as "a chemical which has, for health or environmental reasons, been prohibited for all uses by final governmental regulatory action." *Id.* art. 1(b), at 158.

^{75.} The term "severely restricted chemical" is defined as "a chemical for which, for health or environmental reasons, virtually all uses have been prohibited nationally by final government regulatory action, but for which certain specific uses remain authorized." *Id.* art. 1(c), at 158.

^{76.} Id. art. 1(g), at 158.

^{77.} Id. art. 1(h), at 158.

channels of notification and information; feedback by States; confidential data; and the role of DNAs regarding imports, exports, and other functions.⁷⁸

The role of the DNA⁷⁹ is central to the success of both the International Code and the London Guidelines. The latter directs the DNA to communicate all national control actions regarding banned or severely restricted chemicals to the International Register of Potentially Toxic Chemicals (IRPTC).80 The IRPTC in turn circulates the list of national control actions and determines which chemicals will be included in the PIC procedure.81 The IRPTC also collates information regarding new national control actions to forward to DNAs for consideration regarding future importation of named chemicals.82 These Decision Guidance Documents (DGDs) provide summary of toxicological environmental characteristics, known usage, exposure routes, measures to reduce exposure, regulatory actions taken by some countries to ban or severely restrict the chemical, with corresponding reasons for their actions."83

^{78.} Compare id. arts. 6–12, at 161–66, with International Code, supra note 49, art.9, at 182-84.

^{79.} The term "designated national governmental authority" is not defined in either of the documents, but refers to a national governmental authority that is "competent to perform the administrative functions related to the exchange of information and decisions regarding importation of chemicals included in the PIC procedure." *London Guidelines*, *supra* note 50, art. 5.4, at 160. Part of the competence to perform the administrative functions comes from sufficient resources, which is why governments should ensure that DNAs have adequate resources to carry out the mandates of the *Guidelines*. *See id.* art. 5.6, at 160.

^{80.} See id. art. 6(a), at 161.

^{81.} See id. art. 7, at 161-63.

^{82.} See id. art. 8, at 164; see also United Nations Food and Agric. Org. & United Nations Env't Programme, Joint Programme for the Operation of Prior Informed Consent, Prior Informed Consent (PIC): Update on Implementation as of 30 June 1998 (modified June 30, 1998) http://irptc.unep.ch/pic/volpic/english/UPDATEN9. html> [hereinafter PIC: Update on Implementation] (commenting that DGDs also assist governments in analyzing potential hazards associated with the handling and use of the chemical).

^{83.} PIC: Update on Implementation, supra note 82. The DGDs are expected to aid governments in analyzing potential dangers associated with a chemical and to assist countries in deciding whether to permit or prohibit future importation of the chemical. See id.

The IRPTC also receives importing country responses and disseminates them to participating countries.⁸⁴ Once a year a PIC circular is distributed that contains a full listing of country responses and DNAs for each country.⁸⁵ This is updated every six months.⁸⁶

The DNAs of exporting countries are required to provide information to the importing country with the first export following the control action.⁸⁷ Further notifications are required when any new information or condition develops with respect to the control action.⁸⁸ Exporters are also expected to provide whenever possible this information before exportation.⁸⁹

Like the *International Code*, the *London Guidelines* does not contain either an enforcement mechanism or a source of funding for developing countries to assist in the implementation of the PIC procedure. However, the *London Guidelines* does encourage funding agencies to assist in this regard.⁹⁰

The international response to these documents has been positive, with a total of 227 DNAs from 155 countries⁹¹ being registered with the FAO or UNEP Chemicals as of June 30, 1998.⁹² Pesticides and chemicals circulated on DGDs include aldrin, DDT, dieldrin, chlordane, heptachlor,

86. See id.

^{84.} See id. "The compilation of import responses is intended to enable exporting countries to ensure that exports of these chemicals do not take place contrary to the importation decisions of the importing countries concerned." *Id.*

^{85.} See id.

^{87.} See London Guidelines, supra note 50, art. 8(a), at 164. The minimum quantity of information should include (1) a copy of the information given at the time of notification of the control action, (2) an indication that export of the specific chemical is occurring or will occur, (3) an estimate of the quantity of the chemical that will be exported on an annual basis, and (4) any shipment information that is available. See id. art. 8(c), at 163.

^{88.} See id. The stated purpose of providing this export information is "to remind the State of import of the original notification regarding control action and to alert it to the fact that an export will occur or is occurring." *Id.* art. 8(b), at 163.

^{89.} See id. art. 8(e), at 163.

^{90.} See id. art. 15(a), at 167. Funding agencies are specifically encouraged "to provide training, technical assistance, and funding for institutional strengthening." *Id.*

^{91.} Countries are allowed more than one DNA, if necessary, for the implementation of the *London Guidelines*. See id. art. 5.4, at 160 n.2.

^{92.} See PIC: Update on Implementation, supra note 82.

hexachlorobenzene, and polychlorinated biphenyls (PCBs).⁹³ In 1997 twenty-two pesticides and five industrial chemicals were covered by the voluntary PIC procedure.⁹⁴ Most are banned or severely restricted by the United States or European Countries.⁹⁵ An update of PIC Circular VIII will be distributed to DNAs in January 1999.⁹⁶

C. To Rio and Beyond

Even though the *International Code* and the *London Guidelines* have improved the regulation of chemicals and pesticides in international trade, they have also been criticized for not being strong enough. Criticisms of the *International Code* have included its voluntariness, its failure to address the inadequate resources of developing countries, its screening mechanism for PIC procedures, and the fact that it focuses on existing pesticide use levels rather than encouraging reductions in pesticide use.⁹⁷ Furthermore, its definition of "severely restricted" excludes hazardous pesticides through its reference to registered uses that have been prohibited by government regulatory actions, and this definition has been criticized for its resulting failure to include restrictions on handling and application.⁹⁸

An additional argument against the *International Code* results from its reference to the PIC procedure instead of the precautionary principle.⁹⁹ While the precautionary principle is capable of many interpretations, in this context it is used as defined by the *Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and*

^{93.} See id.; see also infra note 198 and accompanying text (noting that these are all chemicals which will likely be banned under UN/ECE POPs Protocol).

^{94.} See Vania Grandi, 'Watch List Mechanism' Approved by Nations Working on Chemical Trade Treaty, 20 Int'l Env't Rep. (BNA) No. 22, at 993, 993 (1997).

^{95.} See Peter Fairley, Building Regulatory Capacity at IFCS, CHEMICAL WK., Mar. 19, 1997, at 56, 56.

^{96.} See PIC: Update on Implementation, supra note 82.

^{97.} See Margo Brett Baender, Pesticides and Precaution: The Bamako Convention as a Model for an International Convention on Pesticides Regulation, 24 N.Y.U. J. INT'L L. & POL. 557, 582–85 (1991). A criticism of its voluntariness is that its vague language is subject to several interpretations, which allows government and industry greater powers of evasion. See id.

^{98.} Id. at 584

^{99.} See id. at 585–87. Baender argues that "[a]doption of a precautionary approach would encourage countries to turn to alternative agricultural practices that are less dependant on agrichemicals and thus better for the environment." *Id.* at 587.

Management of Hazardous Wastes Within Africa. 100 In Article 4(3)(f), the precautionary principle is described in the following manner:

Each party shall strive to adopt and implement the preventative, precautionary approach to pollution problems which entails, inter-alia, preventing the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm. The Parties shall co-operate with each other in taking the appropriate measures to implement the precautionary principle to pollution prevention through the application of clean production methods, rather than the pursuit of a permissible emissions approach based on assimilative capacity assumptions. 101

The benefit of utilizing such a principle is that it does not require conclusive scientific proof before commencing regulatory action, and thereby serves to shift "the burden of proof from those who oppose environmental degradation to those who seek to engage in a potentially harmful activity." This critique is equally applicable to the *London Guidelines* for its use of the PIC procedure for the regulation of chemicals.

Critique of the status quo was also made at UNCED in Chapter 19 of *Agenda 21* entitled "Environmentally Sound Management of Toxic Chemicals, Including Prevention of Illegal International Traffic in Toxic and Dangerous Products." Chapter 19 calls for a strengthening of both national and international efforts to achieve an environmentally sound management of chemicals. 104 In this

^{100.} Org. of African Unity, Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, (Jan. 29, 1991), reprinted in 30 I.L.M. 773, 781 [hereinafter Bamako Convention]; see also Baender, supra note 97, at 595–96 (reprinting the text of the precautionary principle).

^{101.} Bamako Convention, supra note 100, art. 4(3)(f), at 781.

^{102.} Baender, *supra* note 97, at 588. This alleviates the heavy burden on regulators to utilize limited time and resources gathering sufficient data to convince authorities that a substance should be regulated. *See id.*

^{103.} AGENDA 21, supra note 36, ch. 19, at 412.

^{104.} See id. ¶ 19.3, at 412 (recognizing that much more remains to be accomplished to ensure proper management of toxic chemicals and that two major problems that remain are lack of sufficient scientific information for

regard, six program areas were proposed: "[e]xpanding and accelerating international assessment of chemical risks; [h]armonization of classification and labeling of chemicals; [i]nformation on toxic chemicals and chemical risks; reduction [e]stablishment of risk programmes: [s]trengthening of national capabilities and capacities for management of chemicals; and [p]revention of illegal traffic in toxic and dangerous products."105 Agenda 21 recognizes that the success of these program areas depends not only upon international cooperation, but also upon "the identification and application of technical, scientific, educational and financial means, in particular for developing countries."106

The program objectives for information exchange on toxic chemicals and chemical risks are of particular relevance. These objectives were expected to promote an increase in the exchange of information on chemical safety, use, and emissions and "[t]o achieve by the year 2000, as feasible, full participation in and implementation of the PIC procedure, including possible mandatory applications through legally binding instruments contained in the Amended *London Guidelines* and the FAO *International Code of Conduct*, taking into account the experience gained within the PIC procedure."¹⁰⁷

As previously mentioned, this language is ambiguous given that both the *London Guidelines* and *International Code* are voluntary, and as such, it would be difficult to contain a legally binding instrument within either one of them. ¹⁰⁸ It also suggests that a compromise was reached between UNCED delegations desirous of a binding legal instrument and those opposed to such an initiative. ¹⁰⁹ Given that

assessing the risks of chemicals and lack of resources for assessing chemicals on which data exists).

^{105.} *Id.* 19.4, at 412–13. Another area deals with enhancing cooperation related to the program areas. *See id.* "To varying degrees, the programme areas involve hazard assessment . . . , risk assessment . . . , risk acceptability and risk management." *Id.* 19.5, at 412.

^{106.} Id.

^{107.} Id. para. 19.38, at 423 (emphasis added).

^{108.} See Marc Pallemaerts, Hazardous Substances and Waste: International Transfer of Restricted or Prohibited Substances, Regulation of Chemicals, 3 Y.B. INT'L ENVIL. L. 281, 282 (1992) (stating "the suggestion that a possible future binding legal instrument should be 'contained' in the London Guidelines and FAO Code does not make any sense, as both the Guidelines and the Code are non-binding instruments").

^{109.} See id.

Principle 15 of the *Rio Declaration*¹¹⁰ espoused the need to implement the precautionary principle, *Agenda 21* is weak because it fails to assert such a requirement for chemical management. It is difficult, if not impossible, to imagine any other industrial sector deserving of such a strong regulatory approach.

It was not long however before the demands for a legally binding treaty were heard and acted upon by the international community. It began in November 1994 when the FAO Council, at its 107th Session, agreed "that the FAO Secretariat should proceed with the preparation of a draft PIC convention as part of the current FAO/UNEP programme on PIC and in cooperation with other international [IGOs] and non-governmental organizations [NGOs] concerned."111

The UNEP Governing Council Decision 18/12, made May 26, 1995, authorized the UNEP Executive Director, together with the FAO and in consultation with governments, to prepare for and convene "an intergovernmental negotiating committee [INC], with a mandate to prepare an international legally binding instrument for the application of the [PIC] procedure for certain hazardous chemicals in international trade."112 The UNEP Executive Director was also invited to convene, in cooperation with the FAO, a governmentdesignated group of experts (GDGE) to consider the work progressing in other fora relating to chemical safety and POPs and to "recommend what further measures [were] needed to reduce the risks from a limited number of hazardous chemicals, either within or beyond the scope of [the] existing [PIC] procedure."113 Furthermore, consideration was given at the Nineteenth session of the Governing Council regarding the need to develop further measures to reduce risks from a limited number of hazardous chemicals,

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^{110.} See Rio Declaration, supra note 47, at 320. Principle 15 states "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." *Id.*

^{111.} United Nations Env't Programme, Development of an International Legally Binding Instrument (visited Nov. 16,1998) http://irptc.unep.ch/pic/h2.html.

^{112.} G.C. Dec. 18/12, U.N. EP, 18th Sess., para. 1, U.N. Doc. UNEP/GG.18/12 (1995).

^{113.} Id. para. 2.

including the possibility of increasing the mandate of the INC to develop such measures.¹¹⁴

The GDGE met on April 16–19, 1996, in Copenhagen, and the meeting was attended by experts from "23 countries, the European Commission and a number of UN Organs, Specialized Agencies, IGOs and NGOs."¹¹⁵ The GDGE recommendations were forwarded to the UNEP Governing Council for consideration at its nineteenth session.

The need to coordinate the PIC and POPs agreements was acknowledged by James Willis, Director of UNEP Chemicals. 116 Willis suggested two potential avenues for such a framework: (1) prepare a general treaty under which the PIC and POPs agreements would be considered specific protocols or (2) develop a non-binding framework for the maintenance of communication among the various chemical treaty secretariats. 117 Although the consideration of a global chemicals framework was not included in the INC's mandate, Willis stated it could be handled under the UNEP Governing Council's directive to examine "further measures." 118

The need to harmonize the two draft conventions was also addressed on October 10, 1996 when the 111th FAO Council Meeting reviewed the scope of the INC mandate. Members were divided over the potential breadth of the PIC

115. United Nations Env't Programme, Further Measures to Reduce the Risks from a Limited Number of Hazardous Chemicals (visited Nov. 16, 1998) http://irptc.unep.ch/pic/furmer/gcfurm-e.html.

^{114.} See id. para. 3.

^{116.} See Cheryl Hogue, UNEP Officials Says Linking Global Pacts on Chemicals Would Ensure Coordination, 19 Int'l Env't Rep. (BNA) No. 19, at 808, 809 (Sept. 18, 1996). Mr. Willis stated that administration of the two treaties would need to be linked under a common framework and that future agreements would also fall under this umbrella. See id.

^{117.} See id. The first approach would be similar to the 1985 Vienna Convention for the Protection of the Ozone Layer that was a broad framework for establishing goals to protect stratospheric ozone. See id. After it was signed, the Montreal Protocol on Substances that Deplete the Ozone Layer was adopted, which sets specific timetables to phase-out production of chemicals. See id.

^{118.} *Id.* Under this effort, UNEP, the Intergovernmental Forum on Chemical Safety, and the FAO can solicit input from their constituent governments on the concept of a global framework. *See id.*

^{119.} See United Nations Food and Agric. Org., Decision of the 111th FAO Council Meeting: Report on the Progress of Negotiations of an Internationally Legally-Binding Instrument for the Application of the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (visited Nov. 16, 1998) https://irptc.unep.ch/pic/fao111en.html.

Convention and what it might cover.¹²⁰ While some believed the PIC instrument should be drafted to include POPs, others wanted to have separate negotiations for the PIC and POPs instruments.¹²¹ Unable to reach consensus, the Council elected to retain the original INC mandate.¹²²

Some support for the development of two separate came from the Chemical Manufacturers instruments Association which argued that the time required to develop a global framework would work to the disadvantage of those countries who lacked infrastructure and expertise in chemical matters. 123 However, this framework was already being accomplished under the voluntary PIC procedures offered by the International Code and the London Guidelines. In this respect, the inability to make progress toward the chemical management development of a framework agreement seems peculiar unless consideration is given to the political leverage of the chemical industry, which would probably prefer no action. Therefore, the PIC and POPs¹²⁴ agreements were left to be designed in relative isolation from each other.

At the Nineteenth UNEP Governing Council Session on February 7, 1997, the INC mandate was confirmed after noting the INC's progress and the additional work undertaken by the GDGE and by the Joint Secretariat of UNEP and FAO.¹²⁵

With respect to the work undertaken by the GDGE, the Governing Council accepted the GDGE's recommendations relating to unwanted stocks of pesticides and other chemicals, capacity-building, and inadequate information. The GDGE's recommendations for possible phase-outs or bans of certain hazardous chemicals, and the Governing

121. See id.

122. See id.

^{120.} See id.

^{123.} See Special Report: Greenhouse Gas Emission Talks, Update on Rio Earth Summit to Top 1997 Agenda, 20 Int'l Env't Rep. (BNA) No. 2, at 79, 79 (Jan. 22, 1997). Under a global framework, the PIC agreement would be the first protocol to the broad underlying agreement. See id.

^{124.} See discussion infra Section IV.A for additional information regarding the international move toward a POPs agreement.

^{125.} See G.C. Dec. 19/13B, U.N. EP, 19th Sess., U.N. Doc. UNEP/GC.19/13B (1997).

^{126.} See id. (stating that the Governing Council "[w]elcomes and endorses the recommendations contained in the report of the Government-designated Group of Experts").

Council invited governments to implement these recommendations and report on such actions at the twentieth session of the UNEP Governing Council. 127

Further, the Nineteenth Governing Council invited the Executive Director of UNEP "to develop a report outlining options for enhanced coherence and efficiency among international activities related to chemicals, including the instrument on [PIC] procedure and a likely future agreement on [POPs]."¹²⁸

During the third session, delegates discussed several aspects of the draft text, including the proposed criteria for the selection of additional chemicals, the rules for notifying exporters of regulated chemicals, and the role of national authorities in ruling on the importation of chemicals. Delegates also debated the definition of pesticides, the notification period for regulatory action, mechanisms for dispute settlement, the public availability of names and percentages of exported toxicological chemicals, and the confidentiality status of impurities of toxicological concern. 130

At the opening of the fourth session, Mr. Howard Hjort, Deputy Director-General of the FAO, stated "that control of pests was necessary to increase productivity, but should be done in such a way that it made agriculture more sustainable, supported rural development, and posed no unacceptable risk to human health and the environment." ¹³¹

^{127.} See id. (noting that prior to any implementation, governments were invited to review the report and its annexes).

^{128.} G.C. Dec. 19/13D, U.N. EP, 19th Sess., U.N. Doc. UNEP/GC.19/13D (1997) [hereinafter Decision 19/13D]. The Council noted that the report should (1) outline both legal and administrative options, (2) evaluate advantages and disadvantages of the options as they relate to environmental benefits and administrative and organizational aspects, (3) outline the roles and responsibilities of the legal instruments and of those organizations with responsibility for chemicals, and (4) consider the capabilities of developing countries. See id.

^{129.} See Current Report: Agreement on Draft PIC Text Sets Stage for International Treaty Later this Year, 20 Int'l Env't Rep. (BNA) No. 12, at 551, 551 (June 11, 1997). Subjects covered in May 1997 included the use of risk assessments; requirements aimed at classification, packaging, and labeling; technical assistance; and financial resources required. See id.

^{130.} See Prior Informed Consent Talks to Address Which Pesticides to Include, Data Required, 20 Int'l Env't Rep. (BNA) No. 18, at 821, 821–22 (Sept. 3, 1997).

^{131.} See Intergovernmental Negotiating Comm. for an Int'l Legally Binding Instrument for the Application of the Prior Informed Consent Procedure for Certain Hazardous Chems. and Pesticides in Int'l Trade, Report of the Intergovernmental Negotiating Committee for an International Legally Binding Instrument for the Application of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade on the Work of Its

This quote highlights the tension among delegates to find a balance between the demands of industry and those of other social actors seeking a stricter regulatory regime. At the fourth session, delegates recognized the need for developing countries "to add more dangerous pesticide formulations causing health problems under conditions of use to the PIClist and agreed that substances covered by the voluntary PIC would be added to the Convention. 132 At this session, industrialized countries also indicated their willingness to provide technical assistance to developing countries. 133 At the end of the fourth session, INC Chair Maria Celina de Azevedo Rodrigues stated, "After the success we achieved here in Rome a legally binding convention on hazardous chemicals and pesticides is within reach. For the remaining issues to be resolved we need to concentrate on finding compromises to finalise an agreement."134

After lengthy negotiations, ninety-five countries unanimously agreed on a legally binding Convention on hazardous chemicals and pesticides and international trade. On September 11, 1998, the Convention was signed by fifty-seven countries and the European Community in Rotterdam, the Netherlands.

Fourth Session, UNEP, 4th Sess., U.N. Doc. UNEP/FAO/PIC/INC.4/2 para. 131 (1997) [hereinafter Fourth INC Report].

^{132.} United Nations Env't Programme, *Prior Informed Consent News and Highlights; 95 Countries Agree on New International Convention on Dangerous Chemicals and Pesticides* (visited Nov. 23, 1998) http://unep.unep.org/unep/per/ipa/pressrel/r03-1698.001>. [hereinafter *95 Countries Agree*] (noting that in many developing countries, farmers experience acute poisoning and even death due to ineffective handling of pesticides because protective gear is often too expensive).

^{133.} See id.

^{134.} United Nations Food and Agric. Org., *Prior Informed Consent News and Highlights, Convention on Hazardous Chemicals "Within Reach"* (visited Feb. 13, 1999) http://www.fao.org/AG/AGP/AGPP/Pesticid/PIC/picnews5.htm. Thus, the Convention and the agreement will promulgate the overarching goal of helping to reduce the dangers that chemicals and pesticides pose to health and the environment. *See id.*

^{135.} See 95 Countries Agree, supra note 132, (discussing the nature of the agreement, its objectives, and its requirements).

^{136.} See United Nations Env't Programme, Rotterdam Convention on Harmful Chemicals and Pesticides Adopted and Signed (visited Oct. 13, 1998) http://irptc.unep.ch/pic/incs/dipcon/Finpress.html>.

D. The Draft PIC Convention

The draft PIC Convention developed during the fourth session of the INC in Rome on October 20–24, 1997, states as its objective:

[T]o promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect the environment and human, animal and plant life and health from potential harm from such chemicals and to contribute to their environmentally sound use, by promoting and facilitating information exchange about the characteristics of certain potentially hazardous chemicals and pesticides in international trade and by providing for a national decision-making process on the future import of these chemicals and the dissemination of these decisions to Contracting Parties.¹³⁷

This text clearly indicates the PIC Convention will merely be a reworking of the voluntary PIC procedure, and therefore, will fail to utilize any regulatory means, which are stronger than a shared information approach. This tension was further echoed by Michael Metelis, head of the U.S. delegation, who stated that the greatest benefit of the Convention would be its ability to aid countries in their decision-making based upon information currently available to them. ¹³⁸ In this context, he stated that the Convention would provide a means to facilitate increased national regulatory management, which, would render the Convention redundant once achieved. ¹³⁹ One could interpret Mr. Metelis words to be an encouragement to governments to read down the legally binding nature of the Convention and regard is as a voluntary regime.

The Convention will amalgamate the previously divided categories of pesticides and chemicals, as described in the *International Code*¹⁴⁰ and *London Guidelines*, ¹⁴¹ and therefore, the definition of chemical has been altered to reflect a

^{137.} Fourth INC Report, supra note 131, art. 1.

^{138.} See id. ¶ 6.

^{139.} See id.

^{140.} See International Code, supra note 49 (regulating pesticides).

^{141.} See London Guidelines, supra note 50 (regulating chemicals).

broader coverage of substances. 142 The definitions of "banned chemical" 143 and "severely restricted chemical" 144 have also been changed to reflect this broader coverage. Another change is the addition of a definition for "[acutely] hazardous pesticide formulations" that means "those pesticide formulations that [are likely to] produce [severe] [acute] health [or environmental] effects through [single or multiple] exposure [over a short period of time]." 145

This definition has caused much discussion among delegates regarding whether it should be included. Its utility is that it allows pesticide formulations to be included that have previously been excluded from the voluntary PIC procedure. Delegates have agreed that "hazardous pesticide formulations" applies to pesticide formulations likely to produce severe health effects through exposure under conditions of their use." However, disagreement continues regarding the amount of exposure required and how severe or acute the health or environmental effects must be. 147

means a chemical all uses [of which in one or more use-categories] [for industrial [or consumer] purposes or as a pesticide] have for health or environmental reasons been prohibited by final governmental regulatory action by a Party to this Convention. Included in this are chemicals which have been refused approval for the first time use or withdrawn by industry either from the domestic market or from further consideration in the approval process where there is clear evidence that such actions have been taken for health or environmental reasons.

Id. art. 2(b) (brackets in original).

144. The term "severely restricted chemical"

means a chemical virtually all use[s] of which within one or more [use-categories] [uses for industrial [or consumer] purposes or as a pesticide] for health or environmental reasons have been prohibited [or a chemical for which a substantial reduction of health or environmental risk, caused by a reduction of use[s] [in one or more use-categories,] has been obtained] by final governmental regulatory action, but for which certain specific uses remain authorized.

Id. art. 2(c) (brackets in original).

145. Id. art. 2(c bis) (brackets in original).

146. Prior Informed Consent Talks to Address Which Pesticides to Include, Data Required, 20 Int'l Env't Rep. (BNA) No. 18, at 821, 821 (Sept. 3, 1997).

147. See id. (discussing disagreement between nations as to degree of environmental effects).

^{142.} See Fourth INC Report, supra note 131, art. 2(a). "'Chemical' means a substance whether by itself or in a mixture or preparation and whether manufactured or obtained from nature and includes such a substance in [the following use-categories:] / pesticidal, industrial [or consumer] use, but does not include any living organism." *Id.* (brackets in original).

^{143.} The term "banned chemical"

While the Convention applies to banned or severely restricted chemicals, and to "[acutely] hazardous pesticide formulations," it does not apply to narcotic drugs and psychotropic substances; radioactive materials; wastes; chemical weapons and their precursors; pharmaceuticals, including human and veterinary drugs; chemicals used as food additives; chemicals imported for research and analysis in small quantities unlikely to affect human health or the environment; and chemicals imported for personal use in small quantities unlikely to affect human health or the environment.¹⁴⁸ This list is more extensive than that found in the London Guidelines and does not allow governments the option of applying the Convention to pharmaceuticals and food additives as the London Guidelines did. 149 Of interest is a footnote, made in relation to chemicals used as food additives, that states "[a]t the second session of the [INC], the Technical Working Group deleted chemical contaminants, including pesticide residues; the latter were understood to be excluded as they are not considered to be chemicals."150

An example of a situation in which pesticide residue in a food stuff was considered a chemical contaminant can be found in a decision by the U.S. Food and Drug Administration (FDA) to ban the import of European wines containing traces of a Japanese-approved fungicide, procymidone, not approved for use in the United States. ¹⁵¹ This decision caused a trade dispute with the European Community until the United States proposed an interim tolerance for the residue, thereby permitting entry of the wines. ¹⁵² This decision was made because "[t]he EPA [Environmental Protection Agency] determined that the economic impact of not establishing an interim tolerance for procymidone would be severe. The ban of these imported wines would be detrimental to both the producers, importers,

^{148.} Fourth INC Report, supra note 131, art. 3.

^{149.} See London Guidelines, supra note 50, at 159 (listing exemptions and stating that governments can apply the guidelines to pharmaceuticals and food additives if they wish).

^{150.} Fourth INC Report, supra note 131, at 55 n.9.

^{151.} See Roslyn M. Pitts, The International Implications of Pesticide Regulation and the Need for Harmonized Environmental Law, 1 DICK. J. ENVTL. L. & POLY 117, 121 (1992).

^{152.} See id. at 122 (discussing the negative trade implications between Europe and the United States resulting from this ban and interim tolerance).

and distributors of the product and would disrupt the U.S. balance of trade."¹⁵³

It is interesting to note that this decision was made even though FDA tests on the residue samples determined that procymidone was carcinogenic, affected reproduction, and affected the development of reproductive organs. ¹⁵⁴ In light of this case, it can be surmised that the environmental and health agenda of the PIC Convention will likely remain secondary to economic interests.

The desire to protect global trade is evidenced by Article 4(5), which states:

The Parties *shall* ensure that measures taken to regulate the chemicals under this Convention do not create unnecessary obstacles to and [are not applied in a manner that would] constitute a means of arbitrary or unjustifiable discrimination or disguised restrictions on international trade [in accordance with the obligations under the World Trade Organization].¹⁵⁵

When contrasted with the parallel provisions of the *International Code* and *London Guidelines*, it becomes apparent that the tenor of the language has changed. It is no longer worded as something that governments should avoid but something that they *shall* avoid.

The Convention also outlines the process whereby banned or severely restricted chemicals¹⁵⁶ and [acutely] hazardous pesticides¹⁵⁷ are placed under the PIC procedure. A dispute remains over the number of proposals the Secretariat must receive before determining that the chemical or pesticide subject to the PIC procedure. While health and environmental organizations want a substance listed if any one country proposes its inclusion, the industry lobby "does not want a substance added until five countries from three different regions of the world have banned it." Based on current practices, this would mean going from a list of 350

^{153.} Id.

^{154.} See 55 Fed. Reg. 39,171, 39,172-173 (1990).

^{155.} Fourth INC Report, *supra* note 131, art. 4[5] (emphasis added) (brackets in original).

^{156.} See id. art. 6.

^{157.} See id. art. 7.

^{158.} Grandi, supra note 94, at 993.

chemicals and pesticides if only one ban were necessary, to 30 if five were needed, according to UN figures."¹⁵⁹

To some of the delegates, such a proposal would be contrary to the very intent of the Convention, which was purportedly designed to assist those countries where workers have and use little protective gear and where improper use has resulted in hundreds of deaths. These delegates believe it is important to include substances in the list if only to alert developing countries that they are harmful.

The draft further specifies the requirements for removal of chemicals and pesticides from the PIC procedure and the obligations of importing and exporting parties.¹⁶² The latter articles specify in greater detail the obligations of the parties and they are drafted using mandatory language.¹⁶³ Furthermore, exporting countries are required to comply with Article 11, which deals with export notification.¹⁶⁴ While the draft language suggests that delegates are not yet in agreement regarding the number of notifications required or their timing, export notification has become a mandatory act under the Convention.¹⁶⁵

The Convention further specifies procedures for classification, packaging, and labeling; information exchange;

Each exporting Party shall notify when [the first two exports on an annual basis] [the first export on an annual basis] [the first export] occur(s) to each importing Party, of each chemical that is banned or severely restricted in its territory, through its designated national authority to the relevant designated national authority of the importing Party. The first notification shall be given [on a timely basis when] [before] the first export occurs, after it has adopted a final regulatory action to ban or severely restrict the chemical. . . . (emphasis added) (brackets in original).

Id. Compare that with the *London Guidelines*, which states "Provision of information regarding exports *should* take place when the first export following the control action occurs, and should recur periodically or in the case of any significant development of new information or condition surrounding the control action. It is the intention that, in so far as possible, the information should be provided prior to export. . . . "(emphasis added). *London Guidelines*, *supra* note 50, at 164.

^{159.} Id.

^{160.} See id. (identifying convention aims and expressing the fears of some delegates that the populations of developing countries could be put at risk).

^{161.} See id. (describing how including certain substances on a watch list would alert developing countries of harmful effects).

^{162.} See Fourth INC Report, supra note 131, arts. 8-10.

^{163.} See id. art. 10-11.

^{164.} See id. art. 11.

^{165.} See id.

implementation of the Convention; and technical assistance for developing countries. ¹⁶⁶ Of interest is the extreme dilution of the statement regarding technical assistance compared to that found in the *London Guidelines*. ¹⁶⁷ The Convention will also provide for financial resources and mechanisms in Article 19, but this has not yet been drafted.

A final article worthy of comment is Article 27, which specifies when the Convention will come into force. While the Convention has tentatively been drafted to require fifty instruments of ratification, a footnote states there are numerous factors which will influence this decision, such as "interim arrangements; swift entry into force; the number of participants in the voluntary procedure; and participation of a sufficient number of States involved in a significant share of global chemicals trade." ¹⁶⁸

This analysis suggests that some of the concerns that were articulated regarding the *International Code* and the *London Guidelines* still remain. In particular, the failure of the delegates to develop a chemical management agreement that incorporates the precautionary principle.¹⁶⁹

IV. PERSISTENT ORGANIC POLLUTANTS

POPs are chemical substances with a unique set of physical characteristics; they are resistant to degradation through photolytic, biological and chemical means; have a high lipid solubility, promoting their bioaccumulation and

^{166.} See Fourth INC Report, supra note 131, arts. 12-13, 15-16.

^{167.} Compare id. art. 16 (detailing technical assistance to developing countries under the INC), with London Guidelines, supra note 50, at 167 (detailing technical assistance to developing countries under the London Guidelines).

^{168.} Fourth INC Report, supra note 131, at 61 n.50.

^{169.} In March 1998, after two years of negotiating, 95 governments finalized the text of the Convention on Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. See Cheryl Hogue, Countries Agree on Final Draft of Prior Informed Consent Treaty, 21 Int'l Env't Rep. (BNA) No. 6, at 245, 245 (1998). The text of the convention was adopted and opened for signature at the Conference of Plenipotentiaries in Rotterdam on September 10–11, 1998. See Cheryl Hogue, Treaty on Prior Informed Consent Sigend by 57 Countries at Rotterdam Meeting, 21 Int'l Env't Rep. (BNA) No. 19, at 893, 893 (1998). The convention is open for signature until September 10, 1999. See Conference of Plenipotentiaries on the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Final Act of the Conference of Plenipotentiaries on the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, UNEP, U.N. Doc. UNEP/FAO/PIC/CONF/5 para. 16 (1998).

biomagnification in fatty tissue; and are semi-volatile, which allows them to travel long distances in the atmosphere before depositing.¹⁷⁰ POPs have been classified into the following main groups: industrial chemical products like PCBs, combustion and by-products like dioxins, and pesticides like DDT.¹⁷¹

[POPs] have been measured on every continent, at sites representing every major climatic zone and geographic sector throughout the world. These include remote regions such as the open oceans, the deserts, the Arctic and the Antarctic, where no significant local sources exist and the only reasonable explanation for their presence is long-range transport from other parts of the globe.¹⁷²

Exposure to POPs can occur through diet, occupational accidents, and indoor and outdoor environments.¹⁷³ These compounds are known to "have toxic effects on animal reproduction, development, and immunological function"¹⁷⁴ and have been observed to affect human health by reducing immunity in infants and children, causing developmental abnormalities, neurobehavioral impairment, and cancer and tumor growth.¹⁷⁵ It is difficult to establish causality of illness or disease in relation to POPs. Like other environmental pollutants evidence proves elusive.¹⁷⁶ However, the most insidious threat of POPs is their propensity to "accumulate,"

^{170.} See L. Ritter et al., An Assessment Report on: DDT, Aldrin, Dieldrin, Endrin, Chlordane, Heptachlor, Hexaclorobenzene, Mirex, Toxaphene, Polychlorinated Biphenyls, Dioxins, and Furans (visited Oct. 29, 1998) http://irptc.unep.ch/pops/indxhtms/asses0.html (Prepared for the International Program on Chemical Safety, December 1995) (describing physical characteristics of POPs).

^{171.} See United Nations Econ. Comm'n for Eur., The Dirty Dozen: Persistent Organic Pollutants (visited Oct. 27, 1998) http://www.unece.org/spot/s01.htm (interview with Lars Nordberg, Deputy Director of the Environmental and Human Settlements Division of the Economic Commission for Europe (UN/ECE)).

¹⁷². Ritter, supra note 170 (identifying regions of the world where POPs have been found).

^{173.} See id. at 2 (noting that these exposures, whether acute or chronic, can cause illness and possibly death).

^{174.} Frank Wania & Donald Mackay, *Tracking the Distribution of Persistent Organic Pollutants*, 30 ENVTL. SCI. & TECH. 390A (1996) (explaining that in order to control POPs it is necessary to understand how they migrate).

^{175.} See Ritter, supra note 170, at 2.

^{176.} See id. at 4.

persist and bioconcentrate"177 from small exposures and thereby to increase to toxicologically relevant concentrations. POPs can be described as compromising the health of our entire ecosystem. 178

Although several POPs are either banned or restricted in developed countries, they continue to be manufactured for export to developing countries where "they remain in wide and relatively unregulated use."179 It is their highly volatile nature that allows POPs to travel from the warmer climates of developing countries to the cooler climates near the North and South Poles. 180 This behavior has been explained on the basis of a global fractionation process.¹⁸¹ Whereas warmer tropical temperatures encourage POPs to evaporate, colder climates "favor deposition from the atmosphere . . . onto soil and water."182 Data supporting the fractionation theory show that concentrations of highly volatile POPs increase on a gradient from warmer to cooler climates, that contaminant mixtures change whereby more volatile components are found in cooler climates, and that when a source of POPs is released in a warm climate it migrates gradually to a cooler one.183 It is this propensity of POPs to act like homing pigeons that has caused concern among developed nations and provided the impetus to pursue the negotiation of a POPs Convention.¹⁸⁴

The Quest for an International Instrument

At the UNEP Governing Council's ninth meeting on May 25, 1995, Decision 18/32 was adopted. 185 The Governing Council invited the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), the International

177. Id. at 5.

^{178.} See id. ch. 7 (noting that the substances have a broad range of adverse effects on the environment and human health, including impaired reproduction and endocrine dysfunction, immunosuppresion, and cancer).

^{179.} Wania & Mackay, supra note 174, at 390A.

^{180.} See id. at 390A-91A (explaining global fractionation and condensation processes).

^{181.} See id.

^{182.} Id. at 390A.

^{183.} See id. at 391A.

^{184.} See id. at 390A (noting that the "consensus among developed countries for restrictions on POPs results in large part from knowledge that [POPs can movel thousands of kilometers from the point of release.").

^{185.} See G.C. Dec. 18/32, U.N. EP, 18th Sess., 9th mtg., U.N. Doc. UNEP/GC.18/32 (1995) [hereinafter Decision 18/32].

Programme on Chemical Safety (IPCS), and Intergovernmental Forum on Chemical Safety (IFCS) to undertake an assessment process of POPs. 186 This process was to commence in relation to twelve specific POPs (PCBs, dioxins and furans, aldrin, dieldrin, DDT, endrin, chlordane, hexachlorobenzene, mirex, toxaphene, and heptachlor)187 and was to consist of a consolidation of available information regarding their chemistry and toxicology; an analysis of their transport pathways, origin, transport, and deposition; an examination of the sources, benefits, risks, and other factors relevant to their production and use; an evaluation of the availability of substitutes; and an assessment of realistic response strategies, policies, and mechanisms for the reduction and/or elimination of emissions, discharges, and losses of POPs. 188 The Governing Council further invited IFCS to develop recommendations and gather information on international action regarding POPs to present at the 1997 sessions of the UNEP Governing Council and the World Health Assembly (WHA). 189

UNEP held the first meeting of the Working Group in October 1995, during which a workplan was created and resource needs were identified. 190 At the second meeting of the IFCS Inter-Sessional Group (ISG2) held in March 1996, the Working Group on POPs was formally directed to continue its assessment process and to develop recommendations and information on possible courses of international action, including those required for an international legally-binding instrument.¹⁹¹ The ISG2 also considered an IPCS Assessment Report and found that, although the Report demonstrated there was enough evidence to justify a need for international action, additional scientific information was required. 192 To this end, UNEP was elected to collect the required information.¹⁹³ Requests for

^{186.} See id.

^{187.} See id.

^{188.} See id.

^{189.} See id.

^{190.} See id.

^{191.} See id.

^{192.} See United Nations Env't Programme, UNEP Chemicals (IRPTC): Status Report on UNEP's and Other Related Activities on Persistent Organic Pollutants, para. 9, (visited Jan. 29, 1999), http://irptc.unep.ch/pops/download/status.doc [hereinafter Status Report]. 193. See id.

additional information were then sent to governments and international organizations by the Executive Director of UNEP and the President of the IFCS.¹⁹⁴ Several responses were received from developed and developing countries.¹⁹⁵

On February 7, 1997, the UNEP Governing Council was presented with the IFCS Report that outlined the international controls needed for pesticides and chemicals and called for the development of scientific criteria to identify other chemicals as persistent pollutants. ¹⁹⁶ In Decision 19/13 C, which recalled its decision of 18/32, Chapters 17 and 19 of *Agenda 21*, and Principle 15 of the *Rio Declaration*, the Governing Council concluded "that international action, including a global legally binding instrument, is required to reduce the risks to human health and the environment arising from the release of the twelve specified [POPs]."¹⁹⁷

The Governing Council also stated "that action programmes must take into account that the twelve specified [POPs] include pesticides, industrial chemicals, and unintentionally produced by-products and contaminants, and that, in the framework of overarching objectives to be negotiated by an intergovernmental negotiating committee, different approaches are needed for each category of [POPs]." As noted in the discussion regarding the PIC Convention, the UNEP Governing Council in its Decision 19/13 D recognized the need for coherence and efficiency between the two international Conventions. 199

The first meeting of the POPs INC was held from June 29 to July 3, 1998.²⁰⁰ At this meeting, in accordance with the Governing Council of UNEP's Decision 19/13 C, the INC was

154. Dec ia

^{194.} See id.

^{195.} See id. (noting that the responses included case studies)

^{196.} See Cheryl Hogue, U.N. Urged to Negotiate Treaty on Persistent Organic Pollutants, 19 Int'l Env't Rep. (BNA) No. 19, at 808, 808 (1996) (noting that the report was drafted by the IFCS ad hoc group during a June 21–22 meeting in the Philippines).

^{197.} G.C. Dec. 19/13C, U.N. EP, 19th Sess., 8th mtg., U.N. Doc. UNEP/GC.19/13C (1997) [hereinafter Decision 19/13C].

¹⁹⁸ *Id*

^{199.} See Decision 19/13D, supra note 128 (noting the need for present and future instruments or activities relating to chemical management to be efficient and coherent).

^{200.} See Report of the Intergovernmental Negotiating Committee for an Internationally Legally Binding Instrument for Implementing International Action on Certain Persistent Organic Pollutants on the Work of Its First Session, Intergovernmental Negotiating Committee U.N. EP, 1st Sess. at 1, U.N. Doc. UNEP/POPS/INC.1/7 (1998). [hereinafter First Pops Report].

expected to establish an expert group for the development of science-based criteria and a procedure for the identification of other POPs.²⁰¹ The second meeting was held from January 25–29, 1999.²⁰² Prior to the first meeting, the IFCS and UNEP continued to work in several areas, including facilitation of information sharing, evaluation and monitoring of implemented strategies, identification and inventorying of PCBs, and finding alternatives to POPs.²⁰³ In May 1997, the WHA adopted a resolution on POPs that:

call[ed] on member states to involve appropriate health officials in national efforts to follow up and implement decisions of the UNEP and WHO [World Health Organization] governing bodies relating to POPs; to take steps to reduce reliance on insecticides of vector-borne control diseases through promotion integrated pest-management of approaches in accordance with WHO guidelines, and through support for the development and adaptation of viable alternative methods of disease vector control; and to ensure that DDT is authorized by governments for public health purposes only and limited to government-authorized programmes.²⁰⁴

The WHA further requested that the WHO participate in the INC and other meetings that would require health expertise. ²⁰⁵ The Convention is expected to be completed by the year 2000. ²⁰⁶

B. Other International Initiatives

Other international initiatives have been undertaken to address the POPs problem, such as the Global Programme of Action for the Protection of the Marine Environment from

^{201.} See Decision 18/32, supra note 185, para. 1.

^{202.} See UNEP Reports 'Solid Progress' in Talks on Treaty for Persistent Organic Pollutants, Int'l Env't Rep. (BNA) No. 3, at 33, 33 (Feb. 3, 1999).

^{203.} See Status Report, supra note 192, para. 15.

^{204.} Id. para. 17.

^{205.} See id.

^{206.} See Decision 19/13C, supra note 197, para. 12; see also Michael Roberts, UNEP Aims for POPs Treaty by 2000, CHEMICAL WK., Feb. 26, 1997, at 49, 49 (noting that the negotiations were to begin in early 1998 and conclude by 2000).

Land-based Activities²⁰⁷ and the North American Commission for Environmental Cooperation's Sound Management of Chemicals Initiative.²⁰⁸ Most notable of these endeavors, and the one upon which the international convention will likely be based,²⁰⁹ is the one undertaken by the UN Economic Commission for Europe (UN/ECE).²¹⁰

In 1995, the Executive Body for the Convention on Long-Range Transboundary Air Pollution agreed that negotiations should be initiated for a POPs protocol.²¹¹ In February 1998, the UN/ECE agreed to a POPs protocol to eliminate or severely restrict emissions of POPs.²¹² In June 1998, environment ministers signed the protocol,²¹³ which targeted sixteen substances that were singled out for their extreme persistency and toxicity at low levels.²¹⁴ It immediately banned production and use of eight of these POPs,²¹⁵ and it identified four other POPs (DDT, heptachlor,

^{207.} Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, UN EP, U.N. Doc. UNEP/OCA/LBA/IG.2/7 (1995) (addressing transboundary pollutants).

^{208.} N. American Comm'n for Envtl. Coop., *The Sound Management of Chemicals* (1995) (establishing international commitments for both POPs and heavy metals). For a more detailed review of these and other initiatives, *see* David VanderZwaag, *International Law and Arctic Marine Conservation and Protection: A Slushy, Shifting Seascape*, 9 GEO. INT'L ENVTL. L. REV. 303, 332–37 (1997).

^{209.} See Global Initiative on POPs Progressing; Format for Pact to be Approved in 1997, 19 Int'l Env't. Rep. (BNA) No. 6, at 209, 209 (Mar. 20, 1996).

^{210.} The UN/ECE includes the European countries, Canada, and the United States. $See\ id.$

^{211.} See Status Report, supra note 192, para. 2.

^{212.} See Daniel Pruzin, Air Pollution: UN/ECE Draft Protocol Concluded on Heavy Metals, Persistent Organics, 21 Int'l Env't Rep. (BNA) No.4, at 141, 141 (Feb. 18, 1998).

^{213.} See Emissions: Environment Ministers Sign Protocols on Heavy Metals, Organic Pollutants, 21 Int'l Env't Rep. (BNA) No. 14, at 663, 663 (July 8, 1998). Signatures include the European Union, fourteen of the EU's fifteen member countries (Spain did not sign), Bulgaria, Croatia, Cyprus, Czech Republic, Iceland, Latvia, Liechtenstein, Lithuania, Macedonia, Moldova, Norway, Poland, Romania, Slovakia, Slovenia, Switzerland, the Ukraine, Canada and the United States. See id.

^{214.} See Pruzin, supra note 212, at 141. The sixteen substances "include the pesticides aldrin, chlordane, chlordecone, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene (HCB), mirex, toxaphene, and hexachlorocyclohexane including lindane; the industrial chemicals hexabromobiphenyl and polychlorinated biphenyls (PCBs); and the byproducts/contaminants dioxins, furans, and polycyclic aromatic hydrocarbons (PAHs)." *Id.*

^{215.} See id. (stating that aldrin, chlordane, chlordecone, dieldrin, endrin, hexabromobiphenyl, mirex, and toxaphene are to be banned immediately).

hexachlorocyclohexanes, and PCBs) that will be eliminated at a later stage.²¹⁶ The use of DDT, hexachlorocyclohexanes, and PCBs will be "severely restricted for applications where they are considered essential to use and where no adequate substitutes exist."²¹⁷

C. Considerations for the Global POPs Convention

The first meeting of the POPs INC was held in Montreal, Canada, from June 29 to July 3, 1998.²¹⁸ The attendees identified twelve POPs that required urgent action. ²¹⁹ The POPs are aldrin, chlordane, DDT, dieldrin, dioxins, endrin, furans, heptachlor, hexachlorobenzene, mirex, polychlorinated biphenyls, and toxaphene.²²⁰

An examination of the UNEP Governing Council Decision 19/13 C reveals the strategy that will likely be deployed in drafting the POPs Convention. This Decision integrated the recommendations presented in the IFCS Report²²¹ and required that the following considerations be included:

- (a) Use of separate, differentiated approaches to take action on pesticides, industrial chemicals, and unintentionally produced by-products and contaminants;
- (b) Use of transition periods, with phased implementation of various proposed actions;
- (c) Careful and efficient management of existing stocks of the specified [POPs] and, where necessary and feasible, their elimination;
- (d) Training in enforcement and monitoring of use to discourage the misuse of [POPs]; [and]
- (e) Remediation of contaminated sites and environmental reservoirs, where feasible and practicable, taking into account national and

^{216.} See id.

^{217.} Id.

^{218.} See First POPs Report, supra note 200, at 1.

^{219.} See United Nations Env't Programme, Information Kit Montreal 1998 (visited Nov. 8, 1998) http://irptc.unep.ch/pops/POPS_Inc/press_releases/infokite.html.

^{220.} See id.

^{221.} See Hogue, supra note 196, at 808 (outlining the IFCS Report).

regional considerations in light of the global significance of the problem.²²²

The Decision also recognized the need to consider the practical matters of an expeditious drafting of the Convention "in such a manner as to recognize ongoing activities on [POPs]"; national and regional concerns; the special concerns of developing countries; voluntary measures which may be implemented; coordination among the various regional and international initiatives to ensure harmonization and mutual support; and input of scientific, technical, and economic expertise. Finally, socio-economic factors were also considered, such as potential impacts on food production, potential impacts on human health, the need for capacity-building; financing concerns and opportunities, and possible trade impacts. ²²⁴

Taking a practical approach to the drafting of the Convention will necessitate a fine balancing of the various stakeholder interests represented by governments, industry, IGOs, NGOs, and citizens. Such a balancing will require an evaluation of the disparate impact that banning and phasing out these compounds will have on the developing world. Another issue is how to deal with chemical industry manufacturers who continue to export these products to the developing world, such as Velsicol Chemical Company of the United States who manufactures heptachlor and chlordane for export.²²⁵ In this regard, it will take time to determine who manufactures which compounds, what substitutes are available, and which countries use them.²²⁶

Consideration of DDT provides an example of some problems that must be solved by the Convention. DDT has been used in the developing world as a control for vector-

^{222.} Decision 19/13C, supra note 197, para. 5.

^{223.} Id. para. 6.

^{224.} See id. para. 7.

^{225.} See Jeff Johnson, Nations to Draft Treaty to Phase Out Persistent Pollutants, 29 ENV'T SCI. & TECH. 546A, 546A (1995) (noting the importance in learning and the difficulty in determining that companies make the banned or limited pesticides and stating that countries use the banned or limited substances while substitutes are available).

^{226.} See id. (reporting comments by Robert Dekker, chief of the International Water Policy Division of the Netherlands Ministry of Transport, Public Works and Water Management, in which Mr. Dekker points out that some U.S. companies are continuing to manufacture harmful chemicals for export).

borne diseases.²²⁷ Although alternatives are available, such as synthetic pyrethroids, they are more expensive.²²⁸ Furthermore, considering that Chinese and Indian firms are the primary producers of DDT, they will suffer financially if a ban is implemented.²²⁹

This example highlights the need for financial and technical assistance by developing countries to find alternatives and re-tool their manufacturing facilities. Given the dangerous properties of POPs, a worldwide ban is urgently required. To effect this, developed countries must be willing to provide extensive support to the developing world. ²³⁰ It has been suggested that developed countries set up a pool of money, such as that established under the Montreal Protocol, or alternatively, recourse could be made to utilize the Global Environmental Fund that provides financial support to remedy ecological problems. ²³¹

Another related issue is how to deal with the confidentiality issues associated with new pesticide products. It is likely that these patents are held by manufacturers in the developed world, and it is unlikely that the manufacturers will be willing to forego any profits associated with their production. One reason western chemical manufacturers have not lobbied against the POPs treaty is that their patents for the first twelve POPs have expired.²³² As such, they are no longer lucrative, and a worldwide ban on these products would "boost the market for their more lucrative alternatives."²³³ As one industry representative stated regarding the POPs Convention, "[I]t focuses on taking some of the nastier chlorinated compounds, which we're in

^{227.} See POP Goes the Treaty, ECONOMIST, Aug. 3–9, 1996, at 68 (observing that "DDT remains the most effective and cheapest way of fighting malaria").

^{228.} See id.

^{229.} See id. (noting that DDT alternatives that are too expensive for developing countries, such as synthetic pyrethroids, have been developed by richer countries).

^{230.} See Cheryl Hogue, Countries Seek Treaty to Curb or Halt Emissions Production of Some Chemicals, 18 Int'l Env't Rep. (BNA) No. 23, at 856, 856–57 (Nov. 15, 1995) (observing that a major financial issue for developing countries is the higher cost of safer pesticides along with technological needs to dispose of existing chemicals).

^{231.} See id. at 857 (including a statement by Magnus Johanneson, secretary general of Iceland's Environment Ministry, that it is vital for money to be included in treaty negotiations).

^{232.} See POP Goes the Treaty, supra note 227, at 68.

^{233.} Id.

favour of. We have never defended all chlorinated products, but we do feel sure the vast majority are beneficial."234

Another issue that may prove to be controversial is how to identify chemicals for inclusion under the Convention. The CMA has proposed that chemicals be selected on the basis of the following criteria: their persistence in the environment; their ability to bioaccumulate, and their toxicity.235 The European Chemical Industry Council, however, uses these three criteria in addition to a fourth, the ability of the substance to travel through the atmosphere. 236 It has also been suggested that it may be necessary to place restrictions on a set of chemical properties, based upon ranges of unacceptable volatility, mobility, and half-lives, rather than restrictions on the use of a specific list of chemical compounds.²³⁷ Two other contentious issues identified by the CMA are the "process for listing and assessing compounds" and "management options for addressing risks identified through the assessment process."238

In light of all of these issues, it will be interesting to observe the extent to which the precautionary principle is included in the final text of the POPs Convention and how it will be defined. If it is accepted, then proponents of new chemicals may be required to prove a lack of a serious environmental threat before being allowed to market them.²³⁹

Trade impacts will also be a concern during the drafting of the POPs Convention, not the least because of the proposed Multilateral Agreement on Investment (MAI).

237. See Wania & Mackay, supra note 174, at 396A (noting that replacing POPs with substances that have the same undesirable characteristics would be a futile attempt at remedying the problem, rather, restricting the chemical properties would prevent the ecosystems from being damaged).

^{234.} Roberts, *supra* note 206, at 49 (quoting Euro Chlor executive director Barrie Gilliat).

^{235.} See Chemicals Covered by Future Treaty Should Be Toxic, Persistent, U.S. Group Says, 18 Int'l Env't Rep. (BNA) No. 25, at 948, 948 (Dec. 13, 1995) (noting that the CMA's approach, similar to that of the European Chemical Industry Council, is based on the chemical characteristics of POPs, not in eliminating emissions, which is the international approach).

^{236.} See id.

^{238.} Greenhouse Gas Emission Talks, Update on Rio Earth Summit to Top 1997 Agenda, 20 Int'l Env't Rep. (BNA) No. 2, at 79, 79 (Jan. 22, 1997) [hereinafter Greenhouse Gas Emission Talks].

^{239.} See VanderZwaag, supra note 208, at 343.

V. THE MULTILATERAL AGREEMENT ON INVESTMENT

Foreign investment has received significant attention from international institutions in recent years. An example can be found in the World Bank's Guidelines of Foreign Direct Investment.²⁴⁰ The Foreign Investment Report was believed to be useful as a means of devising a "desirable normative framework to guide future governmental conduct affecting foreign investment."241 It also refers to work conducted by the UN Centre on Transnational Corporations, which between the years of 1977 and 1992 engaged in writing a code of conduct for foreign investors.²⁴² These documents are mentioned because they serve as an indicator of the extent to which both the global economy and government opinion has changed toward foreign investment. A further indicator of this change can be found in the fact that U.S. foreign direct investment increased to US\$315 billion, thereby doubling itself between the years of 1991 and 1995.243

It appears that the pendulum may have swung too far in favor of foreign investors in recent years, especially in light of the move toward an ever-increasing globalization of the capitalist market place.

In popular mythology, economic globalization is a natural phenomenon. like continental resist or control. impossible to In reality. globalization is being shaped and advanced by carefully planned legal and institutional changes embodied in a series of international agreements. Pacts like the General Agreement on Tariffs and Trade (GATT) and the North American Free Trade Agreement (NAFTA) promote the unregulated flow of money and goods across borders and strip elected

^{240.} See MULTILATERAL INV. GUAR. AGENCY, LEGAL FRAMEWORK FOR THE TREATMENT OF FOREIGN INVESTMENT (1992), reprinted in 31 I.L.M. 1366, 1379 [hereinafter FOREIGN INVESTMENT REPORT] (producing a report for the Development Committee of the World Bank).

^{241.} Id. at 1369.

^{242.} See id. at 1368. This draft code of conduct was never completed because northern governments, having been effectively lobbied by corporate interests, decided that it was no longer required. See Finger & Kilcoyne, supra note 37, at 139.

^{243.} See Balancing Act, ECONOMIST, Jan. 4–10, 1997, at 71 (finding that because U.S. companies primarily invest in foreign countries to serve foreign markets and not to make products to be shipped back to the United States the trade imbalance is closing).

governments of their regulatory authority, shifting power to unaccountable institutions such as the World Trade Organization (WTO), the successor to GATT.²⁴⁴

That each of these steps has been a move toward increasing market power was recognized within the preamble of the Guidelines of Foreign Direct Investment.²⁴⁵ The MAI can therefore be characterized as the next evolutionary step toward total market liberalization.²⁴⁶

A. Drafting for Consensus

In May 1995, the Organisation for Economic and Cooperative Development (OECD) agreed to negotiate an instrument to liberalize "international investment flows,"²⁴⁷ and Renato Ruggerio, Director General of the WTO, heralded the drafting of the MAI as "the constitution of a single global economy."²⁴⁸ The MAI will "commit nations to a policy of non-discrimination and national treatment of all investments, with few exceptions, and is expected to stoke trade among signatory nations."²⁴⁹ While the "agreement is open to all OECD members, . . . non-members will be allowed to accede to the deal as well."²⁵⁰ The five non-member countries,

244. Scott Nova & Michelle Sforza-Roderick, Multilateral Agreement on Investment: "The Constitution of a Global Economy," <code>ECOLOGIST</code>, Jan.–Feb. 1997, at 5.

245. See FOREIGN INVESTMENT REPORT, supra note 240, at 1379 (stating "that these guidelines, which have benefitted from a process of broad consultation inside and outside these institutions, constitute a further step in the evolutionary process where several international efforts aim to establish a favorable investment environment, free from non-commercial risks in all countries, and thereby foster the confidence of international investors").

246. See id. (observing that the MAI is one of the participating institutions requesting that a set of guidelines be created for the purpose of establishing "a favorable investment environment free from non-commercial risks in all countries").

247. *Greenhouse Gas Emission Talks*, supra note 238, at 81 (noting that the agreement is not only open to all OECD members, but to non-members as well).

248. ECON. JUSTICE WORKING GROUP, M.A.I... THE END OF DEMOCRACY? 1 (1997).

249. NGO Coalition Including Environmentalists Vows Campaign Against MAI Under Way at OECD, 20 Int'l Env't Rep. (BNA) No. 22, at 1007, 1007 (Oct. 29, 1997) [hereinafter NGO Coalition].

250. Greenhouse Gas Emission Talks, supra note 238, at 81. The OECD member countries are AS FOLLOWS: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey,

Argentina, Brazil, Chile, Hong Kong and the Slovak Republic, who have been observing the negotiations, are expected to sign the agreement.²⁵¹ Meetings have also been held with "high-level investment policy officials from developing countries."²⁵²

The foreign investment opportunities offered by the MAI are welcomed by some as a means of "beefing up the... economy, improving services, enhancing competition and generating growth."²⁵³ However, not everyone has been as keen to applaud the benefits of foreign investment in light of what the MAI has not addressed, the environment.

Concern has been raised about the absence of environmental issues in the draft MAI.²⁵⁴ At an OECD meeting held May 26–27, 1997, ministers agreed that "integration of economic, social and environmental objectives underpins global sustainable development "and" should be a fundamental aspect of governmental efforts to adapt to new economic realities."²⁵⁵ Yet, during the MAI negotiations they failed to use this principle.²⁵⁶ This is evidenced by the controversy surrounding an article that would prevent countries from lowering their environmental standards to attract foreign direct investment (FDI).²⁵⁷ Although it was discussed, no consensus could be reached regarding its inclusion, and yet, consensus was reached regarding text

the United Kingdom, and the United States. See Org. for Econ. and Coop. Dev., About OECD: Member Countries (last modified Nov. 23, 1998) http://www.oecd.org/about/general/member-countries.htm>.

^{251.} See NGO Coalition, supra note 249, at 1008 (observing that these five non-member countries of the OECD were granted observer status in the negotiations and all participated for the first time during talks that took place in September, 1997).

^{252.} Id.

^{253.} Terence Corcoran, *Anti-MAI Battle Going Nowhere*, GLOBE & MAIL (Toronto), June 7, 1997, at B2 (noting Canadian enthusiasm for the MAI because of the foreign investment that accompanies it).

^{254.} See Environmental Objectives Must be Integrated into Policies on Global Economy, Group Says, 20 Int'l Env't Rep. (BNA) No. 12, at 551, 552 (June 11, 1997) (stating that an environmental clause must be included in the MAI "that will prevent countries from lowering standards in order to attract foreign direct investment").

^{255.} Id. at 551.

^{256.} See id. at 552 (stating that the agenda did not include environmental issues, but numerous debates on the environment were conducted).

^{257.} See id.

stating "that environmental conditions should not be used as an FDI barrier."²⁵⁸

On October 27, 1997, an NGO coalition comprised of consumer, development, and environmental organizations met with negotiators to raise their concerns over the MAI's attempt to elevate "the rights of investors far above those of governments, local communities, citizens, workers, and the environment."259 Specific environmental criticisms included a failure to incorporate international environmental agreements, such as the Rio Declaration and Agenda 21, into MAI; the lack of binding obligations for corporate conduct concerning the environment; the right of investors to attack domestic regulations concerning health and the environment when they are perceived to violate the MAI; and the MAI's ability to induce governments to alter environmental standards to attract FDI.²⁶⁰ Another concern raised by the NGO coalition was that the amount of investment liberalization might inappropriate developing be for countries.²⁶¹ Furthermore, they demanded "that the agreement respect the rights of developing countries to determine their own development policy and retain mechanisms to achieve national priorities . . . [and] that the MAI should respect existing international and national laws, especially those governing the use of natural resources, environmental protection, and workers' rights."262

A final critique by the NGO coalition related to an article that allows investors to sue "governments in the event of perceived investment discrimination." ²⁶³ NGOs fear that multinational corporations might use, or threaten to use, this right to pressure governments to the detriment of local citizens and the environment. ²⁶⁴

259. NGO Coalition, supra note 249, at 1007. The NGOs were concerned that the MAI would undermine the little progress achieved toward sustainable development since the 1992 Rio Earth Summit. See id.

^{258.} Id. at 551-52.

^{260.} See id. at 1007-08.

^{261.} See id. at 1008.

^{262.} Id.

^{263.} Id.

^{264.} See id. (observing that Frans Engering, Dutch director of Foreign Economic Relations and chair of the MAI talks, conceded that OECD must study this possibility further, but also noted "that this has not been a problem in other international trade treaties, [for example,] the North American Free Trade Agreement").

Following their meeting with the NGO coalition, OECD negotiators agreed to increase their efforts to ensure that the MAI does not adversely impact upon the environment or a government's ability to safeguard it.²⁶⁵ To this end, additional environmental studies were ordered. These studies include a review by the OECD Secretariat to ensure that language used in the MAI does not conflict with current international environmental legislation, reviews by each of the twenty-nine delegates of their own national environmental legislation and any disparate impact which the MAI might exert, and the preparation of research on links between foreign investment and the environment.²⁶⁶

Whether the additional reports will result in increased environmental protection in the MAI remains to be seen. However, in light of a recent press report additional studies may be more appropriately characterized as an attempt to deflect criticism rather than as exposing an intention to alter the draft text to include environmental concerns.

Reports from Ottawa and Paris, where talks are under way at the OECD, suggest Mr. Marchi [Canadian Minister of International Trade] is successfully warding off attempts by Canadian greens and other anti-free-traders to load the agreement with protectionist environmental and labour clauses. So far, Mr. Marchi has said no.²⁶⁷

B. Reviewing the Draft MAI

The Preamble²⁶⁸ of the draft shows signs of the tension among negotiators regarding whether or not environmental issues will be explicitly included. While it begins with some general statements concerning the benefits of FDI, there is a bracketed clause dealing with the environment.

[Recognising that investment, as an engine of economic growth, can play a key role in ensuring

^{265.} See Lawrence J. Speer, OECD Multilateral Agreement on Investment to Give More Consideration to Environment, 20 Int'l Env't Rep. (BNA) No. 23, at 1040, 1041 (Nov. 12, 1997).

^{266.} See id. at 1040-41.

^{267.} Terence Corcoran, *Victory for Free Investment*, GLOBE & MAIL (Toronto), Nov. 1, 1997, at B2.

^{268.} See DIRECTORATE FOR FIN., FISCAL AND ENTER. AFFAIRS, ORG. FOR ECON. AND COOP. DEV., MULTILATERAL AGREEMENT ON INVESTMENT: THE MAI NEGOTIATING TEXT 7–8. (Apr. 24, 1998) [hereinafter MAI TEXT].

economic growth is sustainable. accompanied by appropriate environmental policies to ensure it takes place in an environmentally sound manner [Recognising that appropriate environmental policies can play a key role in ensuring that economic development, to which contributes, is sustainable], investment resolving to [desiring to] implement this agreement [in accordance with international environmental law and in a manner consistent with sustainable development, as reflected in the Rio Declaration on Environment and Development and Agenda 21, lincluding the protection and preservation of the environment and principles of the polluter pays and the precautionary approach].269

A footnoted explanation states that some delegations oppose inclusion of this text within the Preamble.²⁷⁰ However, even if this text was included it would be unable to provide assistance with an environmental claim except in a very descriptive manner.

Part III of the Draft contains several important articles. The first, entitled is drafted as follows:

- 1. Each Contracting Party shall accord to investors of another Contracting Party and to their investments, treatment no less favourable than the treatment it accords [in like circumstances] to its own investors with respect and their investments to establishment, acquisition, expansion, operation, management, maintenance, use, enjoyment and sale or other disposition of investments.
- 2. Each Contracting Party shall accord to investors of another Contracting Party and to their investments, treatment no less favourable than the treatment it accords [in like circumstances] to investors of any other Contracting Party or of a non-Contracting Party, and to the investments of investors of any other Contracting Party or of a non-Contracting Party, with respect to the establishment, acquisition, expansion, operation, management, maintenance,

269. Id. at 7-8 (brackets in original).

^{270.} See id. at 8 nn.6-12 (recognizing that the bracketed materials have mixed support among the delegations).

use, enjoyment, and sale or other disposition of investments.²⁷¹

The U.S. delegates pushed for inclusion of the phrase "in like circumstances" in the 1997 negotiating sessions²⁷² They argued that this phrase would resolve the tension between treatment toward foreign investors that is "different" and treatment that which is "less favorable or discriminatory."²⁷³ In any event, these articles will not allow governments to refuse investors based upon their unfriendly environmental attitudes observed elsewhere.

Performance requirements are also specified in the Draft.²⁷⁴ These pose prohibitions against interfering with investments in twelve different ways.²⁷⁵ Two prohibitions have been singled out in relation to proposed Paragraph 4 of the performance requirements.²⁷⁶ Paragraph 4 reads as follows:²⁷⁷

[Provided that such measures are not applied in an arbitrary or unjustifiable manner, or do not constitute a disguised restriction on investment, nothing in paragraphs 1(b) and 1(c) shall be construed to prevent any Contracting Party from adopting or maintaining measures, including environmental measures:

- (a) necessary to secure compliance with laws and regulations that are not inconsistent with the provisions of this Agreement;
- (b) necessary to protect human, animal or plant life or health;
- (c) necessary for the conservation of living or non-living exhaustible natural resources.]²⁷⁸

^{271.} Id. at 13. (brackets in original).

^{272.} PREAMBLE CTR. FOR PUB. POLICY, PRIMARY CHANGES BETWEEN THE JANUARY AND MAY 1997 MAI DRAFT TEXTS 2 (1997) [hereinafter PREAMBLE CTR.].

^{273.} See id.

^{274.} See MAI TEXT, supra note 268, at 18.

^{275.} See id. at 18-22.

^{276.} See id. at 23.

^{277.} Given that the bracket appears at the beginning of the article, I am assuming that this article has not yet been given approval by all delegations. This interpretation would not appear to be inappropriate given the nature of the NGO coalition's complaints discussed earlier. See id. at 23 (brackets in original).

^{278.} Id. (emphasis added) (brackets in original).

Paragraphs 1(b) and 1(c) state,

A Contracting Party shall not, in connection with the establishment, acquisition, expansion, management, operation, maintenance, use, enjoyment, sale or other disposition of an investment in its territory of an investor of a Contracting Party or of a non-Contracting Party, impose, enforce or maintain any of the following requirements, or enforce any commitment or undertaking:

. . .

- (b) to achieve a given level or percentage of domestic content;
- (c) to purchase, use or accord a preference to goods produced or services provided in its territory, or to purchase goods or services from persons in its territory;²⁷⁹

An interpretative footnote comments that many delegations would prefer to have issues relating to human, animal, or plant health and the environment covered in a more general article and remain concerned about the breadth of Paragraph 4(a) above.²⁸⁰ To this end, many prefer a proposal that would replace the current draft in part with the following:

[N]othing in paragraphs 1(b) and 1(c) shall be construed to prevent any Contracting Party from adopting or maintaining measures necessary to secure compliance with environmental laws and regulations [that are not otherwise inconsistent with the provisions of this Agreement and] that are necessary for the conservation of living or non-living resources, [or that are necessary to protect human, animal or plant life or health.]²⁸¹

The concern that delegations expressed undoubtedly stems from lessons learned from a similar provision in GATT.

GATT has also been criticized for its inability to protect the environment.²⁸² In particular, several U.S. cases highlight

^{279.} Id. at 18-19.

^{280.} See id. at 18 n.16.

^{281.} Id. at 23 n.30. (brackets in original).

^{282.} See Mike Meier, GATT, WTO, and the Environment: To What Extent Do GATT/WTO Rules Permit Member Nations to Protect the Environment When Doing So Adversely Affects Trade?, 8 COLO. J. INT'L ENVIL. L. & POLY 241 (1997).

the ineffectiveness of GATT Article 20,283 which provides exceptions for national measures to protect human, animal, or plant life and health and for national measures that conserve natural resources.284 In practice this article has been narrowly read, with the result that when health or environmental laws were perceived to be discriminatory, trade liberalization has triumphed.285

Given the strong wording of GATT Article 20²⁸⁶ and its proven inability to protect environmental matters when challenged by trade issues, the concern of MAI delegates over either version of proposed Paragraph 4 would appear to be misplaced. It is unlikely that the MAI could ever be construed in favor of environmental matters over those of trade.

Another article of interest is entitled "Not Lowering Standards (Labour and Environment)," which currently has four alternatives.²⁸⁷

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

. . .

. . .

. . .

GATT, supra note 283, art. XX.

287. MAI Text, *supra* note 268, at 54. In addition to the alternative articles, two delegations proposed other ways to address the problem. One delegation proposed deleting Paragraph 4 and replacing it with a general exception article stating:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on investment, nothing in this

^{283.} See General Agreement on Tariffs and Trade, Oct. 30, 1947, art. XX, 61 Stat. A-11, T.I.A.S. 1700, 55 U.N.T.S. 194 [hereinafter GATT].

^{284.} See Meier, supra note 282, at 242 (noting that the exception is intended to allow GATT "members to have laws and regulations that protect against the harmful effects of hazardous substances, air pollution and so forth").

^{285.} See id. at 245–72 (analyzing the legal standards GATT/WTO applies when reviewing national health and environmental regulations under the health and natural resources exceptions to the GATT).

^{286.} The article reads as follows:

⁽b) necessary to protect human, animal or plant life or health;

⁽g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

Alternative 1

The Parties recognise that it is inappropriate to encourage investment by lowering [domestic] health, safety or environmental [standards] [measures] or relaxing [domestic][core] labour Accordingly, a Party should not waive or otherwise derogate from, or offer to waive or otherwise derogate such [standards] [measures] encouragement for the establishment, acquisition, expansion or retention in its territory of an investment of an investor. If a Party considers that another Party has offered such an encouragement, it may request consultations with the other Party and the two Parties shall consult with a view to avoiding any such encouragement.]288

Alternative 2

[A Contracting Party [shall] [should] not waive or otherwise derogate from, or offer to waive or otherwise derogate from [domestic] health, safety or environmental [measures] [standards] or [domestic] [core] labour standards as an encouragement for the

agreement shall be construed to prevent the adoption, maintaining or enforcement by any Contracting party of measures:

- (a) necessary to protect human, animal or plant life or health
- (b) relating to the conservation of living or non-living exhaustible natural resources.

Id. at 56 n.129. Another delegation proposed a general article using the text of NAFTA Article 1114(1) and adding another paragraph to address investment outflows, which states:

Nothing in this agreement shall be construed to prevent a Contracting Party from adopting, maintaining or enforcing any measure otherwise consistent with this Agreement that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns.

Likewise, no Contracting party shall adopt, maintain or enforce any environmental measure in a manner which would constitute a disguised restriction for investment outflows from that Contracting Party to another Contracting party, or for investment among Contracting parties.

Id.; see also North American Free Trade Agreement, Dec. 17, 1992, Can.-Mex.-U.S., art. 1114(1), 32 I.L.M. 289, 642 [hereinafter NAFTA] (providing the language for the first paragraph of this proposed article stated above).

288. Id. at 54.

establishment, acquisition, expansion or retention of an investment of an investor.]²⁸⁹

Alternative 3

- [1. The Parties recognise that it is inappropriate to encourage investment by lowering domestic health, safety or environmental measures or relaxing international core labour standards.
- 2. A Contracting Party [shall] [should] accord to investors of another Contracting Party and their investments treatment no more favourable than it accords its own investors by waving or otherwise derogating from, or offering to waiver or otherwise derogate from domestic health, safety, environmental or labour measures, with respect to the establishment, acquisition, expansion, operation, management, maintenance, use, enjoyment and sale or other disposition of an investment.
- 3. A Contracting Party [shall] [should] not take any measure which derogates from, or offer to derogate from, international health, safety or environmental laws or international core labour standards as an encouragement for investment on its territory.]²⁹⁰

Alternative 4 (Environment Only)

- [1. The Parties recognise that it is inappropriate to encourage investment by relaxing health, safety or environmental measures.
- 2. Accordingly, a Contracting Party shall accord to investors of another Contracting Party and their investments treatment no more favourable than it accords to its own investors and their investments by waving or otherwise derogate from, or offering to waive or otherwise derogate from health, safety [sic] environmental measures, with respect to the establishment, acquisition, expansion, operation, management, maintenance, use, enjoyment and sale or other disposition of investments.
- 3. In addition, a Contracting Party should not encourage investment by lowering its health, safety and environmental standards in general. If a Party considers that another Party has offered such an

^{289.} Id. at 54-55.

^{290.} Id. at 55.

encouragement, it may requires consultations with the other Party and the two Parties shall consult with a view to avoiding any such encouragement.]²⁹¹

These provisions are unlikely to appear in the final text as it appears that no one alternative has majority support.²⁹² If they are not included, the possibility that some countries will lower their environmental standards to attract investors is not precluded.

A study regarding environmental policies and industrial competitiveness states that the costs of compliance with environmental regulations have had little effect on industrial competitiveness, as measured by trade balances and impacts on trade.²⁹³ Furthermore, it does not support the industrial flight hypothesis²⁹⁴ because other factors such as access to markets, raw materials, political stability, supporting infrastructure, and transportation costs are weighed more heavily by investors.²⁹⁵ However, industrial migration within sectors²⁹⁶ does occur as a result of lower environmental standards. "Environmentally-dirty industries, particularly resource-based sectors, have migrated over the last two countries decades to lower income with environmental standards; the result is a geographical shift in production capacity within sectors with a consequent acceleration of industrial pollution intensity in developing countries."297 The study later adds that "[1]iberalised trade and investment rules among countries with unequal levels of environmental protection may create incentives

292. Compare MAI Text, supra note 268, at 54–56 (providing four alternative versions), with Directorate for Fin., Fiscal and Enter. Affairs, Org. for Econ. and Coop. Dev., Multilateral Agreement on Investment: The MAI Negotiating Text 48–49 (May 1997) (providing only two alternative versions); see also Preamble Ctr., supra note 272, at 5 (noting that the mandatory language of the two 1997 alternatives did not have much support).

^{291.} Id.

^{293.} Candice Stevens, *Synthesis Report: Environmental Policies and Industrial Competitiveness, in* Environmental Policies and Industrial Competitiveness 7 (Org. for Econ. and Coop. Dev. ed., 1993).

^{294.} See id. at 11 (defining this term as "the out-migration of polluting industries from countries with strict environmental regulations").

^{295.} See id.

^{296.} This concept refers to the relocation of production capacity sectors within individual firms to areas with lower environmental standards. *See id.*

^{297.} Id.

companies to relocate to jurisdictions with lower levels of environmental regulation and lower compliance costs."298

impact that such a blatant omission environmental standards will have on global efforts toward sustainable development is certain to be profound. As another commentary has stated, "Assuring a more efficient flow of capital and investment around the world can help create the potential for sustainable development, but that potential will be realised only if environmental conditions are attached to these investment flows up front, in the trade agreements that set this process in motion."299

A final set of articles worthy of mention are those that provide investors with the ability to resolve disputes against Contracting Parties concerning an alleged breach of a MAI obligation.300 This type of investor right can be found in NAFTA³⁰¹ and also provides an example of the environmental implications such a right may entail. U.S. based Ethyl Corporation has launched a US\$350 million lawsuit against the Canadian government, alleging that a Canadian ban on importation and transportation of products containing MMT is "expropriating' Ethyl's potential profits both by directly interdicting sales and by impugning the company's reputation."302 MMT is a neurotoxin manufactured solely in North America by Ethyl and is used as a fuel additive.³⁰³ On July 20, 1998, the Canadian government withdrew its ban and settled with Ethyl Corporation for US\$13 million.³⁰⁴

The future of the MAI is presently unclear. In the spring of 1998, OECD representatives set a new target deadline for completion of the MAI in April 1999.305 The reason given to

^{298.} Id.

^{299.} Stewart Hudson, Exploring the Relationship Between Investment, Trade and Environment, in Environmental Policies and Industrial Competitiveness 130 (Org. for Econ. and Coop. Dev. ed., 1993).

^{300.} See MAI TEXT, supra note 268, at 63-67 (providing for consultation, conciliation, mediation, and arbitration among parties).

^{301.} See NAFTA, supra note 287, art.1116.

^{302.} ECONOMIC JUSTICE WORKING GROUP, supra note 248, at 3.

^{303.} See id.; see also Envtl. Defense Fund, Statement by EPA Administrator Carol M. Browner regarding Advertisement by Ethyl Corporation (Mar. 7, 1996) http://www.edf.org/pubs/NewsReleases/1996/Mar/e_epa.html (noting that the EPA does not have enough data to prove whether MMT is a threat or not).

^{304.} See Canadian Government Withdraws Ban on Trade, Import of Gasoline Additive MMT, 21 Int'l Env't Rep. (BNA) No. 15, at 719, 719 (July 22, 1998).

^{305.} See Terrence Corcoran, The MAI is Dead. "Cheers," GLOBE & MAIL (Toronto), Mar. 25, 1998, at B2 (stating it is seriously doubtful that the MAI will pass).

defer completion was that the draft was weak and subject to several state exemptions, and notably it had lost the support of the U.S. delegation.³⁰⁶ The February 14, 1998 MAI draft text raises the same concerns expressed in regard to its earlier draft.³⁰⁷

VI. CONCLUSIONS

The current global faith in economic liberalization, chemical dependency, and corporate legitimacy remains unshakable even in light of an increasingly deteriorating planet. The promise of change embodied in the PIC and POPs agreements has vanished, even as they remain in draft and conceptual form. While the PIC Convention will help control trade in hazardous chemicals and pesticides, it retains the weaknesses and ineffectiveness of its predecessors, along with their allegiances to trade. It is probable that the POPs Convention will also be drafted with generalized language so as to weaken the applicability of the precautionary principle in accordance with the industry's agenda. As future international agreements, these documents bear the indelible stamp of the global faith.

In contrast, from an industry perspective the two chemical management agreements must be a lobbyist's dream. Not only does the PIC Convention refuse to extend into contentious industry territory, but the POPs Convention, even if it does ban twelve older substances, can only serve to increase opportunities for trade with scientifically uninitiated substances. Furthermore, these lobbying successes pale when contrasted with the creation of the MAI. The MAI not only places corporations at the pinnacle of international relations, but names them as custodians of the world and its future.

The future effectiveness of international environmental initiatives can best be characterized with a cartoon of the four horsemen of the Apocalypse speaking to a fifth rider saying, "Congratulations, Ecological Disaster—it's not often

307. See Org. for Econ. and Coop. Dev., The Multilateral Agreement on Investment: The MAI Negotiating Text (Apr. 24, 1998) http://web.uvic.ca/german/hendrik/mai-0298.txt (consolidating the text of the agreement being considered in current MAI negotiations).

^{306.} See id. (noting that the Clinton administration and U.S. Congress are uninterested in the MAI process); see also Heather Scoffield, Canada, U.S. Dump on "MAI," GLOBE & MAIL (Toronto), Feb. 14, 1998, at B3.

we admit another horseman into the Apocalypse!"³⁰⁸ In order to implement effective international environmental initiatives, the means must be found to throw the fifth horseman from the corporate steed.

308. Gahan Wilson, Congratulations, Ecological Disaster—It's Not Often We Admit Another Horseman Into the Apocalypse, New Yorker, Feb. 24, 1992, at 93.