

Trade in Hazardous Waste: Environmental Justice Versus Economic Growth

Environmental Justice and Legal Process

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INTRODUCTION

During the past two decades, the generation and transboundary movements of hazardous wastes and their disposal has become a major issue of environmental justice. It is estimated that in 1990, 400 million metric tons of hazardous waste was generated world wide.[2] Over ninety per cent of this waste originated in countries belonging to the Organization for Economic Co-operation and Development (OECD).[3] As disposal facilities for hazardous waste become scarcer and more costly in industrialised countries, lesser developed countries are being increasingly targeted as dumping grounds. This places a disproportionate burden on countries who frequently lack the capacity to deal with the wastes in an environmentally sound manner. The practice of exporting hazardous wastes for disposal in developing countries has been described as environmental injustice or environmental racism on a global scale.[4]

There has also been an increase of incidents of hazardous waste exports to both developed and developing countries for recovery or recycling. Hazardous waste often has an economic value as secondary raw materials. Consequently, many hazardous wastes are exported for activities such as resource recovery, recycling or re-use. According to OECD estimates, the amount of recoverable metals or metal-bearing wastes subject to international trade in 1989 was valued at US \$16 billion.[5] Trade in hazardous waste with developing countries is very controversial. While recovery of secondary materials and their reintegration into the global economy can reduce the demand for virgin resources, it poses a serious threat to the environment and human health in those countries who do not have the capacity to handle these wastes in an environmentally sound manner.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention) is one of the most important steps taken in recent times towards the international regulation of hazardous waste.[6] The focus of this article will be on the efficacy of the Basel Convention to achieve environmental justice for developing countries by eliminating hazardous waste exports from industrialised developed countries to developing countries. Part I of this article examines the relationship between waste disposal and environmental justice and discusses the motivation for exports of hazardous waste to developing countries. Part II considers the international regulation of transboundary movements of hazardous waste under the Basel Convention and its inability to protect developing countries. Part III discusses the steps which the international community have taken to impose a ban on the hazardous waste trade and the likely success of these measures in eliminating hazardous waste exports to developing countries.

I Waste Disposal and Environmental Justice

In recent years the need to protect the environment has been extended to the protection of other endangered communities - the poor and people of colour. This form of non-traditional environmentalism is known as environmental justice or environmental racism. The movement originated in the United States and first received national attention in 1982 when more than 500 protesters were jailed following the siting of a landfill in Warren County, North Carolina. The demonstration resulted from a decision to include approximately 330,000 cubic yards of polychlorinated biphenyl (PCB) contaminated soil in landfill. Since then, several studies in the United States have identified a correlation between race, socio-economic status and the location of hazardous waste facilities.[7] The United States Environmental Protection Agency describes environmental justice as the 'fair treatment for people of all races, cultures, and incomes, regarding the development of environmental laws, regulations and policies'.[8] On 11 February 1993, President Clinton issued an Executive Order on Environmental Justice requiring all federal agencies to 'make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations *in the United States*'. [9] The limitation of United States policy to domestic injustice is unfortunate, since environmental justice should be accorded to all states and not confined to national inequalities. However, the United States is the only country which has made a conscious effort to implement environmental justice into law and policy.

The siting of hazardous waste facilities in disadvantaged communities has been described as a microcosm of the problem of the practice of exporting hazardous waste to developing countries.[10] Under both these practices poor communities are required to shoulder the burden of industrialisation without having received any of its advantages.

The notion of environmental justice is rarely used in the context of international law. However the concepts of intergenerational responsibility and intergenerational justice were emphasised in the Brundlandt Report which defines sustainable development as development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs.'[11] The Report stresses the need for 'recognition by states of their responsibility to ensure an adequate environment for present as well as future generations' as an important step towards sustainable development.[12] Agenda 21 emphasises the paramount importance of ensuring effective control of the generation, storage, treatment, recycling, transport and disposal of hazardous wastes for proper health, environmental protection, natural resource management, and sustainable development.[13] Thus, it would seem that the concept of environmental justice at international law has been subsumed into the more general rubric of sustainable development.

A Incidents of Hazardous Waste Dumping in Developing Countries

Environmental problems arising from disposal of hazardous waste in developing countries first gained international attention in the late 1980's, when several incidents of dumping in Africa were reported.

One of the earliest cases of illegal dumping occurred in Nigeria. An Italian national, working in Nigeria had obtained a product import licence, then substituted shipments of several thousand tons of highly toxic and radioactive wastes, including 150 tons of polychlorinated biphenyls, which are both carcinogenic and toxic. Investigations revealed that 3,800 tons of these wastes were being stored on a site at Koko. Many drums were damaged and leaking. Workers packing drums into containers for retransportation to Italy suffered severe chemical burns. Some were hospitalised and one man was paralysed. After the waste was removed, land within a 500 metre radius of the dump site was declared unsafe and there is concern about surface and groundwater contamination.[14]

In 1988, Guinea-Bissau was offered a \$600 million dollar contract - four times its gross national product - to dispose of 15 million tons of toxic wastes over five years. The contract was never enforced because of public concern within Guinea-Bissau.[15] Many other such arrangements were reported in the 1980's in other African countries such as Namibia, Guinea, Haiti and Sierra Leone.[16] In some cases dumping had taken place with the consent of the government in question, in other cases it was part of an illegal operation.

Although the issue of hazardous waste first received international attention because of these incidents, the problem is by no means confined to Africa. Numerous incidents of dumping in developing countries have been reported throughout the world.

B Why Waste is Exported to Developing Countries

The motivation for exporting hazardous waste to developing countries is primarily economic. Lawrence Summers, the former vice president and chief economist of the World Bank, is reported to have encouraged these exports.[17] Summers' wrote in an internal memorandum: 'I think the economic logic behind dumping a load of toxic waste in the lowest wage country is impeccable and we should face up to that'.[18] The rationale for this statement was that any 'health-impairing pollution should be done in the country with the lowest cost, which will be the country with the lowest wages'.[19]

Although Summers and the World Bank have since retracted these statements[20], the economic incentives for exports of hazardous waste to developing countries are indisputable. As industrialised countries have become aware of the dangers of unsound disposal of hazardous waste, more stringent environmental and safety measures have been introduced. As a result, disposal has become extremely costly. Developing countries provide a disposal option at prices that are often a mere fraction of the equivalent cost in the state of origin. According to one study in the late 1980's, the average disposal costs for one ton of hazardous wastes in Africa between US \$2.50 - \$50, while costs in industrialized countries ranged from US \$100 - US \$2,000.[21] The lower costs generally reflect the lack of environmental standards, less stringent laws and absence of public opposition due to lack of information concerning the dangers involved.[22] Consequently, without regulation developing countries will be increasingly vulnerable, since: "like water running downhill, hazardous wastes invariably will be disposed of along the path of least resistance and least expense".[23]

II The International Regulation of Hazardous Waste Exports under the Basel Convention

A Background

International concerns about exports of hazardous wastes to developing countries led to the negotiation of the 1989 Basel Convention which came into force in 1992. The Basel Convention does not expressly refer to the concept of environmental justice; however its underlying rationale of ensuring protection for human health and the environment in developing countries reflects this principle. Ratification of the Basel Convention was listed in Agenda 21 as one of the overall targets to achieve sustainable development.[24]

More than one hundred countries have ratified or acceded to the Convention, including Australia. The original text of the Basel Convention does not ban the transboundary movements of hazardous waste. Rather it seeks to control and limit the movement of waste, so that transportation and disposal of the waste is consistent with human health and the environment. Since then the Basel Convention has been amended to impose a ban on exports of hazardous wastes from OECD to non-OECD countries. The ban has not yet come into force.[25]

B The Scope of the Basel Convention

The scope of the Basel Convention extends to hazardous wastes that are subject to transboundary movement. The Convention adopts a very broad definition of hazardous waste which encompasses hazardous wastes destined for recycling as well as final disposal.[26]

Annexes I, II and III to the Basel Convention define which wastes are hazardous. Annexes I and III deal with this issue in very general and ambiguous terms. This has led to controversy as to the question of exactly which 'wastes' are hazardous and thus subject to the Convention. Annex 1 sets out two categories of wastes to be controlled. The first category deals with waste streams and includes hospital and pharmaceutical waste, wastes from organic solvents, polychlorinated biphenyls, adhesives and so forth. The second category classifies wastes according to their constituents. Listed are substances such as lead, mercury and asbestos. The onus is then on a person who claims that the wastes are not hazardous to show that they do not have any of the characteristics of Annex III. The hazardous characteristics listed in Annex III include explosives, flammable liquids and solids, substances liable to spontaneous combustion, toxic and ecotoxic wastes.

In addition to the wastes listed in Annexes I and III, the Basel Convention also extends the definition of hazardous to encompass those wastes listed in Annex II, namely, household wastes and ash from the incineration of household wastes. Furthermore, wastes are also classified as hazardous if they are defined as hazardous in the national and domestic legislation of the exporting, importing or transit party.[27]

C Obligations Imposed by the Basel Convention

The Convention imposes specific obligations on member states. These obligations are intended to ensure environmental justice for developing countries. Some of the main obligations imposed are as follows:

- . To ensure that the transboundary movement of hazardous wastes are reduced to a minimum consistent with environmentally sound management;[28]
- . To recognise and observe the right of states to prohibit the import of hazardous wastes;[29]
- . To prohibit the export or import of hazardous wastes to or from a non-party;[30]
- . To permit movement of waste only where the state of export does not have the technical capacity or facilities to dispose of the wastes in an environmentally sound manner, unless the wastes are required as raw material for recycling in the state of import;[31]
- . To obtain the prior informed consent of the importing country and each state of transit before shipment;[32]
- . To prevent exports or imports of hazardous wastes if it has reason to believe that the wastes in question will not be managed in an environmentally sound manner.[33]
- . To re-import the wastes or find another method of disposal if the importing country is unable to dispose of the waste in an environmentally sound manner;[34]
- . To impose criminal sanctions for illegal trafficking in hazardous wastes.[35]

D Weaknesses of the Convention

The effectiveness of the Basel Convention has been somewhat limited by extrinsic and intrinsic factors.

1. Extrinsic factors

Although the Basel Convention has been ratified by most industrialised countries, the United States has not yet become a party to the Convention. The United States is the world's largest generator of hazardous wastes, accounting for almost three quarters of the world's annual production.[36] Consequently, to ensure environmental justice for developing countries, the participation and co-operation of the United States is essential.

The United States did sign the Basel Convention in 1988 and Senate consented to its ratification in 1992. However, the instruments of accession have not been deposited with the Basel Secretariat, as the US Congress has not yet passed domestic legislation to implement the Convention. Domestic legislation is essential to enable the United States to meet its obligations under the Convention. For example, without such legislation federal agencies would be unable to prevent exports to a non-party or to re-import waste which has been exported in violation of the principles of environmentally sound management.[37]

2. Intrinsic factors

There are a number of major weaknesses in the Basel Convention which impact on its potential to achieve environmental justice for developing countries. For example, the Convention lacks an enforcement mechanism to ensure that hazardous waste traders are fully accountable for all damage which occurs. This aspect is being addressed by the development of a *Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal* and is outside the scope of this article.[38] Weaknesses in the Basel Convention pertinent to this article are:

- (1) the general and often ambiguous definitions of fundamental terms, eg. 'hazardous waste' and 'environmentally sound management';
- (2) the adoption of a limited ban, rather than a total ban on hazardous waste exports; and
- (3) the provision for separate agreements under Article 11 and the loopholes which it provides to permit hazardous waste exports for recycling.

(a) General definitions

(i) Hazardous waste

The generality of the definition of hazardous waste has resulted in uncertainty as to which wastes are hazardous and subject to the Basel Convention. Consequently, it has been possible for parties to argue that exports are 'products' and not 'hazardous wastes.' To clarify which wastes are encompassed by the Basel Convention, the Third Meeting of the Conference of the Parties instructed the Technical Working Group to give full priority to completing work on hazard characterisation and developing lists of wastes.[39] Three lists of waste have been developed. A-listed wastes are characterised as hazardous for the purposes of the Basel Convention. B-listed wastes are not characterised as hazardous under the Convention, unless they contain Annex I material to an extent that causes them to assume the hazardous characteristics listed in Annex III. C-listed wastes are still of uncertain status. At the Fourth Meeting of the Conference of the Parties in February 1998, lists A and B were incorporated as two new annexes to the Convention.[40] The adoption of the lists is an important step in tightening up control on exports of hazardous wastes to developing countries.

(ii) Environmentally Sound Management

The key obligations relating to the management and transboundary movement of hazardous waste under the Basel Convention, is to ensure that the waste will be managed in an 'environmentally sound manner.'[41] 'Environmentally sound management' is defined in the Convention as 'taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes.'[42] The generality of this definition provides very little guidance to states.

(b) The Adoption of a Limited Ban on Transboundary Movements of Hazardous Wastes

When the Basel Convention was being drafted, many developing countries favoured a total ban of transboundary movements of hazardous waste, but industrialized developed countries would not agree to such a ban, because it was economically disadvantageous.[43] The result was a compromise between the two views: a limited ban on exports and imports of hazardous wastes. Transboundary movement of hazardous waste between parties to the Basel Convention is permitted when the exporting state does not have the technical capacity and the necessary facilities to dispose of the waste in an environmentally sound and efficient manner[44] or where the wastes are required as a raw material for recycling or recovery industries in the state of import.[45] Furthermore, although parties to the Convention may not

export wastes to, or import wastes from a non-party, an exception exists where parties have entered into a bilateral or multilateral agreement under Article 11 of the Convention on condition that such agreements do not derogate from 'environmentally sound management.' Because of the generality of the definition of 'environmentally sound management' in the Basel Convention, this criterion provides a very weak yardstick of protection for developing countries.

Transboundary movements of hazardous waste which are permitted under the limited ban, are subject to the 'prior informed consent' provisions of the Basel Convention. These provisions require the exporting state to obtain the prior informed consent of the importing country and each state of transit before exporting the waste.[46] They afford little protection to developing countries which frequently lack a sufficiently sophisticated national infra structure to monitor hazardous waste imports.[47]

Many developing countries have found the limited ban totally unacceptable. In 1988, the Organisation for African Unity (OAU) passed a resolution declaring the dumping of nuclear and hazardous waste into Africa to be a crime against Africa and the African people.[48] The OAU refused to participate in the Basel Convention and, instead negotiated the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (Bamako Convention).[49] The Bamako Convention imposes a total ban on nuclear and hazardous waste imports into Africa for final disposal and recycling.[50] Some African countries have taken a very serious view of hazardous waste dumping. For example, Nigeria and Cameroon have imposed the death penalty for waste importers.[51]

Dissatisfaction with the limited ban imposed by the Basel Convention is not confined to African countries. According to Greenpeace, there are now well over a hundred countries with regional or national waste import bans.[52] Asia has become the primary target of hazardous waste traders since it is the only non-OECD region which does not prohibit waste imports.[53] Greenpeace has reported that waste traffic is increasingly being directed at Asia and is claiming a 'devastating toll from people and the environment'.[54] However, there is no doubt that regional bans do not have the capacity to ensure environmental justice for developing countries to the same extent as a global ban which has the support of the international community.

III International Action to Impose a Total Ban on Transboundary Movements of Hazardous Wastes

Whereas the initial focus of the international community was focussed on protecting developing countries against hazardous waste dumping, present concerns have focussed primarily on wastes which are being sent to developing countries for recycling. Concern amongst the international community that the Basel Convention was not affording sufficient protection for developing countries prompted action to impose a total ban on the transboundary movement of hazardous wastes to developing countries. At the Second Meeting of the Conference of Parties of the Basel Convention in March 1994, a decision was passed by consensus banning all exports of hazardous wastes from OECD to non-OECD (largely developing) countries. The ban on hazardous wastes for final disposal was intended to take place immediately, while wastes bound for recycling were to be prohibited from 31 December 1997.[55]

In September 1995 at the Third Meeting of the Conference of the Parties in Geneva, it was decided to adopt an amendment to the Basel Convention to incorporate the ban. This was achieved by inserting a new Article 4A into the Convention and creating a new Annex VII. Article 4A provides as follows:

- '1. Each Party listed in Annex VII shall prohibit all transboundary movements of hazardous wastes which are destined for operations according to Annex IV A [final disposal], to States not listed in Annex VII.
2. Each Party listed in Annex VII shall phase out by 31 December 1997, and prohibit as of that date, all transboundary movements of hazardous wastes under Article 1(i)(a) of the Basel Convention which are destined for operations according to Annex B [recovery and recycling] to States not listed in Annex VII. Such transboundary movement shall not be prohibited unless the wastes in question are characterised as hazardous under the Basel Convention'.[56]

The ban will come into force after it has been ratified by 62 countries, (three quarters of the Parties present at the Third Conference of the Parties).

States listed in proposed Annex VII of the Basel Convention are 'Parties and other States which are members of the OECD, the European Community (EC) and Liechtenstein'.

The ban is intended to ensure environmental justice by protecting lesser developed countries not listed in Annex VII, who generally lack the capacity to handle these wastes in an environmentally sound manner. In particular, the ban amendment seeks to 'plug the recycling loophole through which more than 90% of exported wastes continue to

flow.'^[57] When the ban was first proposed in 1992, the terminology 'industrialized versus developing countries' was used as the basis of the trade restriction. However, to achieve clarity as to which countries were to be included in Annex VII, the OECD/non-OECD distinction was preferred. In addition, the OECD has an internal control regime to monitor transboundary movements of hazardous wastes. The European Community is explicitly listed in Annex VII, so as to emphasise its existence as a separate entity within the OECD. Liechtenstein is included in Annex VII, although not an OECD state, because of its special geopolitical situation. As Liechtenstein shares a customs Union with Switzerland, it has no border controls. Hence, if it was not included on Annex VII it could represent a possible loophole for hazardous waste exports to non-Annex VII (non-OECD) countries.

At the Fourth Meeting of the Conference of the Parties a decision was passed urging Parties to ratify the ban amendment as a matter of priority.^[58] At the same time it was decided to leave membership of Annex VII unchanged until the amendment enters into force.

A Economic Implications of the Ban on Trade in Recyclable Hazardous Wastes

The ban has had a mixed reception. It has been applauded by environmental groups worldwide as a victory 'for environment and justice.'^[59] Greenpeace describes the ban as follows:

'For so long, unscrupulous business interests in rich nations have exploited the less stringent regulations and weak infrastructure in poor countries to avoid the responsibility of minimising their wastes at home and creating an incentive for clean production technologies. The Basel Ban is the developing world's answer to this disturbing trend, a repudiation of the widespread dumping of hazardous waste on their shores.'^[60]

While environmental groups have welcomed the ban, there has been considerable reluctance by developed countries to ratify the ban amendment. The main reason for opposition relates to the economic impact of a total ban on exports of hazardous waste to developing countries for recycling. The ban amendment has been a further disincentive for ratification of the Basel Convention by the United States. After the ban decision, the US Chamber of Commerce opposed ratification on the ground that a ban on recyclables would cost the US \$2.2 billion a year. ^[61]

Australia also conducts a considerable trade in hazardous wastes. In 1994 and 1995, studies were carried out to determine the extent of this trade. The studies classified countries according to their OECD status. For the purposes of identifying imports and exports of hazardous wastes for recovery, the investigation of trade was confined to the OECD red and amber lists.^[62]

The 1994^[63] study of Australian trade in hazardous wastes made the following findings:

. In 1993, Australia exported \$121 million worth of hazardous wastes:

. Of these exports, \$99 million went to OECD countries and \$22 million to non-OECD countries (India, China, Indonesia, Korea, Malaysia and the Philippines). Exports to China totalled approximately \$5 million (mercury \$5 million and lead acid batteries \$175,000);

The 1993 trade study was updated in 1995.^[64] The study found that Australia's exports of amber listed wastes in 1994/95 amounted to \$48.3 million. Of this amount, exports worth \$18.56 million were traded with non-OECD countries and exports worth \$29.74 million were traded with OECD countries.

The survey found no exports or imports intended only for final disposal. The study also investigated the impact on Australian trade, should certain substances currently listed as green by the OECD be included in Annex I to the Basel Convention and be classified as hazardous waste. It was estimated that Australia exported \$63.8 million worth of *other possible Basel substances* to non-OECD countries, mainly India, Indonesia, China, and other Asian countries. Although the Technical Working Group of the Basel Convention has recently compiled lists of wastes which are characterised as hazardous for the purposes of the Basel Convention, the impact on Australia's trade is still uncertain, since the wastes on the C-list are yet to be classified.^[65]

The conclusions to be drawn from this survey is that Australia has a very lucrative trade in hazardous waste with both OECD and non-OECD countries. The studies show that Australia stands to lose considerable revenue if the ban amendment is implemented so as to preclude further trade with developing countries.

B The Environmental Consequences of Exporting Hazardous Waste to Developing Countries for Recycling

Recycling is one of the activities promoted by Agenda 21 to achieve sustainable development. Agenda 21 recommends that: 'States should encourage industry to exercise environmentally responsible care through hazardous waste reduction and by ensuring environmentally sound re-use, recycling and recovery of hazardous wastes...'^[66] To

the extent that hazardous wastes are not recycled, they require disposal. In addition, recycling cuts down on the use of virgin resources. There is also a need, acknowledged by the Basel Convention, to permit hazardous waste exports which are required as a raw material for recycling or recovery industries in the importing state.[67] Although these arguments have considerable force, they are generally outweighed by the dangers of exporting hazardous waste to developing countries who frequently lack the capacity to handle these wastes safely. There are many documented examples of adverse effects to human health and the environment resulting from exports of hazardous waste to developing countries for recycling. Some of the impacts of Australian exports of hazardous waste for recycling are considered below.

Australia exported large quantities of lead battery waste to Asian countries, such as the Philippines, Taiwan, Thailand, Hong Kong, Indonesia, Japan, New Zealand and Papua New Guinea for recycling in 1992.[68] Greenpeace reports that the majority of these exports were not dealt with in an environmentally sound manner and have resulted in damage to human health and the environment in Indonesia, Thailand and the Philippines.[69]

Australia has continued to export hazardous wastes to developing countries for recycling. According to the Australian Bureau of statistics, in 1996 Australia exported at least 8569 tons of hazardous waste and 1.3 million scrap batteries to non-OECD or developing countries. India was the leading destination, followed by Indonesia, the Philippines and China.[70] Greenpeace has found that these wastes are generally not being handled in an environmentally sound manner in the country of import. Many recycling plants have been found to be unsafe, including a facility promoted as a 'model' for others to follow, by the Indian Ministry of Forests and the Environment.[71]

Greenpeace research in the Philippines into imports of lead acid batteries has revealed that even legitimate hazardous waste recycling operations being promoted by the Philippine government are polluting the environment with toxic emissions, and in many cases creating residual hazardous waste more toxic than the original waste.[72] During 1993-1996, Singapore, Saudi Arabia and Australia have emerged as the top three major exporters of drained or undrained scrap batteries to the Philippines.[73] Greenpeace recently investigated a lead smelting recycling plant in the Philippines following reports of increases in health problems of people living near the factory.[74] These complaints included nausea, burning eyes, sore throats and various respiratory ailments. Greenpeace, in coordination with experts from the University of the Philippines College of Public Health, conducted tests on the blood lead levels of children in the area. The study revealed blood lead levels ranging from 8 ug/dl (micrograms per deciliter) to as high as 29 ug/dl.[75] Australia recommends that children should have blood lead levels of less than 10 ug/dl. Blood lead levels as low as 10 Ug/dl cause problems such as decreased intelligence, impaired hearing and stunted growth.[76] Samples of soil, river sediment and vegetation near the recycling plant revealed lead levels greatly exceeding permissible limits in Australia.[77]

C Will the Ban Amendment Succeed in Stopping the Hazardous Waste Trade to Developing Countries?

The ban on hazardous waste in recycling has not yet come into force. As of April 1998, only nine states, including the European Community had ratified the ban and consequently it may be some time before the ban comes effective.

However, even when the ban comes into force, there is some doubt as to whether the ban will actually achieve its objective of putting an end to the hazardous waste trade with developing countries.[78] These concerns have arisen because of the assertion by Australia and other states that it will be possible to continue trade in hazardous wastes with non-OECD countries after the ban comes into force, by negotiating bilateral, multilateral or regional agreements pursuant to Article 11 of the Basel Convention. The possibility of using Article 11 agreements to circumvent the ban is considered below.

1 Bilateral, Multilateral and Regional Agreements to Facilitate Hazardous Waste Exports

Article 11 of the Basel Convention permits agreements or arrangements regarding the transboundary movement of hazardous wastes with Parties or non-Parties, provided that such agreements do not derogate from the environmentally sound management of waste as required by the Basel Convention, taking into account the interests of developing countries. The Australian legislation affords an interesting example of how Article 11 agreements can operate in the domestic context.

In 1989 the Australian Government introduced the *Hazardous Waste (Regulation of Exports and Imports) Act* for the purpose of giving effect to the Basel Convention[79]. This Act was drastically amended by the *Hazardous Waste (Regulation of Exports and Imports) Amendment Act 1996*. [80]

The Australian legislation[81] provides for bilateral, multilateral or regional arrangements of a kind mentioned in Article 11 of the Basel Convention. The intention is to enable the Commonwealth to:

- (1) make arrangements for Australian companies to trade in hazardous wastes with persons in non-party states under agreed terms and conditions which conform with the requirements of Article 11 of the Basel Convention ; and/or
- (2) formulate mechanisms which are different to the procedures outlined in the specific provisions of the Basel Convention but which facilitate environmentally sound trade in hazardous waste between parties to the Basel Convention.[82]

To enable trade in hazardous waste to continue with states who are not parties to the Basel Convention, the *Hazardous Waste (Regulation of Exports and Imports) Amendment Act 1996* introduces a comprehensive permitting system to regulate the transboundary movements of hazardous waste. Two types of permits are provided for, 'Basel' permits and 'special' permits. 'Basel' permits are required for transboundary movements of hazardous waste with Basel parties under the general requirements of the Basel Convention. 'Special' permits refer to permits issued under Article 11 arrangements under the Basel Convention.[83] Australian hazardous waste traders with countries such as the United States, (which is not a Basel party), are ineligible for 'Basel permits' to either export or import waste. However, since Australia and the United States are OECD members, a 'special' permit could be obtained pursuant to an Article 11 agreement to which both countries are parties ie the *Decision of the Council C (02)93/FINAL, concerning the control of transfrontier movements of wastes destined for recovery operations*. This decision is a binding arrangement among OECD countries designed to expedite trade in hazardous recyclables between member countries.

The *Hazardous Waste (Regulation of Exports and Imports) Amendment Act 1996* does not incorporate the ban amendment. However, the Australian view is that Article 11 agreements can be used to continue trade in hazardous waste with developing countries even after the ban comes into force.[84]

2 The Legitimacy of Circumventing the Ban Amendment through Article 11 Agreements

To establish the validity of claims by Australia and other states that the ban amendment can be circumvented by Article 11 agreements, it is necessary to examine the requirements for these agreements under the Basel Convention.

(a) The Requirement of Environmentally Sound Management of Wastes

Agreements or arrangements under Article 11 are only permitted if they 'do not derogate from the environmentally sound management of waste as required by the Basel Convention.' It is unclear whether a narrow or broad interpretation of 'environmentally sound' should apply. Under a narrow interpretation, an agreement will meet this criteria if it includes a requirement of 'environmentally sound management' derived from the definition in Article 2.8 of the Basel Convention. This definition is very general and is likely to impose few restrictions on states who wish to use Article 11 arrangements to conduct transboundary trade in hazardous waste. It is submitted that the better view is that a broad interpretation should be adopted and that an Article 11 agreement should be consistent with the requirements of the Basel Convention including the ban amendment when it comes into force. Support for this approach can be found in the draft guidelines for Article 11 agreements which specify that 'the provisions of the Basel Convention are minimum requirements in any [Article 11] agreement or arrangement'.[85] Kummer[86] also supports a broad interpretation of 'environmentally sound management' and suggests that to meet these requirements, an agreement of the kind mentioned in Article 11 should conform to objective standards and address the following matters:

- (1) the promotion of waste minimisation and application of the proximity principle;
- (2) adherence to the principle of environmental justice, ie, objective standards should apply whatever the place of disposal;
- (3) where transboundary movements of waste are permitted, the provision of a control system under which all potentially affected states have an informed role in the decision as to whether the transboundary movement should take place;
- (4) provision for environmentally sound disposal of waste in the event of an illegal transaction.[87]

On this approach, agreements purporting to circumvent the ban would not be valid agreements under Article 11 of the Basel Convention since they would not be consistent with the requirements imposed by the Convention.

(b) The Requirement to Consider the Interests of Developing Countries

Article 11 makes special reference to developing countries. It requires any agreements to 'stipulate provisions which are not less environmentally sound than those provided for by this Convention in particular *taking into account the interests of developing countries*'. The specific reference to developing countries could be construed as permitting

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environmental protection than the Basel Convention on the basis that sufficient protection exists at the national level.[88] It is submitted that this interpretation is not intended and that the general requirements of the Basel Convention should be included in all Article 11 agreements. However, where agreements involve hazardous waste transfers to developing countries, stricter mechanisms than those applying to developed countries should be imposed, to allow for the limited capacity of those states to monitor the shipments, and to manage the wastes in an environmentally sound manner.[89] Support for this view is found in the ban amendment which limits membership of Annex VII to OECD states. This division is not arbitrary, but based on an assessment by the international community that these states are the only states currently capable of managing hazardous wastes in an environmentally sound manner. To permit states to negotiate Article 11 agreements with developing countries based on their own assessment of the capacity of the state to handle the wastes in an environmentally sound manner would be inconsistent with the ban amendment and Annex VII. Furthermore, it would be difficult for any exporting state to make this assessment, given that any on-site investigations may be regarded as intrusive and an infringement of sovereignty.

The vulnerability of developing countries is reflected in the decision by the Basel parties to insert a new preambular paragraph into the Convention concurrently with the adoption of the ban amendment. The new provision is as follows:

'Recognizing that transboundary movements of hazardous wastes, especially to developing countries, have a high risk of not constituting an environmentally sound management of hazardous wastes as required by the Convention'.[90]

This amendment is an unequivocal acknowledgment by the international community of the dangers associated with exports of hazardous wastes to developing countries and the intention to put an end to this form of environmental injustice. The amendment recognises that developed countries should bear the economic burden of their own hazardous waste generation and that these responsibilities cannot be transferred to developing countries where labour is cheap and environmental standards almost non-existent.

(c) The Legality of Agreements to Circumvent the Ban

One of the most controversial issues surrounding the ban is the question of what is an appropriate legal use of Article 11 agreements, in particular, the legality of using these agreements to circumvent the ban amendment. There is no explicit reference to the possibility to conclude bilateral, multilateral or regional agreements, or to Article 11, in the new Article 4A amendment, nor was any final decision taken on this issue at the Third or Fourth Meeting of the Conference of the Parties. The preamble to the ban amendment notes that the parties have agreed to develop technical guidelines to assist states in concluding Article 11 agreements.[91] This has been interpreted by some countries, including Australia, to support the view that Annex VII states (OECD states) can continue some trade in recyclables with non-Annex VII states (non-OECD countries) after the ban amendment becomes effective.

A legal opinion on this issue obtained by the European Community[92] concludes that it will not be permissible to continue trade in hazardous waste under an Article 11 agreement between parties listed in Annex VII (OECD states) and parties or other states not listed (non-OECD states), once the ban comes into force. The opinion points out that Article 4A has been inserted into the Basel Convention after Article 4 and thereby creates an obligation for parties, in addition to the general obligation laid down in Article 4, paragraph 5, to prohibit exports to non-parties. Article 11 provides for an exception to the general obligation on trade with a non-party, provided the agreement is no less environmentally sound than the provisions of the Basel Convention. However, it does not relate in any way to the new Article 4A and does not therefore provide an exception to the obligation for OECD states to prohibit exports of hazardous wastes to all non-OECD countries.

The view that Article 11 agreements can not be used to circumvent the ban amendment would seem to reflect the intention of the Basel parties. If exceptions to the ban were to be permitted they would have been included in the ban amendment. This view is reinforced by the decision taken at the Fourth Meeting of the Conference of Parties to the Basel Convention to continue to restrict membership of Annex VII to OECD countries.[93]

On this interpretation, after the ban comes into force, the only possibilities to conclude a valid Article 11 agreement to export hazardous wastes would be:

- (1) between an OECD state and another OECD State;
- (2) between a non-OECD state and another non-OECD State;
- (3) between an OECD state and a non-OECD State, but only in respect of exports from the latter to the former.[94]

It is interesting to note that the ban on exports of hazardous waste to developing countries does not apply to exports from other developing countries. Consequently, a non-OECD country such as Singapore could conclude a bilateral agreement with another non-OECD state, such as India, to receive hazardous waste provided Singapore is satisfied such exports will not derogate from the principles of environmental management envisaged by the Basel Convention. Critics of the ban would argue that developing countries are far less equipped to judge the technological capacity of the importing country than a developed country. Although there may be force in this argument, it misses the point of the ban, which is to eliminate the injustice of richer countries transferring the burden of waste which they have generated, to poorer developing countries. In addition, the extent of trade between developing countries is likely to be minimal, considering that their total annual production of hazardous wastes is only about 10% of worldwide generation.[95]

3 Is Australia Bound by the Ban Amendment?

Australia was one of 82 Parties who voted in favour of the ban but has yet to decide whether to ratify the amendment. Until it has done so, Australia will not be legally bound to observe the trade ban.

It is also clear that if Australia does ratify the ban amendment, it would not be binding in Australia until domestic legislation is enacted to implement the ban. This view was affirmed in *Minister for Immigration and Ethnic Affairs v Teoh*. [96] However, a majority of the High Court held that ratification of a convention by Australia creates a 'legitimate expectation' that the Executive Government and its agencies will act in accordance with the terms of the Convention, even where those terms have not been incorporated into Australian law. To overcome the effects of this decision, the Commonwealth government has introduced the *Administrative Decisions (Effect of International Instruments) Bill* 1997. The Bill provides relevantly that the fact that Australia is bound by a particular international instrument does not give rise to a legitimate expectation of a kind that might provide a basis at law for invalidating an administrative decision.

However, even if Australia is not legally bound by the ban amendment, the view that trade with developing countries can continue unaffected under an Article 11 agreement after the ban amendment comes into force, seems unduly optimistic. Kummer points out that:

'On the political front, the conclusion of such an agreement would be very difficult to justify, as it would go against the conviction of a large proportion of the international community'. [97]

The ratification of the ban amendment by the European Union may also place considerable pressure on Australia to desist from using Article 11 agreements to circumvent the ban. [98]

4 Beyond the Ban

The ban is a necessary first step in the overarching objective of the Basel Convention to reduce the generation of hazardous waste to a minimum. [99] Until the ban comes into force, there will be no incentives to reduce the generation of hazardous waste, particularly since it generates considerable revenue for developed countries. Once the ban is in place, developed countries will be obliged to develop and adopt clean production technology. Clean production envisages ecological compatibility throughout the lifetime of a product. Developed countries have a responsibility to train developing countries and to facilitate technology transfers. [100] This was recognised at the Fourth Meeting of the Conference of the Parties. [101]

The emphasis on the international regulation of hazardous wastes is likely to change in the next decade. In anticipation of the ban, and other economic factors, developed country industries are relocating to developing countries where environmental standards are lower or non-existent. The products are then being shipped to the home country where consumers enjoy the benefit of the product while shifting the environmental costs to developing countries. Greenpeace is investigating a shift of new organochloride related industries from developed to developing countries and have identified at least fifty new facilities in Brazil, India, Indonesia and Thailand. [102] Consequently, in future the environmental justice debate in relation to the management of hazardous waste in developing countries is likely to focus more on requiring cleaner production methods.

CONCLUSION

Environmental justice requires that a country should be exposed to approbation if its environmental performance is less stringent in relation to poor populations or developing countries. The export of hazardous waste for disposal in developing countries represents a failure of environmental justice on a global scale. It places a disproportionate burden on poor countries and threatens human health and the environment. The Basel Convention is an important first step in achieving environmental justice for developing countries. Admittedly, it falls short of this objective in a number of respects. The ban amendment is designed to compel industrialized countries to deal with their own hazardous wastes and to discourage them from exporting it to countries who lack the facilities to deal with it safely. Ideally, this will prove an incentive for waste minimisation and clean production technology. How effective the ban will prove in practice has yet to be seen. However, there are already indications that some countries, including Australia, propose to circumvent the export ban through concluding Article 11 agreements. This interpretation does not seem to accord with the provisions or spirit of the Basel Convention. A major challenge for the future will be to see that the ban is enforced and implemented so as to put an end to this form of environmental injustice.

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[2] Based on a United Nations Environment Programme (UNEP) report in Greenpeace, *Heavy Burden - A Case Study on Lead Waste Imports Into India*, Greenpeace International Toxics Campaign, March 1997, p 4.

[3] Kummer, *International Management of Hazardous Wastes*, Clarendon Press Oxford 1995, p 10.

[4] H R Marbury "Global Environmental Racism" (1995) 28 *Vanderbilt Journal of Transnational Law* 251 at 293.

[5]. OECD Waste Management Policy Group, *Working Paper No 3 for the 37th Meeting*, (March 1993); Doc UNEP/CHW 2/12 (17 December 1993).

[6] See Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Reproduced in (1989) 28(3) ILM 652.

[7] See Marbury op cit 292.

[8] US Environmental Protection Agency - environmental homepage (www.epa.gov/swerops/ej/index.html).

[9] Executive Order No 12,898, (1994) 59 Fed Reg 7629.

[10] Marbury op cit at 291.

[11] World Commission on Environment and Development *Our Common Future* Oxford 1987, 8.

[12] Ibid 330.

[13] *Agenda 21: Programme of Action for Sustainable Development*, Rio Declaration on Environmental Development, UN Conference on Environmental Development UN Doc A/C.151/26 (1992), Ch 20.1. Agenda 21 is a program of action for sustainable development agreed to by all governments at the UN Conference in Rio de Janeiro in 1992.

[14] A Vir "Toxic Trade with Africa" (1989) 23(1) *Environment, Science & Technology Journal* 24 at 25.

[15] Ibid.

[16] Ibid.

[17] J Vidal, "A Gaffe Over the GEF", *Guardian* (London), Feb 14 1992, at 29.

[18] D Henwood, "Toxic Banking; World Bank's Environmental and Global Policies," (1992) 250 *Nation*, 257.

[19] Henwood op cit 253.

[20] Ibid.

[21] Kummer op cit pp 6-7.

[22] Ibid.

[23] S Porterfield & D Weir, "The Export of US Toxic Waste" (1989) *Nation*, 245 at 344 quoting a statement made in 1983 by Representative James Florio, D-New Jersey.

[24] *Agenda 21* op cit, Ch 20.7(b).

[25] Decision II/12 (1994).

[26] 'Wastes' are defined in the Basel Convention as 'substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.' 'Disposal' is very broadly defined in Article 2 to mean any operation specified in Annex IV to the Basel Convention. Annex IV divides disposal operations into two categories. Section A deals with operations leading to final disposal and which do not lead to the possibility of recycling or re-use. Section B encompasses operations which may lead to resource recovery, recycling, reclamation, re-use or alternative uses in respect of materials considered to be hazardous wastes under the

Basel Convention and which would otherwise have been destined for final disposal.

[27] Article 1.1(b). It should be noted that radioactive wastes and wastes discharged from ships are excluded from the scope of the Convention as they are covered by other international legal instruments: Article 1.3.

[28] Article 4.2(), 4(2)(d).

[29] Article 4.1(a), (b), (e).

[30] Article 4.5.

[31] Article 4.9.

[32] Articles 6 and 7;

[33] Articles 4.2(e), (g).

[34] Article 8.

[35] Article 9.5.

[36] Greenpeace, *Lead Astray: the Poisonous Lead Battery Waste Trade*, A Greenpeace Report, (1994) 6.

[37] J Kitt, "Waste Exports to the Developing World: A Global Response, (1995) 7 *Georgetown International Environmental Law Review* 485 at 512.

[38] In Decision IV/19 (1998), at Kuching, the Fourth Meeting of the Conference of the Parties acknowledged the progress made towards developing a Draft Protocol and requested the Ad Hoc Working Group to finalise it for consideration and adoption by the Fifth Meeting of the Conference of the Parties.

[39] Decision III/12 (1995).

[40] Fourth Meeting of the Conference of the Parties, Kuching, 23-27 February 1998, UNEP/CHW.4/35 Decision IV/9.

[41] Articles 4. 2(b), (d), (e), (g), 4.8, 4.9(a), 4.10; 8; 11.1, 11.2.

[42] Article 2.8.

[43] P W Birnie & A E Boyle, *International Law and the Environment*, Clarendon Press, Oxford, 1992, p 332.

[44] Article 4.9(a).

[45] Article 4.9(b).

[46] Articles 6 and 7;

[47] Kummer op cit p 82.

[48] OAU Council of Ministers Resolution on Dumping of Nuclear and Industrial Waste in Africa, 23 May 1988, reproduced in (1989) 28 *ILM* 567.

[49] The Bamako Convention was adopted on 29 January 1991 in Bamako and came into force on 22 April 1998.

[50] Article 4.1.

[51] CP Wallace "Asia Tires of Being the Toxic Waste Dumping Ground for the Rest of the World" LA Times March 23 1994 at A16.

[52] Greenpeace, *The Waste Invasion of Asia*, A Greenpeace Inventory, Executive Summary (1994). Example of regional agreements are: the *Lome Convention* between the European Community and the 69 African, Caribbean and Pacific states adopted at Lome on 15 December 1989 - it prohibited the EU from exporting nuclear or hazardous wastes to the ACP countries, who in turn agreed to prohibit such wastes from any other country; the Central American agreement on Hazardous Waste - 6 states banned all imports of hazardous wastes, Panama 9-11 April 1992; the *Waigani Convention to Ban the Importation into Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region*, adopted in Papua New Guinea, September 1995 - bans the import of hazardous and nuclear wastes, and so forth.

[53] The Association of SE Asian Nations (ASEAN) issued a Joint Communique at the ASEAN inter-Parliamentary organisation's 14th working committee and General Assembly, Kuala Lumpur, 20-25 September 1993 voting for a Regional Convention to prohibit imports but this has not yet occurred.

[54] Greenpeace, *The Waste Invasion of Asia*, op cit, Executive Summary.

[55] Decision II/12 (1994).

[56] Decision III/1 (1995).

[57] Greenpeace, *Lead Overload*, A Greenpeace Report, p 4.

[58] Decision Regarding Annex VII UNEP/CHW.4/CRP 27 February 1998.

[59] Greenpeace, *Lead Overload*, op cit, p 3.

[60] Ibid.

[61] "Chamber of Commerce Withdraws Support for Treaty on Waste Movement", (1994) 25 *Envtl Rep* (BNA), n 194.

[62] The OECD *Decision of the Council C (02)93/FINAL, concerning the control of transfrontier movements of wastes destined for recovery operations* provides a streamlined mechanism for identifying which substances will be regarded as hazardous wastes among OECD countries and for distinguishing those by means of a red, amber or green listing as follows:

. that, because of their significant toxicity, cannot be traded except for final disposal and with express prior consent ("red"-listed substances);

. that, because of their moderate toxicity, can be traded for recycling or recovery provided there is prior informed consent ("amber"-listed); and

. that, because of their low or marginal toxicity, can be freely traded unless an importing country expressly rejects the proposed imports ("green"-listed).

The OECD red and amber lists of wastes are considered to correspond closely to the wastes encompassed by the Basel Convention Annexes.

[63] Thompson Environmental Services & ACIL Economics & Policy Pty Ltd, *Assessment of Australian Trade in Hazardous Wastes for Recovery*, Report to the Commonwealth Environment Protection Agency, April 1994.

[64] Thompson Environmental Services, *Assessment of Australian Trade in hazardous Wastes*, August 1995.

[65] Draft Position Paper on Hazard Characterization and Classification of Wastes within the Framework of the Basel Convention (UNEP/CHW.4/2) adopted at Fourth Meeting of the Conference of the Parties, February 1998.

[66] Agenda 21, op cit, par 2, ch 20.17(d).

[67] Article 2.9(b).

[68] Greenpeace, *Lead Astray: the Poisonous Lead Battery Waste Trade*, a Greenpeace Report, (1994) p 4.

[69] Ibid, p 3.

[70] Greenpeace Media Release, "Australia the Mucky Country - Hazardous Waste Trade Continues, 24 February 1997, p 1.

[71] Greenpeace, *Heavy Burden - A Case Study on Lead Waste Imports Into India*, Greenpeace International Toxics Campaign, (1997), p 6.

[72] Greenpeace, *Lead Overload*, op cit, p 2.

[73] Ibid, p 7.

[74] Greenpeace, *Heavy Burden*, op cit, p 6.

[75] Ibid.

[76] Ibid.

[77] Ibid.

[78] It has been argued that a ban on the legal hazardous waste trade will promote the development of illegal trade. If this view is correct, it cannot be regarded as a justification for not imposing a ban on legal trade.

[79] The *Hazardous Waste (Regulation of Exports and Imports) Act 1989* came into force in July 1990.

[80] The *Hazardous Waste (Regulation of Exports and Imports) Amendment Act 1996* commenced in December 1996.

[81] These provisions were inserted by the *Hazardous Waste (Regulation of Exports and Imports) Amendment Act 1996*, ss 4C, 13C-13E).

[82] See Explanatory Memorandum on the *Hazardous Waste (Regulation of Exports and Imports) Amendment Bill* to Parliament of the Commonwealth of Australia (1995), 16.

[83] *Hazardous Waste (Regulation of Exports and Imports) Act 1989*, ss 13C, 13D, 13E.

[84] "Australian Plenary Statement to the Basel Convention Fourth Conference of Parties", Environment Australia, 23-27 February 1998, p 5.

[85] UNEP/CHW.4/33, Technical Working Group, "Draft Guidance Elements for Bilateral, Multilateral or Regional Agreements or Arrangements", 24 July 1997, p 2. The Draft Guidance was presented at the Fourth Meeting of the Conference of the Parties to the Basel Convention in 1998 and is to be elaborated for adoption at the Fifth Meeting of the Conference of the Parties.

[86] Kummer, op cit, p 92.

- [87] Ibid.
- [88] Ibid, p 93.
- [89] Ibid.
- [90] New preambular par. 7 bis inserted by Decision III/1 (1995).
- [91] See Decision III/1 (1995).
- [92] The opinion is set out in a letter from L Kramer, Head of Unit of European Commission's Directorate-General on Environment, Nuclear Safety and Civil Protection to Dr I Rummerl-Bulska, Executive Secretary of the Basel Convention on 8 February 1996.
- [93] Decision IV/8 (1998), UNEP/CHW.4/35.
- [94] Ibid.
- [95] Kummer, op cit, p 10.
- [96] (1995) 183 CLR 273.
- [97] K Kummer , *Transboundary Movements of Hazardous Waste at the Interface of Environment and Trade*, UNEP, Geneva 1994, p 57.
- [98] On 20 January 1997, the 15 member states of the EU amended their legislation so as to incorporate Decisions II/12 and III/1 of the Basel Convention. The EU made it clear that Article 11 agreements that would circumvent the ban on hazardous waste exports from EU to non-OECD State will no longer be possible after 1 January 1998. The amendment also terminates existing arrangements from EU to non-OECD States as of 1 January 1998 whether concluded at EU level or by individual member states:<http://www/greenpeace.org/~comms/97/toxic/cop4key.html>.
- [99] Basel Convention, Preamble.
- [100] Basel Convention, Articles 10, 14.
- [101] Decision IV/18 (1998).
- [102] L Finaldi, "Chlorine Chemistry: Coming Soon to A Factory Near You!" (1993) 6(3), *Toxic Trade Update*, 27-28.