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THE TRAFIGURA CASE AND THE SYSTEM OF PRIOR INFORMED CONSENT
UNDER THE BASEL CONVENTION – A BROKEN SYSTEM?

Gary Cox

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House II, 1F, 7 Chemin de Balexert, 1219 Châtelaine-Geneva, Switzerland, Tel/fax: + 41 (0)22 79 72 623, info@lead-journal.org*

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Dr Gary Cox, International Environmental Planning Consultant, 9 Colour House, 7 Bell Yard Mews,
London SE1 3UA, United Kingdom, Email: gary.cox@garycoxconsulting.com

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1

INTRODUCTION

The principle of prior informed consent was first established in United States legislation regulating toxic waste, specifically the Toxic Substances Control Act of 1976.¹ This principle forms the keystone of the 1989 Basel Convention on the Transboundary Movement of Hazardous Wastes and a number of other highly significant multilateral environmental agreements. The central objective of the Basel Convention is to regulate the international trade in hazardous waste in order to protect human health and the environment. The primary regulatory mechanism to achieve this is the system of prior informed consent (PIC). There have been major questions as to the efficacy of the PIC procedure to effect the objectives of the Convention and to safeguard developing countries from the health and environmental impacts of this growing international trade. Trade bans have been instigated under both the Bamako Convention and the Basel Convention as well as by the European Union and the OECD. The economic impact of these bans on developing countries is an issue that complicates the effective development of regulatory and compliance regimes.

This article will focus on the development of the Basel Convention and its system of PIC. It will compare the effectiveness of the procedures under the Basel Convention with those established under other multilateral environmental agreements. It will examine the development of international trade in hazardous waste with particular reference to North-South trade movements. The politics around both hazardous waste trade and ban amendments will be critically appraised in order to shed light on some of the key issues and tensions. The recent *Trafigura* case relating to the illegal dumping of hazardous petrochemical waste in Côte d'Ivoire will be analysed in order to highlight some of the flaws in the existing system. Conclusions will be drawn regarding the central question of this article regarding the effectiveness of PIC procedures in an ever more complex trade between North and South and

1 M. Nakagawa, 'Overview of Prior Informed Consent from an International Perspective', 4 *Sustainable Development Law and Policy* 4 (2004).

between South and South. Finally, some suggestions for reform will be made with reference to the recent simultaneous extraordinary meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions.

2

A GRIM HISTORY OF HAZARDOUS WASTE INCIDENTS

The late 1970s and early 1980s witnessed a series of headline grabbing industrial accidents involving highly hazardous chemicals and leakages of radioactive material. The first was the Seveso incident in Italy in July 1976, which involved the release of the highly toxic chemical TCDD or dioxin. In December 1984, a large quantity of another toxin, MIC or methyl isocyanate, escaped from the Union Carbide plant in Bhopal, India. The most far-reaching was the explosion in the Chernobyl nuclear power plant in the then USSR in April 1986, causing radioactive fall-out across many European countries.² These incidents, though not involving the transport of hazardous waste, established that both hazardous industrial practices and hazardous substances necessitated a worldwide interdependent regulatory regime.³

Coinciding with these incidents, production of chemicals across the world had increased rapidly. According to UNEP's International Register for Potentially Toxic Chemicals, the total volume of organic chemicals produced globally had increased from around seven million tonnes in 1950 to over 250 million tonnes in 1985.⁴ Hazardous waste production is likely to have

2 V.P. Nanda and B.C. Bailey, 'Nature and Scope of the Problem', in G. Handl and R.E. Lutz eds, *Transferring Hazardous Technologies and Substances: The International Challenge* 3, 3-16 (London: Graham & Trotman, 1989).

3 G. Handl and R.E. Lutz, 'The Transboundary Trade in Hazardous Technologies and Substances from a Policy Perspective', in Handl and Lutz eds, note 2 above at 41-42.

4 K. Kummer, *International Management of Hazardous Wastes: The Basel Convention and Related Rules* 6 (Oxford: Clarendon Press, 1995). The International Register for Potentially Toxic Chemicals (IRPTC) was established by UNEP in 1976 following a recommendation of the 1972 United Nations Conference on the Human Environment held in Stockholm.

mirrored this growth; however, accurate and comprehensive data for this period is difficult to obtain. According to Kummer, in the early 1990s, ten per cent of hazardous waste was shipped across international borders resulting in one cargo of hazardous waste crossing a frontier within the OECD every five minutes.⁵

The root cause of this international trade has been identified by a number of commentators as being the adoption of more stringent environmental regulations in OECD countries, particularly Europe and the USA.⁶ Related to this, the costs of hazardous waste treatment in countries of the North increased exponentially between the 1970s and early 1990s. Asante-Duah and Nagy cite costs for sludge incineration for the USA over this period increasing from US\$50 per tonne to US\$2600 per tonne. By contrast, they cite costs for hazardous waste disposal in the 1990s in some African countries as being no more than US\$50 per tonne and even US\$5 per tonne in some cases.⁷ Kummer recognised that this increase in international hazardous waste trade had diverse causes but grouped them into three categories: (i) waste following the 'path of least resistance' related to less stringent environmental regulations, less public opposition and least cost; (ii) waste transfer amongst neighbouring states with generally equivalent environmental regulations in order to benefit from the most feasible technically superior disposal option; and (iii) wastes with value as secondary raw materials, including the trade in recyclable waste, resource reclamation and resource recovery (usually for energy).⁸

The late 1980s saw a series of incidents in Africa, which highlighted the poor treatment and management of hazardous waste shipments originating from OECD countries. The most prominent example was the incident in Koko, Nigeria, in 1988. A local farmer rented out his land for US\$100 a month to an Italian company ostensibly for the storage of fertiliser only to discover

the barrels contained polychlorinated biphenols or PCBs and asbestos fibres. A similar incident occurred in 1986 in Guinea-Bissau where highly toxic incinerator ash from Philadelphia was dumped on an open-air site. This was after a number of unsuccessful attempts to unload the consignment in Caribbean states. The Guinean-Norwegian firm who imported the waste claimed it was raw material for bricks.⁹ This pattern of deliberate mislabelling was a recurring feature of the trade in hazardous waste at the time, particularly to less developed countries.¹⁰

3

DEVELOPING COUNTRIES AND THE HAZARDOUS WASTE TRADE

3.1 Data on Hazardous Waste Imports

An abiding feature of the international trade in hazardous waste is the lack of reliable information on the quantities and composition of hazardous waste generation and transboundary movements. The data that exists is typically incomplete and inconsistent, which renders time series comparisons difficult if not speculative.¹¹ The most recent data set compiled by the Secretariat of the Basel Convention highlights these problems. The data is compiled from reports from parties to the Convention, and hence omits the USA as a non-party, although a major generator of hazardous waste.¹² Over half of the reporting parties submit estimates or provide nil returns or simply do not report.

⁵ *Id.*, at 5.

⁶ J. Clapp, 'Africa and the International Toxic Waste Trade', in M.K. Tesi ed, *The Environment and Development in Africa* 103,104 (Oxford: Lexington Books, 2000) and D.A. Wirth, 'Hazardous Substances and Activities', in D. Bodansky, J. Brunnée and E. Hey eds, *The Oxford Handbook of International Environmental Law* 394, 412 (Oxford: Oxford University Press, 1st ed. 2008).

⁷ D.K. Asante-Duah and I.V. Nagy, *International Trade in Hazardous Waste* 3 (London: E & FN Spon, 1998).

⁸ See Kummer, note 4 above at 6-10.

⁹ See Clapp, note 6 above at 105; and J. Clapp, *Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries* 32-38 (New York: Cornell University Press, 2001). The two incidents are often referred to by the names of the vessels involved: the *Karin B* and the *Khian Sea* respectively.

¹⁰ *Id.*, at 36.

¹¹ See Asante-Duah and Nagy, note 7 above at 72.

¹² In 1995, the USA exported a total of 205,381 tonnes of hazardous waste; 109,783 tonnes to Canada, 94,718 tonnes to Mexico, and 881 tonnes elsewhere. Cited in L.T. Belenky, 'Cradle to Border: US Hazardous Waste Export Regulations and International Law', 17 *Berkeley Journal of International Law* 95, 101 (1999).

Total waste generated from all parties is reported as being 260.3 million tonnes in 2004, 77.6 million tonnes in 2005, and 76.4 million tonnes in 2006. The sharp decline is partly attributable to the fact that Kazakhstan reported generating 146.1 million tonnes in 2004 and thereafter did not report. Total exports were reported as 7.0, 6.5 and 8.3 million tonnes for each of the three years. Imports were reported as 7.1, 8.0 and 8.8 million tonnes respectively.¹³

Reliable data linking country of export and country of import is even more problematic. Most studies quote

anecdotal reports and obviously illegal traffic is even more difficult to estimate.¹⁴ The three most recent datasets available from the Basel Secretariat have been analysed and presented in the table below. The major consignments of transboundary movements are to or within the European Union, particularly involving Germany, Belgium and France. Non-OECD parties are mainly economies in transition. Malaysia stands out as the main developing country party receiving hazardous waste imports.

Import of Hazardous Wastes (tonnes, as reported by Parties)			
	2004	2005	2006
Azerbaijan	-	4,483	-
Belarus	534,659	591,374	600,223
Bulgaria	47,760	9,300	-
Estonia	4,721	9,360	9,889
Israel	5,811	5,362	10,389
Latvia	36	55	129
Malaysia	354,390	306,646	172,151
Philippines	36,036	29,590	-
Russian Federation	65,110	-	-
Singapore	-	162	205
Slovenia	25,610	23,159	22,902
Thailand	280	-	-
Ukraine	-	21,413	-
Venezuela	-	11,151	12,854
Total non-OECD Parties	1,074,413	1,012,055	828,742
Non-OECD as % of total:	15.1%	12.6%	9.5%
OECD Parties	6,053,222	7,009,158	7,930,517
Total	7,127,635	8,021,213	8,759,259

Source: Secretariat of the Basel Convention - data at 18/06/2009.

¹³ Secretariat of the Basel Convention, Data on Generation and Transboundary Movements of Hazardous Wastes (as Reported by Parties) 2004-2006 (Geneva: Secretariat of the Basel Convention and UNEP, 2009).

¹⁴ See Asante-Duah and Nagy, note 7 above at 74-80; see also Clapp, note 9 above at 59 and J. Krueger, *International Trade and the Basel Convention* 13, 17-20 (London: Earthscan and Royal Institute of International Affairs, 1999).

The above data must be viewed in conjunction with party reporting statistics. While the majority of parties submit the basic information required under Article 13(2), there is substantial and persistent under-reporting by developing country parties regarding the transboundary movement data required under Article 13(3)(b). Some parties that are known importers, such as Bangladesh, India and Nigeria, have sporadic reporting records over

Status of National Reporting Pursuant to Article 13(3) of the Basel Convention			
<i>UN Region</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
<i>Africa</i>			
Number of Parties	41	44	46
Reporting Parties	14	18	17
Proportion Reporting	34%	41%	37%
<i>Asia and Pacific</i>			
Number of Parties	42	42	42
Reporting Parties	24	18	16
Proportion Reporting	57%	43%	38%
<i>Central and Eastern Europe</i>			
Number of Parties	22	22	23
Reporting Parties	20	18	16
Proportion Reporting	91%	82%	70%
<i>Latin America and Caribbean</i>			
Number of Parties	30	30	30
Reporting Parties	19	17	17
Proportion Reporting	63%	57%	57%
<i>Western Europe and Others</i>			
Number of Parties	27	27	27
Reporting Parties	24	24	20
Proportion Reporting	89%	89%	74%
<i>Total</i>			
Number of Parties	162	165	168
Reporting Parties	101	95	86
Proportion Reporting	62%	58%	51%
Source: Secretariat of the Basel Convention - data at 28/09/2009.			

the period 1999 to 2007.¹⁵ Reporting is especially poor in Africa and the Asia-Pacific and overall only half of the parties to the Convention reported data on transboundary hazardous waste movements in 2006.

3.2 Trade and Recycling

The issue is further complicated by wastes destined for recycling, reclamation or energy recovery. These may be composed of listed hazardous wastes. It is these categories of waste that have the most economic potential for developing countries. Waste consignments may have value as secondary raw materials, such as scrap metal. The main categories of internationally traded recyclable waste materials are paper, plastics, iron, copper, aluminium and lead. In recent years, the major trade outflows of recyclable materials were from OECD countries to major Asian economies.¹⁶ There are frequent cases of improper labelling of recyclable consignments to disguise hazardous wastes, including mercury, lead-acid batteries and clinical wastes.¹⁷ There is also the more complicated case of ship breaking, which is prevalent in India and Bangladesh.¹⁸ A more recent phenomenon has been the export of waste electrical and electronic equipment (WEEE) containing a range of hazardous substances, including lead, mercury, cadmium, and hexavalent chromium.¹⁹ The

dumping of computer waste has been a growing problem for countries in West Africa, notably Nigeria, with attendant ecological and human health risks.²⁰ Hazards are often compounded by inherently hazardous recovery methods, such as open-air burning of copper cables.²¹

The question remains about whether this trade in specifically *hazardous* waste is lucrative in itself to developing countries. A number of economic studies contest the existence of a significant 'pollution haven' effect.²² This concept relates to the premise that low-income developing countries have a comparative advantage in hazardous waste disposal due to regulatory leniency and lower treatment costs.²³ These studies conclude that such factors are not the dominant determinants of the direction of trade and that OECD countries overall are net importers of hazardous waste.²⁴ However, for the confounding conditions outlined in this section, such confident conclusions are difficult to sustain. The transboundary movement of hazardous waste is a classic 'wicked problem' where conditions of perfect knowledge do not prevail, where definitions are blurred, and where the precise boundaries of the problem shift constantly.²⁵ Whilst the economic research suggests that specifically hazardous waste treatment, in contrast to waste materials recycling, may not be a lucrative industrial sector for most developing countries, the perception of quick financial gains and influential vested interests have coloured the debates and negotiations surrounding the various ban amendments.

15 Secretariat of the Basel Convention, *Basel Convention: Status of National Reporting by Parties Pursuant to Article 13(3) of the Convention 1999-2006* (Geneva: Secretariat of the Basel Convention, 28/09/2009); Secretariat of the Basel Convention, *Basel Convention: Status of National Reporting by Parties Pursuant to Article 13(3) of the Convention 2007* (Geneva: Secretariat of the Basel Convention, 20/07/2009).

16 M. Kojima, 'Current Trade Flows in Recyclable Resources', in M. Kojima ed., *International Trade of Recyclable Resources in Asia: IDE Spot Survey No.29*, 3, 3-8 (Chiba-shi, Japan: Institute of Developing Economics, 2005).

17 *Id.*, at 10-11.

18 See Clapp, note 9 above at 101-102 and S. Sonak, M. Sonak and A. Giriyan, 'Shipping Hazardous Waste: Implications for Economically Developing Countries', 8 *International Environmental Agreements* 143, 143-159 (2008). At the 12th Meeting of the Basel Convention Technical Working Group it was agreed to collaborate with the International Maritime Organization in the development of a 'step-wise approach' on the issue of the dismantling of ships. United Nations Environment Programme, Report of the Technical Working Group of the Basel Convention, Fifteenth Session, Geneva, UN Doc. UNEP/CHW/WG.4/15/12, 14 (1999).

19 D.N. Pellow, *Resisting Global Toxics: Transnational Movements for Environmental Justice* 187 (Cambridge, Massachusetts: The MIT Press, 2007).

20 Basel Action Network 2005, *The Digital Dump: Exporting Re-Use and Abuse to Africa* 6 (Seattle: The Basel Action Network and Earth Economics, 2005).

21 See Kojima, note 16 above at 11 and Basel Action Network, note 20 above at 13.

22 J. Baggs, 'International Trade in Hazardous Waste', 17 *Review of International Economics* 1 (2009) and E. Neumayer, *Greening Trade and Investment: Environmental Protection without Protectionism* 55 (London: Earthscan, 2001).

23 See Baggs, note 22 above at 2.

24 According to the Basel Secretariat data for 2004, the Netherlands is a net exporter of hazardous waste, Germany is a net importer, and France is almost balanced in volumes of imports and exports. Secretariat of the Basel Convention, Table 3: Draft Export of Hazardous and Other Wastes: As Provided By Parties 2004 and Table 4: Draft Import of Hazardous and Other Wastes: As Provided By Parties 2004 (Geneva: Secretariat of the Basel Convention, 28/08/2007 and 11/09/2007).

25 H. Rittel and M. Webber, 'Dilemmas in a General Theory of Planning', 4 *Policy Sciences* 155, 160-167 (1973).

In addition, concerns around restrictions on the highly valuable trade in recyclable materials have made common cause between some developing countries and some OECD countries around opposing more stringent restrictions on transboundary movements of hazardous waste. Some reported examples relate to the Philippine secondary lead smelting industry and the Indian secondary zinc industry.²⁶

4 THE PRINCIPLE OF PRIOR INFORMED CONSENT EMERGES

4.1 The Basel Convention

By the early 1980s, there was a nascent international consensus that the problem of the international trade in hazardous waste required concerted international action. In 1982, the UNEP Governing Council authorised a group of experts to establish a framework for the ‘transport, handling and disposal of toxic and dangerous waste’.²⁷ The work of this group led to the development of the Cairo Guidelines and Principles for the Environmentally Sound Management of Hazardous Wastes.²⁸ The guidelines adopt general principles regarding the protection of human health and the environment from hazardous waste. Principle 2 states the requirement that ‘all practicable steps’ be taken to ensure the management of hazardous waste accords

with environmental protection and international law.²⁹ The guidelines also recommend that exports of hazardous waste should not be permitted without the prior notification and prior consent of states of import and transit.³⁰

Systems of informed consent or notification first appeared in the national legislation of the USA in the 1970s. The first notice system was the Toxic Substances Control Act 1976, which required the exporter to notify the US Environmental Protection Agency and subsequently the EPA to give notice to the country of import.³¹ In recognition of the inadequacies of the existing notification procedures, Congress enacted amendments in 1984 to the Resource Conservation and Recovery Act to obligate prior written consent from a country of import in advance of shipments of hazardous waste.³² In 1987, the OECD produced a Draft International Agreement on Control of Transfrontier Movements of Hazardous Wastes. This provided that the ‘competent authority’ in the country of export receive prior informed consent documentation from the exporter, including evidence of written consent from the country of import. Significantly, the agreement provides four criteria under which an exporting state’s competent authority may prohibit the export: (i) the state of import is dissatisfied with the information supplied, (ii) the wastes are considered to be disposed of in an inadequate facility, (iii) previous exports to the same destination have been disposed of inadequately, or (iv) there is likely to be significant damage to other states.³³

At the UNEP Governing Council meeting that approved the Cairo Guidelines a proposal by Switzerland and Hungary was adopted which initiated the process for negotiating an international convention on the transboundary movement of hazardous wastes. The

²⁶ See Krueger, note 14 above at 58-61.

²⁷ UNEP Governing Council Decision 10/24, 31 May 1982. This followed the recommendations of the Montevideo Programme for the Development and Period Review of Environmental Law, adopted by the Ad Hoc Meeting of Senior Government Officials Expert in Environmental Law, Montevideo, 6 November 1981, as adopted by UNEP Governing Council Decision 10/21, 31 May 1982.

²⁸ Environmentally Sound Management of Hazardous Wastes, UNEP Governing Council Decision 14/30, 17 June 1987, Annex II 14/30 UNEP Environmental Law Guidelines and Principles No.8. For a fuller discussion refer to: D. Langlet, *Prior Informed Consent and Hazardous Trade: Regulating Trade in Hazardous Goods at the Intersection of Sovereignty, Free Trade and Environmental Protection* 74 (The Netherlands: Kluwer Law International, 2009).

²⁹ P. Sands, *Principles of International Environmental Law* 676 (Cambridge: Cambridge University Press, 2nd ed., 2003).

³⁰ See Kummer, note 4 above at 39.

³¹ Section 12, 15 U.S.C. §2611(1976). See C. Mehri, ‘Prior Informed Consent: An Emerging Compromise for Hazardous Exports’, 21 *Cornell International Law Review* 365, 372-373 (1988).

³² Section 3017, 42 U.S.C. §6901-§6902 (1986). See Mehri, note 31 above at 376-377 and Belenky, note 12 above at 97-111.

³³ OECD Environmental Committee, Revised Draft International Agreement on Control of Transfrontier Movements of Hazardous Wastes, ENV (87) 9, W.5432K, 21 August 1987. See Mehri, note 31 above at 378-379.

convention had to be ready for final adoption and signature by 1989.³⁴ Practically, there was only a period of two years to negotiate and draft the convention. The negotiations were difficult and contentious. The focus of debate centred on North-South issues and the threat of illegal waste dumping in developing countries. This was despite the fact that the vast majority of transboundary waste transfers at the time were between OECD countries. Members of the Organisation of African Unity (now the African Union) played a dominant role in advocating a complete ban on all transboundary movements of hazardous waste. This position was strongly supported by environmental NGOs, particularly Greenpeace.³⁵ Opposing the ban on trade were the majority of large industrialised countries and a small number of developing countries such as India and Pakistan.³⁶

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal was adopted on 22 March 1989 by 116 countries. It entered into force on 5 May 1992. There are currently 175 parties to the Convention with the notable absence of the USA.³⁷ The Convention steered a course between an absolute ban and free trade in establishing 'enhanced control of transboundary movement of hazardous wastes and other wastes' to act as an 'incentive for their environmentally sound management' and also for 'the reduction of the volume of such transboundary movement'.³⁸ Article 1 defines the scope of the Convention by categorising hazardous wastes as listed in Annex I (later supplemented by List A of Annex VIII) unless the wastes do not possess characteristics, such as

toxicity or flammability, listed in Annex III.³⁹ General obligations are stated in Article 4. These include the right of parties to prohibit the import of hazardous wastes and the minimisation of both the generation of hazardous wastes and transboundary movements.⁴⁰ There are broad obligations to prevent pollution due to hazardous waste, minimise consequences to human health and the environment, and manage waste in an environmentally sound manner.⁴¹ Article 4 also establishes that 'illegal traffic in hazardous wastes or other wastes is criminal'.⁴²

The central regulatory mechanism of the Convention is prior informed consent. The detailed procedures of this system are set out in Article 6. The state of export or export generator must notify the states of import and transit of the transboundary movement.⁴³ This is to be undertaken via the 'competent authorities' of the countries concerned. The designated notification information is stipulated in Annex V A and includes physical description, quantity, composition and methods of disposal. There is an additional requirement to include the information provided by the disposer of the waste in the country of import upon which the assessment was made that the waste will be managed in an environmentally sound manner in accordance with the laws and regulations of the country of import.⁴⁴ The importing state responds in writing by consenting to the movement with or without conditions, denying permission for the movement, or requesting additional information.⁴⁵ The state of export is not permitted to

34 Environmentally Sound Management of Hazardous Wastes, UNEP Governing Council Decision 14/30, 17 June 1987.

35 See Kummer, note 4 above at 40-46 and Langlet, note 28 above at 75-76.

36 A. Andrews, 'Beyond the Ban: Can the Basel Convention Adequately Safeguard the Interests of the World's Poor in the International Trade of Hazardous Waste?', 5/2 *Law Environment and Development Journal* 167, 170 (2009).

37 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, adopted 22 March 1989, in force 5 May 1992, 28 *Int'l Leg. Mat.* 657 (1989). Recent states to ratify the Convention are Lao People's Democratic Republic (21/09/2010), Somalia (26/07/2010) and Tonga (26/03/2010).

38 *Id.* Preamble.

39 *Id.* Article 1(1)(a). Note that Article 1(3) excludes radioactive waste from the scope of the Convention being subject to other arrangements including the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, adopted 5 September 1997, in force 18 June 2001, 36 *ILM* 1436 (1997). Note that Article 1(4) excludes 'wastes which derive from the normal operations of a ship' which are subject to MARPOL 73/78, the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (London), adopted 2 November 1973, in force 2 October 1983, 12 *Int'l Leg. Mat.* 1319 (1973).

40 *Id.* Article 4(1)(a), and (2)(d).

41 *Id.* Article 4(2)(c), (d), and (e).

42 *Id.* Article 4(3).

43 *Id.* Article 6(1); note under Article 2(13) the PIC 'states concerned' include states of export, import or transit, whether or not parties to the Convention or not.

44 *Id.* Annex V A (20).

45 *Id.* Article 6(2).

allow the export unless it has both received the written consent of the state of import and has received evidence of a contract between the exporter and the disposer 'specifying environmentally sound management of the wastes in question'.⁴⁶ Transit states can prohibit the passage of the waste and the state of export must have received written consent from the transit state before the export can proceed.⁴⁷ A movement document is required to accompany the consignment and must be signed by each person who takes charge of the transboundary movement throughout its passage.⁴⁸ Article 8 provides for a duty to re-import on the part of the state of export in the situation where disposal cannot be carried out under the terms of the contract or where environmentally sound alternative arrangements cannot be made within a period of 90 days. Under Article 9, similar re-importation provisions apply to the state of export for illegal traffic of hazardous waste.

The Basel Convention's PIC procedure was replicated in subsequent regional and international multilateral environmental agreements relating to potentially hazardous substances. The major ones are: the 1991 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, the 1998 Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, the 2001 Stockholm Convention on Persistent Organic Pollutants, and the 2000 Cartagena Protocol on Biosafety to the Convention on Biological Diversity.⁴⁹

46 *Id.* Article 6(3)(a) and (b).

47 *Id.* Article 6(4).

48 *Id.* Article 6(9) and Annex V B.

49 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, Bamako, 29 January 1991, in force 22 April 1998, 30 *Int'l Leg. Mat.* 775 (1991), Art. 6; Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention), Rotterdam, 10 September 1998, in force 24 February 2004, 38 *Int'l Leg. Mat.* 1 (1999), Art. 12; Stockholm Convention on Persistent Organic Pollutants, Stockholm, 22 May 2001, in force 17 May 2004, 40 *Int'l Leg. Mat.* 532 (2001), Art. 3(2)(b); Cartagena Protocol on Biosafety to the Convention on Biological Diversity, Montreal, 29 January 2000, entry into force in 11 September 2003, 39 *Int'l Leg. Mat.* 1027 (2000), Arts 7-10.

4.2 The Bamako Ban and the Basel Ban Amendment

Almost immediately after the Basel Convention negotiations had concluded, the OAU began work on an African hazardous waste agreement. Following an OAU Council of Ministers meeting in May 1988, a number of African countries had demanded stronger safeguards regarding the traffic of hazardous waste from industrialised countries to developing countries, as well as significant financial and technological assistance.⁵⁰ In 1988, an OAU resolution condemned the import of nuclear and industrial wastes into Africa as 'a crime against Africa and the African people' and called on transnational corporations to clean up areas contaminated by them.⁵¹ Against this background, the outcome of the Basel negotiations was viewed as inadequate. The result was the development of the 1991 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa.⁵² The Bamako Convention closely followed the structure of its Basel counterpart. However, it included radioactive waste within its scope.⁵³ It included a regime for the management of hazardous waste within Africa itself, specifically adopting the precautionary approach.⁵⁴ Most significantly it applied a common commitment 'to prohibit the import of all hazardous wastes, for any reason, into Africa from non-Contracting Parties'. Any import in contravention of the ban would be 'be deemed illegal and a criminal act'.⁵⁵ Initially, only 12 countries signed the Convention and it entered into force in 1998. Currently, 24 out of 53 African Union states have ratified the Convention.⁵⁶

50 *See* Kummer, note 4 above at 44.

51 OAU Council of Ministers Resolution on Dumping of Nuclear and Industrial Waste in Africa (23 May 1988), CM/Res.1153(XLVIII), 28 *Int'l Leg. Mat.* 567 (1989).

52 *See* Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, note 49 above.

53 *Id.* Article 2(2).

54 *Id.* Article 3(a) to (u).

55 *Id.* Article 4(1).

56 As of 03/02/2010. Notable states not to have ratified include the Republic of South Africa and Nigeria. Côte d'Ivoire signed the Convention on 31/01/1991 and acceded on 13/07/1994.

The issues that were unresolved in the negotiations leading up to the Basel Convention continued throughout the Conferences of the Parties. In 1992, COP-1 decided on a compromise position that requested developed countries to refrain from exporting hazardous wastes to developing countries. It decided to refer the issue of hazardous wastes destined for recycling or recovery to the Technical Working Group. This significant distinction thus addressed both the concerns of industrialised exporting parties and recipient developing country parties who might be economically disadvantaged by stricter limits on this trade.⁵⁷ At COP-2 in 1994, parties agreed on an immediate ban on the export of hazardous wastes intended for final disposal from OECD to non-OECD countries as well as to phase out wastes destined for recycling and recovery by the end of 1997.⁵⁸ At COP-3 in 1995, the ban on final disposal from OECD to non-OECD countries was adopted as an amendment to the Convention, with a new Annex VII listing developed country parties, mainly OECD members.⁵⁹ The so-called 'ban amendment' was proposed by the EU following disputes about whether the previous COP decision was legally binding.⁶⁰ Kummer reports that these COP negotiations were highly charged and contentious, even around the inclusion of parties in Annex VII.⁶¹ The remaining issue centred on the recycling and recovery of waste and potential conflicts with the WTO rules. Subsequently, the issue faded as support gained for exempting those recyclable wastes from the ban that had a low hazard potential.⁶² As of October 2010, the ban has yet to enter into force as only 69 of the parties to the Convention have ratified it, much less than the three quarters of the parties to the Convention necessary. A number of developing countries have chosen not to ratify, including India, Pakistan, Bangladesh and South Africa.⁶³

In 2008, COP-9 launched a process to reaffirm the ban's objectives and to explore how the legal and political problems could be overcome.⁶⁴ Subsequently, Switzerland and Indonesia initiated a Country Led Initiative involving 'a process for informal, open-minded and dynamic consultations among key players'.⁶⁵ Amongst the objectives are to enhance understanding of the management of hazardous wastes in developed and developing countries and of the reasons for North-South and South-South transboundary movements of hazardous wastes. This process is due to report to COP-10 in late 2011.⁶⁶

5 THE TRAFIGURA INCIDENT

The case of illegal dumping of hazardous waste in Abidjan, Côte d'Ivoire, in August 2006 by the tanker *Probo Koala* brought to international attention the complex problems of the management of hazardous waste.⁶⁷ The attempts by the responsible transnational commodities trading company *Trafigura Beheer BV* to stifle documents revealing the contents of the consignment added a further dimension to the incident regarding public access to environmental information.⁶⁸ As Eze argues, the incident provides a disturbing but profound 'litmus test for the existing instruments,

57 Conference Decision I/22, in Report of the First Meeting of the Conference of the Parties to the Basel Convention, 4 December 1992, UN Doc. UNEP/CHW.1/24 (1992).

58 Conference Decision II/12, in Report of the Second Meeting of the Conference of the Parties to the Basel Convention, 25 March 1994, UN Doc. UNEP/CHW.2/30 (1994).

59 Conference Decision III/1, in Report of the Third Meeting of the Conference of the Parties to the Basel Convention, 22 September 1995, UN Doc. UNEP/CHW.3/35 (1995).

60 See Andrews, note 36 above at 171.

61 K. Kummer, 'The Basel Convention: Ten Years On', 7 *Review of European Community and International Environmental Law* 227, 229 (1998).

62 *Id.*, at 230.

63 See Andrews, note 36 above at 180.

64 Decision IX/26, in Report on Progress: The Ban Amendment, 20 April 2009, UN Doc. UNEP/SBC/Bureau/9/1/6, Annex I.

65 Basel Convention, Indonesian-Swiss Country-Led Initiative (CLI) to Improve the Effectiveness of the Basel Convention - Concept Note, First Meeting of the CLI, Bali, Indonesia, 15-17 June 2009, Doc. CLI/2009/1.

66 The Tenth meeting of the Conference of the Parties to the Basel Convention (COP 10) is due to be held in Cartagena de Indias, Colombia, 17 - 21 October 2011.

67 According to the UNDP Human Development Report 2006, Côte d'Ivoire was classified as a Low Human Development state, ranking 164 out of 177 nations listed on the Human Development Index (177 being the lowest).

68 'How the Trafigura Story Came to Be Told', *The Guardian* (London: 16 October 2009); P. Rogerson and J. Dean, 'News: Super-injunctions' under Fire', 40 *Law Society Gazette* 2 (22 October 2009).

revealing their strengths and weaknesses'.⁶⁹ A striking feature of the case, somewhat lost in the media reports, was that the failures were due to the many institutional actors involved in the incident. It was not simply a case of hazardous waste smuggling.

The basic facts of the case are undisputed, though critical lacunae remain.⁷⁰ Trafigura chartered the Probo Koala in March 2006 to collect a cargo of full range coker naphtha (heavy residual fuel oil) from the Texan port of Brownsville, having purchased the consignment at low cost in Mexico. Subsequently, a process called 'on-board washing' took place, possibly off the coast of Libya or near to Gibraltar.⁷¹ This involved 'sweetening' the coker naphtha with a caustic solution to separate the sulphur and nitrogen contaminants and render the remaining product suitable for petrol

blendstock. The residue or slops from the process was a highly toxic mixture, which included sulphurous mercaptans and phenols. Advice on the composition was provided in the Minton Report, which became subject of the super-injunctions in the English High Court.⁷² On 3 July 2006, the Probo Koala berthed in Amsterdam having obtained agreement from the Amsterdam Port Service (APS) to treat the slops at a cost of €30 per m³, around €17,000 in total. The slops were unloaded but on examination by the APS, they were discovered to be more toxic than initially given to believe. A revised fee for treatment was submitted to Trafigura of €600-€900 per m³, giving a total cost of upwards of €330,000. This was unacceptable to Trafigura and the slops were reloaded and the tanker departed for Estonia. The vessel was refused port at Paldiski, Estonia, possibly after receiving advice on the cargo's likely composition. From there, the Probo Koala made its way to West Africa.

69 Chukwuka N. Eze, The Probo Koala Incident in Abidjan Côte d'Ivoire: A Critique of the Basel Convention Compliance Mechanism (Paper submitted for the Eighth International Conference on Environmental Compliance and Enforcement, Cape Town, 5-1 April 2008), available at http://www.inece.org/conference/8/proceedings/51_Eze.pdf.

70 The main sources of the facts of the case are: Eze, note 69 above; United Nations Disaster Assessment and Coordination (UNDAC), Côte d'Ivoire – Urban Hazard Waste Dumping (Abidjan: UNDAC 2006); UNEP, International Maritime Organization, Secretariat of the Basel Convention and the Government of Côte d'Ivoire, Evaluation Report Assessment of the Port of Abidjan (Geneva: UNEP, 2009); UNGA, Human Rights Council, Report of the Special Rapporteur on the Adverse Effects of the Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights, Okechukwu Ibeanu, Mission to Côte d'Ivoire (4 to 8 August 2008) and the Netherlands (26 to 28 November 2008), A/HRC/12/26/Add.2 (3 September 2008); Organisation Mondiale de la Santé, 'Déversement de Déchets Toxiques en Côte d'Ivoire: Note d'Information aux Médias en date du 15 septembre 2006' (Genève: OMS, 2006); X. Bohand et al, 'Déchets Toxiques Déversés A Abidjan (Côte-d'Ivoire) et Conséquences Sanitaires', 67 *Médecine Tropicale* 620 (2007); Greenpeace International, Toxic Waste in Abidjan: Greenpeace Evaluation (Amsterdam: Greenpeace International, 15 September 2006); Interview with Martyn Day from Leigh Day & Co, Solicitors, People and Power – Dumping Ground, Aljazeera, broadcasted on 20 May 2009; BBC Newsnight May 2009, available on YouTube as 'BBC Censored Story' parts 1 and 2: <http://www.youtube.com/watch?v=50PUNdaXjeg> and <http://www.youtube.com/watch?v=uIxAlJppIZc&feature=related>.

71 Reported on BBC Newsnight, see note 70 above, by Marietta Harjono of Greenpeace Nederland.

Between 19 and 20 August 2006, the highly toxic cargo was discharged at the Port of Abidjan after arrangements had been made with a recently certified local company, Compagnie Tommy, at a cost of US\$35 per m³, being a total cost of approximately UD\$18,000. The slops were disposed of at around 17 open municipal waste sites in and around the central areas of Abidjan close to residential areas. This operation apparently occurred at night using a number of trucks. Residents immediately complained about the smell of rotten eggs from the vaporising hydrogen sulphide. Immediately, health problems occurred, such as nosebleeds, nausea, vomiting, headaches, skin and eye irritations and respiratory symptoms.⁷³ Later more severe symptoms were reported, including miscarriages and up to 12 deaths. It is estimated that 100,000 people sought medical attention in makeshift clinics that the government authorities hastily set-up. In the subsequent, personal injuries claim in London there were 31,000

72 John Minton, 'For the Attention of Mark Aspinall – Re: Caustic Tank Washings. Abidjan, Ivory Coast', 7 (London: Waterson Hicks, 14 September 2006). Note, this is the Minton Report subject to the super-injunction served on Guardian News and Media Limited by (1) RJW and (2) SJW of 11 September 2009 in the High Court of Justice Queen's Bench Division, London.

73 UN News Service, Côte d'Ivoire: UN Helps Country Assess Impact of Deadly Toxic Waste Dumping on Food Chain, 23 October 2006.

registered claimants.⁷⁴ Cases occurred up to three months later but it remains unclear as to the long-term environmental damage and contamination of water supplies.⁷⁵ On 4 September 2006, the Government of Côte d'Ivoire requested international assistance in dealing with the crisis and on 9 September the UN Humanitarian Coordinator in Abidjan formally requested UNDAC intervention.⁷⁶

6 WEAKNESSES REVEALED BY THE TRAFIGURA INCIDENT

There are many aspects to the Trafigura incident that provide insights into the effectiveness of the Basel Convention. Four major issues will be considered here: (i) the applicable international law, (ii) potential points of intervention, (iii) the Basel Secretariat's supervisory role, and (iv) technical capabilities and institutional capacities of the state of import. All these factors shed light on the central issues of this article surrounding the adequacy of the PIC procedure and developing country interests. For Widawsky the Trafigura incident conclusively demonstrates that the Basel Convention 'has not fulfilled its promise of shielding developing

nations from environmental catastrophes'.⁷⁷ While the Basel Convention appears to advance 'impressive environmental justice provisions', the Trafigura case reveals critical weaknesses in the implementation of the Convention.⁷⁸

6.1 Applicable Law

Save for the official statements by Trafigura, all commentators concur that the disposal of the cargo in Abidjan constituted an illegal act.⁷⁹ However, there is confusion about the applicable law. This is most evident in the official UN Evaluation Report Assessment of the Port of Abidjan published at the end of 2009. This discusses the application of the MARPOL Convention in relation to waste generated by ships and cargo residues and the lack of reception facilities at the Port of Abidjan for Annex I and Annex IV wastes.⁸⁰ However, the slops in question did not constitute the 'normal operations of a ship' and, though complex, MARPOL does not cover dumping.⁸¹ Most commentators concur on the primacy of the application of the Basel Convention to the incident due to the details of the trajectory of the Probo Koala. Given that the slops were unloaded at the Port of Amsterdam, the Netherlands' authorities, as a party to the Basel Convention, were obligated to prevent the ship leaving the country with the waste on-board.⁸²

74 In November 2006, the High Court of Justice in London agreed to hear a group action by about 31,000 claimants from Côte d'Ivoire against Trafigura over the alleged dumping of toxic waste from the Probo Koala. In September 2009, the parties to the UK lawsuit reached a settlement agreement in which Trafigura agreed to pay each of the 31,000 claimants a certain amount, thought to be approximately £950. Martyn Day of Leigh Day & Co represented the Abidjan Personal Injury Group. Trafigura agreed to a US\$198 million out-of-court settlement with the government of Côte d'Ivoire in 2007, which exempts it from any further legal proceedings in that country. On 23 July 2010, an Amsterdam district court fined Trafigura Beheer BV •1 million for offences concerning the illegal export of hazardous waste from the Netherlands. In August 2010, the Dutch Public Prosecutor's Service announced it would appeal the ruling against Trafigura, specifically stating that the fine was too low. The Dutch National Fraud Prosecutor is also proceeding with an action regarding fraud on the part of Trafigura.

75 See UNDAC, note 70 above, Annex II at 9-13.

76 *Id.*, at 2.

77 L. Widawsky, 'In My Backyard: How Enabling Hazardous Waste Trade to Developing Nations Can Improve the Basel Convention's Ability to Achieve Environmental Justice', 38 *Environmental Law* 577 (2008).

78 *Id.*, at 602-603.

79 Trafigura, Agreed Joint Final Statement (London: Trafigura, 19 September 2009) and Trafigura, Statement by Trafigura in Response to the Articles in *The Guardian* on 14 May 2009 (London: Trafigura, September 2009).

80 See UNEP et al, note 70 above at 28; International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (London), adopted 2 November 1973, in force 2 October 1983, 12 *Int'l Leg. Mat.* 1319 (1973), Annex I – Prevention of Pollution by Oil, Annex II – Prevention of Pollution by Noxious Liquid Substances in Bulk, Annex IV – Prevention of Pollution by Sewage from Ships.

81 R. Churchill and A. Lowe, *The Law of the Sea* 339-341 (Manchester: Manchester University Press, 3rd ed. 1999).

82 L. Ognibene, 'Dumping of Toxic Waste in Côte d'Ivoire – The International Framework', 37 *Environmental Policy and Law* 31 (2007) and Olanrewaju A. Fagbohun, 'The Regulation of Transboundary Shipments of Hazardous Waste: A Case Study of the Dumping of Toxic Waste in Abidjan, Côte d'Ivoire', 37 *Hong Kong Law Journal* 831, 837 (2007).

Fagbohun, for instance, states that 'it will not be unreasonable to conclude that the legal framework of the Basel Convention is what is applicable'.⁸³ This lack of clarity on the applicable law on the part of front line national regulatory authorities is a significant flaw in the international legal regime.⁸⁴

6.2 Points of Intervention

The PIC procedures were not followed either for the initial shipment to Amsterdam nor for the discharge at Abidjan. The 'country of origin' of the slops is a matter of dispute, due to the fact that the industrial process took place clandestinely on-board ship. This is further complicated by the fact that the original cargo of coker naphtha was taken on-board in the USA, a non-party to the Basel Convention.⁸⁵ However, it is evident that there were a number of potential opportunities for intervention. Firstly, as highlighted by Stichting Greenpeace Nederland's complaint under Article 12 of the Dutch Code of Criminal Procedure the original notification documentation was falsified and misleading.⁸⁶ Though difficult to establish, it appears that Trafigura presented the slops as routine washings under Annex I or II of MARPOL.⁸⁷ The APS collected

and analysed samples of the slops.⁸⁸ This confirmed that the original notification documentation was falsified.⁸⁹ The situation should have triggered Article 9 procedures under the Basel Convention regarding illegal traffic since the waste did 'not conform in a material way with the documents'.⁹⁰ Given that the state of export could not be established and it could have been concluded that the generator of the waste could not guarantee safe disposal, the co-operation responsibilities under Article 9(4) should have been triggered. Instead, the APS merely allowed the vessel to leave port with no assurances as to how the waste would be disposed of or treated. There were potentially other points of regulatory intervention at Paldiski, Estonia, and Lagos, Nigeria, before the waste cargo reached Abidjan.

6.3 Compliance and Supervision

Eze's analysis of the incident points to a number of critical omissions in the compliance procedures under the Basel Convention. These are: (i) the absence of a duty to inform neighbouring states of the presence of a vessel with hazardous waste that may be acting outside the international regulatory framework, and (ii) the lack of a proactive supervisory role for the Secretariat of the Basel Convention.⁹¹ Article 13(1) provides for a duty to inform only in the case of an accident that has already occurred. Eze cites the unpublished UNEP Project Document on the Capacity Building Programme for the Monitoring and Control of Hazardous Wastes and Toxic Chemicals in the Gulf of Guinea, which advocates 'early warning procedures in the case of illegal traffic'.⁹² Such a duty to inform would need to be linked to an enforcement obligation. Both the Estonian and the Nigerian authorities had been pre-warned about the Probo Koala's cargo but were under no obligation to act.

⁸³ See Fagbohun, note 82 above at 837.

⁸⁴ At the time of the shipment, Council Regulation (EEC) No 259/93 of 1 February 1993 on the Supervision and Control of Shipments of Waste within, into and out of the European Community applied an export ban to developing countries who are parties to the Basel Convention. The Regulation only allows movement of hazardous waste to another EU Member State if consent is given. This Regulation was superseded from 12 July 2007 by Council Regulation (EC) 1013/2006 of 14 June 2006 on Shipments of Waste.

⁸⁵ If the cargo was considered to be waste at the point of export, US hazardous waste export regulations would apply, involving the US EPA and the US Customs Service; see Belenky, note 12 above at 95-99.

⁸⁶ Complaint Concerning Failure to Prosecute for an Offence, Request to the Court in The Hague under Article 12 of the Dutch Code of Criminal Procedure, requested by L. Zegveld and M. Pestman on behalf of Stichting Greenpeace Nederland, 16 September 2009, 6. Under Dutch law, public prosecutors have the discretionary power to cancel the prosecution of a crime if it is not deemed opportune to prosecute. However, Article 12 provides that a person with a direct concern in the prosecution of a crime may file at a court of law a complaint against the cancellation of the prosecution. If the court decides that the crime should be prosecuted, it will have to be prosecuted.

⁸⁷ See International Convention for the Prevention of Pollution from Ships, note 80 above, Annex I and Annex IV.

⁸⁸ These samples have been retained and are the only reliable chemical forensic evidence in the case. The samples taken in the sites in Abidjan would have been contaminated and have had reacted to exposure to air.

⁸⁹ See Complaint Concerning Failure to Prosecute for an Offence, note 86 above at 6.

⁹⁰ See Basel Convention, note 37 above, Art. 9(1)(d).

⁹¹ See Eze, note 69 above at 354.

⁹² UNEP Project Document on the Capacity Building Programme for the Monitoring and Control of Hazardous Wastes and Toxic Chemicals in the Gulf of Guinea (not dated), as cited in Eze, Note 69 above at 355.

There is some discord in the literature around the role of the Secretariat of the Basel Convention. Eze states that the Secretariat's lack of supervisory functions and powers seriously limited its effectiveness in dealing with this incident and potentially others.⁹³ From this viewpoint, the Secretariat is viewed as having limited supervisory functions with its primary role being coordination and monitoring. Eze considers that the Secretariat suffers from diplomatic inertia in that it would 'be considered a trespasser or a meddling interloper if it ventures into issues relating to the transboundary movement of wastes between parties'.⁹⁴ Widawsky concurs with this view and explicitly identifies the Convention's Compliance Committee's apparent inaction regarding 'the most elemental requirement of the Basel Convention – ensuring that the importing nation's disposal or recovery methods were environmentally sound'.⁹⁵ Widawsky explicitly cites the obligation under Article 19 of state parties to notify the Secretariat of suspected breaches of the obligations of other parties.⁹⁶ In the *Trafigura* case, this could have potentially involved the Netherlands, Greece, the United Kingdom, Switzerland, and Panama.⁹⁷

However, a contrary view is presented by Fagbohun who states that the Secretariat played a significant response role in the incident within the limits of its resources by contrast with the Secretariat of the Bamako Convention, which 'was unbelievably in the background in its response to the incident'.⁹⁸ The functions of the Secretariat of the Basel Convention are detailed in Article 16. This states, *inter alia*, that its role is 'to assist Parties upon request in their identification of cases of illegal traffic and to circulate immediately to the Parties concerned any information it has received regarding illegal traffic'.⁹⁹ The information note to COP-9 in 2008, which provides details of the joint UNEP/Basel Secretariat response to the *Trafigura* incident, appears

to confirm the latter viewpoint.¹⁰⁰ The report details the convening of an Expanded Bureau in October 2006 and the subsequent technical mission to Abidjan in late 2006. The following year the Executive Director launched the UNEP Trust Fund for Côte d'Ivoire with donations from parties amounting to just over €1 million as well as technical assistance. The report also details the involvement of the International Maritime Organisation and the Secretariat of the Rotterdam Convention in 2007 and 2008 respectively. Clearly, these actions occurred long after the human health and environmental damage from the incident had occurred.

6.4 Capabilities of the State of Import

The final major issue the *Trafigura* incident raises is that of capacity building and technical assistance to developing countries. The Preamble to the Basel Convention explicitly mentions the 'limited capabilities of the developing countries to manage hazardous wastes and other wastes' and 'the need to promote the transfer of technology for the sound management of hazardous wastes and other wastes produced locally, particularly to the developing countries'.¹⁰¹ Technical capabilities are at the core of the Basel Convention's PIC procedure regarding the environmentally sound management of hazardous waste. Principally, the PIC procedure necessitates 'confirmation of the existence of a contract between the exporter and the disposer specifying environmentally sound management of the wastes in question'.¹⁰²

Article 14(1) establishes a regional system of centres for training and technology transfer together with voluntary funding mechanisms. The Basel Convention Regional Centre for French-speaking countries in Africa is based in Senegal. Fagbohun views the current arrangements as inadequate and opines that the Convention has 'no specific financial mechanism to promote capacity building and to facilitate technology

93 See Eze, note 69 above at 356.

94 *Id.*, at 356.

95 See Widawsky, note 77 above at 607.

96 See Basel Convention, note 37 above, Art.19.

97 *Trafigura* has a complex corporate structure but has major registered offices in London, Amsterdam and Geneva. The *Probo Koala* is a Greek owned vessel operating under Panama as its flag state.

98 See Fagbohun, note 82 above at 852.

99 See Basel Convention, note 37 above, Art. 16(1)(i).

100 Information Note on Conference Decision VIII/1, 26 March 2008, *in* Report of the Ninth Meeting of the Conference of the Parties to the Basel Convention, Bali, UN Doc. UNEP/CHW.9/4 Annex II (2008).

101 See Basel Convention, note 37 above, Preamble.

102 *Id.*, Art. 6(3)(b).

transfer'.¹⁰³ Widawsky concurs with the view that the effectiveness of the regional centres has been hampered by insufficient funding.¹⁰⁴ However, the Basel Convention Regional Centres have been supplemented by commitments in the 1999 Basel Declaration on Environmentally Sound Management to institutional and technical capacity building for developing countries and economies in transition.¹⁰⁵ However, as the UN Evaluation Report Assessment of the Port of Abidjan conclusively demonstrates, the institutional and technical task necessitates wide ranging interventions from the development of national legislative provisions, environmentally sound reception facilities, and a range of technical and regulatory skills locally.¹⁰⁶ This issue is further underlined by the Report of the UN Human Rights Council Special Rapporteur of 2008. This report emphasises the need to provide technical assistance in order 'to develop norms and regulations to eliminate loopholes at the national level, with the overall objective of enhancing capacity to monitor and control the transboundary movement of hazardous waste and chemicals'.¹⁰⁷

7

PIC – A BROKEN PROCEDURE?

The Trafigura incident highlights serious weaknesses in the regulatory and compliance regime regarding the transboundary movement of hazardous waste. The key question of this article is whether the Basel Convention's PIC procedure provides sufficient state control over

hazardous waste imports to ensure protection of human health and the environment. Put simply, is the Convention's central regulatory procedure effective or is it broken? Fundamentally, the PIC procedure is designed to protect state sovereignty and to balance environmental and developmental policies. As such, the Convention accords with Principle 2 of the Rio Declaration.¹⁰⁸ However, it is the contention of this article that the PIC procedure does not provide sufficient state control. Six critical observations of the PIC procedure and its supporting regulatory environment will be advanced to support this view.

7.1 A Tighter PIC Procedure

Firstly, there is the issue of tighter controls on the PIC mechanism itself. Eze compares the provisions of the Bamako and Basel Conventions.¹⁰⁹ The Bamako Convention requires states of export use a 'shipment specific notification' for regular exports even for hazardous wastes having the same physical and chemical characteristics.¹¹⁰ The Basel Convention permits the use of one general notification to cover a number of shipments.¹¹¹ In addition, the Bamako Convention obligates parties to limit their ports or points of entry for the purposes of transboundary shipments and notify the Secretariat to this effect for distribution to all contracting parties.¹¹² Though seemingly minor adjustments to the provisions, similar provisions in the Basel Convention would greatly assist institutionally and financially stretched developing country parties enforce the procedures. The port of entry limitation seems to be particularly warranted in the context of the need to develop local institutional and technical capacity to enable sufficient oversight over the process.

103. See Fagbohun, note 82 above at 840.

104. See Widawsky, note 77 above at 606-607.

105. Basel Declaration on Environmentally Sound Management, Conference Decision V/1, 10 December 1999, in Report of the Fifth Meeting of the Conference of the Parties to the Basel Convention, Basel, UN Doc. UNEP/CHW.5/29 (1999).

106. See UNEP et al, note 80 above at 4-5.

107. UNGA, Human Rights Council, Report of the Special Rapporteur on the Adverse Effects of the Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights, Okechukwu Ibeanu, Mission to Côte d'Ivoire (4 to 8 August 2008) and the Netherlands (26 to 28 November 2008), A/HRC/12/26/Add.2 (3 September 2008) 13.

108. Rio Declaration on Environment and Development, in Report of the United Nations Conference on Environment and Development, Rio de Janeiro, UN Doc. A/CONF.151/26 (Vol.1), Annex I (1992), Principle 2.

109. Chukwuka N. Eze, 'The Bamako Convention on the Ban on the Import into Africa and the Control of the Transboundary Movement and Management of Hazardous Wastes Within Africa: a Milestone in Environmental Protection?', 15 *African Journal of International and Comparative Law* 208, 219 (2007).

110. See Bamako Convention, note 52 above, Art. 6(6).

111. See Basel Convention, note 37 above, Art. 6(6).

112. See Bamako Convention, note 52 above, Art. 6(7).

7.2 Problems of Self-Verification

Secondly, there is the self-verification problem.¹¹³ The Basel Convention places exporters under an obligation to ensure that adequate waste treatment facilities are available in the country of import and that these form part of contractual obligations. At face value, this is simply a two-way exchange of information. The exporter is reliant on the representations made by the competent authority in the country of import. Abrams considers the environmentally sound waste management standard in the Convention to be ambiguous as to the locus of responsibility.¹¹⁴ It could be argued that it should require the competent authority in the country of export to make an independent assessment on a case-by-case basis of the suitability of the processes and facilities in the country of import. There is an obvious tension here between state control over imports and state control over exports, as well as clear practical difficulties with exporters exercising a full duty of care obligation.

7.3 Local Institutional and Technical Capacities

Thirdly, as discussed in the previous section, for a state of import to have any real control over hazardous waste imports, a well-developed legal, institutional and technical infrastructure must be in place. There is the fundamental issue under international law of whether the Convention is self-executing in terms of the constitution of the state party and whether enabling national legislation is required.¹¹⁵ Developing countries, particularly low-income countries like Côte d'Ivoire,

more often than not lack the technical and administrative capability to make an informed assessment of the health and environmental impacts necessary to enforce a PIC procedure. Complementary measures are necessary including capacity building, technical assistance and technology transfer. The effectiveness of PIC depends on adequate hazardous waste disposal infrastructure in the country of import. Furthermore, for the PIC system to be fully effective, the infrastructure in place must have been submitted to sound EIA procedures. Nagai states that full implementation of PIC requires each party to consider and evaluate potential risks and make an informed decision concerning trade in hazardous wastes.¹¹⁶ Fagbohun points to the pressures both from corporate interests as well as the reluctance of local corrupt officials to enforce applicable national law.¹¹⁷ Compounding this, the 'reason to believe' criterion embedded in Annex V A allows for potentially wide divergences in approach from country to country.¹¹⁸ It is easy to envisage that a less developed importing country could mistakenly assess that local facilities are adequate for disposal and treatment when they would be unacceptable in the country of export. As evidenced from the Trafigura incident, without this infrastructure the PIC procedure is likely to fail under pressure from unscrupulous interests, either corporately or locally.

7.4 Environmental Impact Assessment

Fourthly, there is the issue of environmental impact assessment. Principle 19 of the Rio Declaration sets out the principle of 'prior and timely notification and relevant information' to potentially affected states regarding transboundary activities.¹¹⁹ However, as mentioned above, the effectiveness of PIC depends on adequate hazardous waste disposal infrastructure in the country of import. Principle 17 asserts the necessity for EIA for 'proposed activities that are likely to have a significant adverse impact on the environment'.¹²⁰ For the PIC system to be fully effective, the infrastructure

113 See Andrews, note 36 above at 173.

114 D. Abrams, 'Regulating the International Hazardous Waste Trade: A Proposed Global Solution', 28 *Colombia Journal of Transnational Law* 801, 828 (1990) and M. Cusack, 'International Law and the Transboundary Shipment of Hazardous Waste to the Third World: Will the Basel Convention Make a Difference?', 5 *American University Journal of International Law and Policy* 393, 413 (1989-1990).

115 A. Cassese, *International Law* 220-221 (Oxford: Oxford University Press, 2nd ed. 2005) and R. Lutz, 'The Export of Danger: A View from the Developed World', 20 *New York University Journal of International Law and Politics* 629, 661 (1987-1988). Note that Côte d'Ivoire is a monist state and hence the act of ratifying a convention immediately incorporates it into national law. However, national regulations would be necessary to fully enable the application of the convention.

116 M. Nagai, 'National Implementation of the International Prior Informed Consent Procedures Concerning Hazardous Chemicals and Wastes', 4 *Sustainable Development Law and Policy* 29, 32 (2004).

117 See Fagbohun, note 82 above at 851-852.

118 See Abrams, note 114 above at 830.

119 See Rio Declaration, note 108 above, Principle 19.

120 *Id.*, Principle 17.

in place must have been submitted to sound EIA procedures. Without such procedures in place and fully operational, the local management of hazardous waste in the country of import is unlikely to be managed in a manner that ensures protection of human health and the environment.

7.5 The Myth of Perfect Information

Fifthly, the Basel PIC procedure assumes ‘perfect information’ in a trading relationship between equals. This is patently not the case. Ross develops the concept of PIC as giving ‘extraterritorial effect to the regulations of exporting countries’.¹²¹ Full or even sufficient state control can therefore only be exercised if the country of import has complete information about the nature of the hazardous wastes, the most environmentally sound method of their disposal, and the spectrum of impacts likely to occur. As Nakagawa asserts, securing meaningful informed consent may be difficult to gauge, given technical barriers and cultural-linguistic differences.¹²² This is complicated by who gives consent in reality. This may be local officials, a centralised state authority, or delegated private sector actors.

There is a broader human rights dimension to informed consent, which has been recognised by the UN Commission on Human Rights.¹²³ As Olowu observes, the threat to human life and health occasioned by hazardous substances necessitates a widening of the Convention’s mandate to the intrinsic linkages between human rights violations and environmental problems.¹²⁴ Such a full and proper exercise of state sovereignty lends weight to a more developed notion of the exporter’s duty of care and principles of extended producer responsibility. Ultimately, this would obligate parties to

the Basel Convention to implement clean production techniques and the reduction of the quantity and toxicity of all wastes as pertains in the Bamako Convention. The latter specifically advocates pollution prevention through clean production methods rather than a permissible emissions approach based on an assimilative capacity approach.¹²⁵

7.6 Lack of a Liability Regime

Sixth and finally, there is the absence of a liability regime. Parrish identifies the adoption of the 1999 Protocol on Liability and Compensation as an attempt to give the Convention ‘teeth’, in a similar way to the Bamako ban.¹²⁶ However, only ten parties have ratified it.¹²⁷ The Protocol’s objective is to provide for a comprehensive regime for liability as well as adequate and prompt compensation for damage resulting from transboundary movements of hazardous wastes, including incidents due to illegal traffic.¹²⁸ The Protocol establishes a strict liability regime whereby the country of export is generally liable for damage until the disposer in the country of import takes control of the waste.¹²⁹ However, the instrument lacks broad based support and is recognised to be full of loopholes.¹³⁰ The most

121 J. Ross, ‘Legally Binding Prior Informed Consent’, 10 *Colorado Journal of International Environmental Law and Policy* 499, 507 (1999).

122 M. Nakagawa, ‘Overview of Prior Informed Consent from and International Perspective’, 4 *Sustainable Development Law and Policy* 4, 6 (2004).

123 UN Commission on Human Rights, Adverse Effects of the Illicit Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights, UN Doc. E/CN.4/RES/1999/23 (1999).

124 D. Olowu, ‘The United Nations Special Rapporteur on the Adverse Effects of the Illicit Movement and Dumping of Toxic and Dangerous Wastes on the Enjoyment of Human Rights: A Critical Evaluation of the First Ten Years’, 8 *Environmental Law Review* 199, 203-207 (2006).

125 J. Krueger, ‘The Basel Convention and the International Trade in Hazardous Wastes’, *Yearbook of International Cooperation on Environment and Development* 2001/02 43, 49 (2002). See Bamako Convention, note 52 above, Art. 4(3)(f): ‘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’.

126 A. Parrish, ‘Sovereignty’s Continuing Importance: Traces of ‘Trail Smelter’ in the International Law Governing Hazardous Waste Transport’, in R. Bratspies and R. Miller eds, *Transboundary Harm in International Law: Lessons from the Trail Smelter Arbitration* 181, 190 (Cambridge: Cambridge University Press, 2006).

127 Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal, Basel, 10 December 1999, not in force (1999 Basel Liability Protocol). Entry into force is pending on ratification by 20 parties (Art.29).

128 *Id.*, Art. 1.

129 *Id.*, Art. 4.

130 S. Choski, ‘The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: 1999 Protocol on Liability and Compensation’, 28 *Ecology Law Quarterly* 509, 524-526 (2001-2002). See also Andrews, note 36 above at 176.

contentious aspect is the bilateral and multilateral agreement exemption under Article 11, which developing countries argue exempts the majority of waste from the Protocol's application.¹³¹ Add to this is the lack of an effective compliance mechanism.

In 2002, COP-6 established an Implementation and Compliance Committee but its mandate was limited to providing assistance to parties to comply with their obligations under the Convention and to promote and monitor compliance with the Convention.¹³² The Committee can consider submissions from parties regarding non-compliance, but as yet has not heard any substantive complaints, possibly due to the reluctance of states to have their own compliance the subject of retaliatory submissions.¹³³ This is compounded by the failure of many state parties to submit national reports to the Secretariat. The Compliance Committee itself noted this at its meeting prior to COP-8.¹³⁴ As Widawsky observes, the Compliance Committee has had no opportunities to date to deter non-compliance.¹³⁵ The Trafigura incident aptly demonstrates the inadequacies of the current fragmented nature of determining liability and providing prompt and adequate compensation.¹³⁶

8

MENDING THE SYSTEM – TOWARDS FULLER INTEGRATION?

The environmental law textbooks have a *nouvelle cause célèbre* – the Trafigura incident of hazardous waste dumping in the African state of Côte d'Ivoire on 19 and 20 August 2006.¹³⁷ The incident exposed serious flaws in the international regime responsible for managing transboundary movements of hazardous waste. As outlined in this article, the failures of institutional actors were numerous and the incident severely tested the effectiveness of the current system of prior informed consent under the Basel Convention. The Trafigura incident has many 'exceptional' aspects; however, a robust system must be as capable of exception handling as with the treatment of more expected or conventional cases.

Any prior informed consent mechanism must be viewed as a part of a much wider regulatory system. It is not simply the passing of forms between two parties. The contention of this paper is that the PIC system in the Basel Convention, as it currently stands, fails to provide sufficient state control over the import of hazardous waste, particularly for developing country parties. To this extent it is a broken system. The Trafigura incident exemplifies the failures of the PIC system under the Basel Convention. The incident revealed confusion on the part of regulatory authorities in more than one state, failure to take prompt and appropriate action by the authorities involved, a lack of proactive supervisory intervention on the part of the Basel Secretariat, and a more far-reaching lack of developing country support for capacity building and technical assistance. More widely the weaknesses of the Basel PIC system have shown the need for a more thorough-going approach to the assessment of environmentally sound management, with complementary measures to support local infrastructure development and EIA in developing countries.

131 See Choski, *id.*, at 526.

132 Terms of Reference of the Implementation and Compliance Committee, annexed to Decision VI/1 2, UN Doc. UNEP/CHW/OEWG/1/3 (2003) and Report of the First Session of the Implementation and Compliance Committee, UN Doc. UNEP/CHW/CC/1/3 (2003).

133 See Andrews, note 36 above at 174.

134 Committee for Administering the Mechanism for Promoting the Implementation and Compliance of the Basel Convention, Geneva, 8-9 April 2006, Report of the Fourth Session of the Basel Convention Implementation and Compliance Committee, UNEP/CHW/CC/4/6 (2006), 3.

135 See Widawsky, note 77 above at, 607.

136 L. de la Fayette, 'The Concept of Environmental Damage in International Liability Regimes', in M. Bowman and A. Boyle eds, *Environmental Damage in International and Comparative Law: Problems of Definition and Valuation* 149, 164-167 (Oxford: Oxford University Press, 2002).

137 See, e.g., R. Axelrod, S. Van Deveer and D. Downie, *The Global Environment: Institutions, Law, and Policy* 137 (Washington DC: CQ Press, 2011).

The issue of meaningful consent must be addressed much more rigorously and underlines the requirement in international environmental law to address 'the special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable'.¹³⁸ Any PIC system remains insufficient in the absence of strong agreed liability provisions specific to the regime in question. In this regard, the Basel Convention lacks 'teeth'. More fundamentally, meaningful consent should be viewed more broadly as encompassing the human rights dimension of hazardous wastes on local communities. In a recent paper, Kaleck and Saage-Maaß highlight the intricacies of holding corporations criminally responsible for human rights violations amounting to international crimes. They cite the Trafigura case as a successful example of a civil remedy for human rights violations caused by a transnational corporation.¹³⁹ They urge the strengthening of specialised law enforcement and investigation units as well as enhancing the vital role of civil society organisations in initiating strategic litigation for human rights violations of this type.¹⁴⁰

Illegal trade in hazardous waste continues.¹⁴¹ The solution to the hazardous waste problem has often been considered to be a blanket ban on transboundary movements between developed countries and developing countries. Concerns around restrictions on the highly valuable trade in recyclable materials have made common cause between some developing countries and OECD countries around opposing more stringent restrictions on transboundary movements of hazardous wastes. The issue is currently under consideration by the Basel Convention Country Led Initiative due to report at COP10 in October 2011. There

may be scope for more targeted bans of specific categories of hazardous wastes whilst permitting international trade in recyclable secondary materials.¹⁴² This would require overcoming some significant political hurdles, not least amongst leading developing countries and emerging economies.

The Trafigura incident demonstrates that the current institutional architecture of the international regulatory regimes, in this case MARPOL, Basel and the European Union, are inadequate and fragmented. As Wirth concludes, 'there is at present no single, over-arching international framework for addressing environmental and public health risks from hazardous substances and activities'.¹⁴³ In order to address the need for more synergistic workings, the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions convened simultaneous extraordinary meetings in February 2010 to explore joint actions to enhance coordination and cooperation aimed at strengthening implementation across the three conventions, including the establishment of a joint clearing-house mechanism.¹⁴⁴ A similar process is in progress between the MARPOL and Basel Conventions.¹⁴⁵ Furthering this trend of inter-institutional co-operation, a joint consultation was held in October 2010 for the first time between the Food and Agriculture Organisation of United Nations, the United Nations Environment Programme and regional centres established under the Basel and Stockholm Conventions. It has concluded with

138. See Rio Declaration, note 108 above, Principle 6.

139. W. Kaleck and M. Saage-Maaß, 'Corporate Accountability for Human Rights Violations Amounting to International Crimes: The Status Quo and Its Challenges', 8 *Journal of International Criminal Justice* 699, 717 (2010).

140. *Id.*, at 723.

141. European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL), IMPEL-TFS Seaport Project II: International Cooperation in Enforcement Hitting Illegal Waste Shipments (Brussels: European Union Network for the Implementation and Enforcement of Environmental Law, 2006). IMPEL inspected 140 waste shipments and found that 68 (49%) breached EU rules. Many of these were destined for developing countries.

142. D. Wirth, 'Trade Implications of the Basel Convention Amendment Banning North-South Trade in Hazardous Wastes', 7 *Review of European Community and International Environmental Law* 237, 245 (1998).

143. D. Wirth, 'Hazardous Substances and Activities', in D. Bodansky, J. Brunnée, and E. Hey eds, *The Oxford Handbook of International Environmental Law* 421 (Oxford: Oxford University Press, 1st ed. 2008).

144. Omnibus Decision Adopted by the Conference of the Parties to the Basel Convention, Conference of the Parties to the Basel, Rotterdam and Stockholm Conventions Simultaneous Extraordinary Meetings, Bali, Indonesia, 22-24 February 2010, UNEP/FAO/ CHW/ RC/ POPS/ EXCOPS. 1/8, Annex I. Identical decisions were adopted by the Rotterdam and Stockholm COPs.

145. Conference Decision VIII/9, 27 November 2006, Cooperation Between the Basel Convention and the International Maritime Organization, in Report of the Eighth Meeting of the Conference of the Parties to the Basel Convention, UN Doc. UNEP/CHW.8/16, Annex I (2007).

an agreement on a plan to strengthen national coordination for control of international trade in hazardous chemicals and wastes.

All these efforts aimed at increasing co-operation, sharing management functions and technical capacity building should be fully supported but they should be rapidly complemented by addressing deficiencies at the 'sharp end' around compliance and the effectiveness of the current system of PIC. The message from the first 21 years of the Basel Convention is clear: neither a simplistic notification system nor a symbolic blanket ban will be sufficient to protect human health and the environment from the complex consequences of transboundary movements of hazardous wastes. Handl observes that the Basel Convention 'is not self-evidently a MEA specifically designed to protect the global environment'.¹⁴⁶ The recent collaborative initiatives amongst the international chemical regimes and also MARPOL would indicate that the time is right for closer integration of these currently fragmented regimes. This should encompass a broader focus beyond transboundary movements between state parties to a wider focus on *common concern* for the global environment in the sense encapsulated in Principle 7 of the Rio Declaration.¹⁴⁷ This should address not only environmentally sound management but also reduction in use of hazardous chemicals and the adoption of clean production practices. At minimum, a more rigorous integrated and comprehensive regime is warranted that fully addresses the complexity of this truly 'wicked' problem that has potentially wide human rights implications.

146 G. Handl, 'Compliance Control Mechanisms and International Environmental Obligations', 5 *Tulane Journal of International and Comparative Law* 29, 36 (1997).

147 See Rio Declaration, note 108 above, Principle 7: 'States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command'.

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