A LEGAL FRAMEWORK FOR THE TRANSBOUNDARY MOVEMENT OF HAZARDOUS WASTE IN SOUTH AFRICA AND LESOTHO

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by

Freddie J Terblanche

Supervisor: Prof LJ Kotzé

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Abstract

The transboundary movement of hazardous waste is a perceptibly dangerous activity which poses significant risks to the environment, as well as human health and well-being. Accordingly, it is imperative that hazardous waste should be regulated during all phases of its movement with a view to ensure that it is transported, handled and disposed of in an environmentally sound manner.

This dissertation examines that legal framework pertaining to the transboundary movement of hazardous waste in South Africa and Lesotho, and considers the international-, regional-, sub-regional- and domestic legal rules applicable to such movement. It notes the fragmented and incoherent fashion in which the movement of hazardous waste is presently regulated in South Africa and Lesotho. It furthermore notes the practical predicaments of the international- and regional legal frameworks, with particular reference to its enforcement against legal subjects other than states (companies or individuals).

It is furthermore evident from an analysis of the domestic legal regimes in South Africa and Lesotho that the international enforcement of domestic judgments might be problematic, and in this regard, the author advances some proposals to cater for the international efficacy of domestic judgments.

Afrikaanse Opsomming

Die oorgrens beweging van skadelike afval is 'n gevaarlike aktiwiteit wat merkwaardige gevare inhou vir die omgewing, sowel as menslike gesondheid en welstand. Dit is gevolglik uiters belangrik om te verseker dat skadelike afval gereguleer word tydens alle fases van beweging, sodat dit op 'n omgewingsvriendelike manier vervoer, hanteer en weggegooi kan word.

Hierdie dissertasie ondersoek die regsraamwerk wat van toepassing is op die oorgrens beweging van skadelike afval in Suid-Afrika en Lesotho, en oorweeg die internasionale-, regionale-, sub-regionale- en plaaslike regsreëls wat van toepassing is daarop. Kennis word geneem van die feit dat die beweging van skadelike afval in Suid-Afrika en Lesotho tans gereguleer word op 'n baie gefragmenteerde en omsamehangende wyse. Daar word ook kennis geneem van die praktiese probleme wat met die internasionale- en regionale regsraamwerke geassosieer word, met spesifieke verwysing na die afdwingbaarheid van hierdie reëls teen regsubjekte wat nie state is nie (maatskappye en individue).

Dit is ook duidelik dat die internasionale afdwingbaarheid van plaaslike hofbevele problematies mag wees, en die skrywer doen gevolglik 'n paar voorstelle aan die hand waarmee Suid-Afrika en Lesotho kan verseker dat plaaslike hofbevele internasionale effektiwiteit kan geniet.

LIST OF ABBREVIATIONS

ACP:	African, Caribbean and Pacific (group of countries)
APPA:	Atmospheric Pollution and Prevention Act (45 of 1965)
ASEAN:	Association of South-East Asian Nations
BCRC:	Basel Convention Regional Centre
CEO:	Chief Executive Officer
CILSA:	Comparative and International Law Journal of South Africa
COP:	Conference of Parties
DEAT:	Department of Environmental Affairs and Tourism
DMA:	Disaster Management Act (57 of 2002)(RSA) / (2 of 1997)(Lesotho)
DWAF:	Department of Water Affairs and Forestry
ECA:	Environment Conservation Act (73 of 1989)
EIA:	Environmental Impact Assessment
EU:	European Union
GG:	Government Gazette
GN:	Government Notice
HICLR:	Hastings International and Comparative Law Review
HNS:	Hazardous and Noxious Substances

HSA:	Hazardous Substances Act (15 of 1973)
ICJ:	International Court of Justice
ICL:	International Law Commission
ICQL:	International and Comparative Law Quarterly
LHDA:	Lesotho Highlands Water Authority
MEC:	Member of the Executive Committee
MULR:	Melbourne University Law Review
NEMA:	National Environmental Management Act (107 of 1998)
NEP:	National Environmental Policy (of 1995)
NRSRA:	National Railway Safety Regulator Act (16 of 2002)
NRTA:	National Road Traffic Act (93 of 1996)
NWA:	National Water Act (36 of 1998)
OECD:	Organisation for Economic Co-operation and Development
PER:	Potchefstroom Electronic Law Journal
RSA:	Republic of South Africa
SADC:	Southern African Development Community
SAJELP:	South African Journal of Environmental Law and Policy
SABS:	South African Bureau of Standards
SANS:	South African National Standards

Stell LR:	Stellenbosch Law Review
UN:	United Nations
UNEP:	United Nations Environment Programme
WCED:	World Commission on Environment and Development

1. Introduction

Ever-increasing industrialisation, coupled with inexorable population growth, brings about a dilemma which threatens the environment, human health and general well-being of people. In order to meet the augmented needs of a growing global population, goods are manufactured at a brisk tempo, which results in increased amounts of hazardous waste being generated annually.[1] As a consequence of the rapid expansion of industrialisation, industrialised countries are faced with two notable problems. Firstly, the disposal sites designated for the safe disposal of hazardous waste are quickly reaching their limits. Secondly, the cost of hazardous waste incineration and disposal has become very expensive. To overcome these problems, industries have begun to explore the possibility of utilising alternative disposal sites, which have lead to a practice where industrialised countries began to use developing countries for the disposal of hazardous waste.[2]

The challenge is that many developing countries deem hazardous waste trade as a source of much needed income, which facilitates economic growth and cultivates socio-economic improvement, often to the detriment of people and the environment.[3] At first glance, hazardous waste trade between industrialised countries and developing countries appears to be mutually beneficial, as both parties gain some advantage from the transaction. If hazardous waste is, however, not transported, handled and disposed

1 Approximately 400 million tons of hazardous waste is produced annually. See Akinnusi *Stell LR* 306 in this regard. With specific reference to the environment-economy debate pertaining to waste trade, Kummer draws attention to the North-South aspect of the economy-environment debate. The nub of this debate is that a threat is posed to the environment of ill-equipped developing countries (usually countries in the Southern hemisphere) by the illegal importation of hazardous wastes from industrialised nations (usually countries in the Northern hemisphere). See Kummer *International Management of Hazardous Wastes* 43. See further Lipman 1999 *Acta Juridica* 270 and Birnie and Boyle *International Law and the Environment* 332.

2 UNEP *Environment and Trade* 13. See further Lipman 1999 *Acta Juridica* 266 and Akinnusi 2001 *Stell LR* 306. See also Naldi 2000 *SAJELP* 218; Russell and Shearer *Environmental Law* 145;Tladi 2000 *CILSA* 211 and Glazewski 1993 *CILSA* 234.

3 Anon 2006 HYPERLINK http://www.american.edu/TED/nigeria.htm 2 Mar. Another reason for waste trade is the economic benefits which exporters enjoy. Disposal and incineration of these wastes have become extremely costly, and therefore developing countries provide disposal options at a fraction of costs in the state of origin. See Lipman 1999 *Acta Juridica* 271 and Akinnusi 2001 *Stell LR* 306 in this regard.

of in an environmentally sound manner, it poses significant risks to the environment, as well as human health and well-being. Albeit a gross generalisation, it is often the case that developing countries lack the capacity to sufficiently manage hazardous waste and that they are also not aware of the dangers involved in the improper management of hazardous waste.

The true dangers involved in the unsafe movement and disposal of hazardous waste is well illustrated by the notorious Koko incident[4] and other related cases,[5] which lead to increased global awareness and manifested in the adoption of various international conventions with a view to avoid the recurrence of history. The management of hazardous waste can be subdivided into three main categories, namely its handling, movement and disposal. Arguably, the first step in the effective management of hazardous waste trade is to control its movement. This dissertation only investigates the movement (transportation) of hazardous waste across borders.

The primary objective of this dissertation is to ascertain whether adequate legal instruments exist to regulate the transportation of hazardous waste in some Southern African countries. As an exposition of all Southern African countries will be too extensive, only the position in South Africa and Lesotho, as member states of the Southern African Development Community (SADC), are investigated.[6]

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4 The Koko incident involved the illegal exportation of thousands of tons of hazardous waste from an Italian company to the city of Koko, Nigeria. When these consignments of wastes were discovered, it was ordered that it should be returned to the state of origin (Italy). Many of the drums were leaking and, as a result, the workers packing drums into containers for retransportation suffered severe chemical burns. Many of these workers were subsequently hospitalised. Moreover, land within a 500m radius of the dumping site was declared unsafe and even more concern arose with regard to the possibility of groundwater contamination. See further Lipman 1999 *Acta Juridica* 267, Tladi 2000 *CILSA* 212 and Van der Linde 2002 *CILSA* 100.

5 The *Khian Sea* incident best illustrates the dangers of hazardous waste trade and the threat to human health and the environment. It was proven that high levels of cadmium, arsenic, mercury and dioxins can contaminate drinking water, causes kidney malfunctions, respiratory difficulties or may even result in death. See Howard 1990 *HICLR* 224.

6 Lesotho and South Africa have been selected for purposes of this discussion by reason of the countries being part of a research project entitled: *Improving transboundary environmental governance in South Africa, Lesotho and Mozambique* within the ambit of the *South African-Netherlands Project on Alternatives in Development* (SANPAD).

Given this context, the legal question posed in this dissertation is: what is the legal framework pertaining to the transboundary movement of hazardous waste in South Africa and Lesotho as member states of SADC? Aspects that are covered are the international, regional, sub-regional and domestic legal rules and instruments applicable to the movement of hazardous waste. This dissertation mainly consists of a literature study where the aforesaid rules and instruments are investigated.

2. Hazardous Waste Defined

As the primary topic of this dissertation is hazardous waste, it is necessary to define the concept before engaging in an analysis of the rules applicable to its movement. The *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal* of 1989 (the Basel Convention) follows a three-tiered approach in defining hazardous waste.[7] In the first instance, Annex I of the Basel Convention lists certain types of wastes as hazardous.[8] Secondly, wastes possessing

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7 The Conventions also distinguishes between hazardous and other wastes. Kummer rightfully notes that the distinction is "purely terminological... [and that]...there is no substantive difference between the two categories of wastes". Accordingly, and for the sake of briefness, no discussion of this distinction is done here. See Kummer 1992 *ICLQ*543 for further reading.

8 Kummer *International Management of Hazardous Wastes* 48; Article 1 of the Convention; Morrison and Muffet *Hazardous Waste* 412; and Kummer 1992 *ICLQ*543. The categories of waste to be controlled under Annex 1, are the following: "[Y1] clinical waste from medical care in hospitals, medical centres and clinics; [Y2] wastes from the production and preparation of pharmaceutical products; [Y3] waste pharmaceuticals, drugs and medicines; [Y4] wastes from the production, formulation and use of biocides and phytopharmaceuticals; [Y5] wastes from manufacture, formulation and use of wood preserving chemicals; [Y6] wastes from the production, formulation and use of organic solvents; [Y7] wastes from heat treatment and tempering operations containing cyanides; [Y8] waste mineral oils unfit for their originally intended use; [Y9] waste oils/water, hydrocarbons/water mixtures, emulsions; [Y10] waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs); [Y11] waste tarry residues arising from refining, distillation and any pyrolytic treatment; [Y12] wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish; [Y13] wastes from production, formulation and use of resins, latex, plasticizers; glues/adhesives; [Y14] waste chemical substances arising from research and development or teaching activities which are not identified and/or are new and whose effects on man and/or the environment are not known; [Y15] wastes of an explosive nature not subject to legislation; [Y16] wastes from production, formulation and use of photographic chemicals and processing materials; [Y17] wastes resulting from surface treatment of metals and plastics; [Y18] residues arising from industrial waste disposal operations. Annex I further lists wastes containing the following constituents as being hazardous: [Y19] metal carbonyls; [Y20] beryllium, beryllium compounds; [Y21] hexavalent chromium compounds; [Y22] copper compounds; [Y23] zinc compounds; [Y24] arsenic or arsenic compounds; [25]

the characteristics contained in Annex III of the Convention are also deemed to be hazardous.[9] In the final instance, the Convention allows every state party to determine additional types of hazardous waste by way of promulgation under their respective domestic legal regimes.[10] The question whether a specific waste is hazardous under the Basel Convention can therefore not be answered without having due regard to the domestic legal regimes of all states involved in the movement of hazardous waste.

The *Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa* (1991) (the Bamako Convention) follows a similar approach to the Basel Convention in defining hazardous waste.[11] In addition, article 2(1)(d) states that "hazardous

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selenium or selenium compounds; [Y26] cadmium or cadmium compounds; [Y27] antimony, antimony compounds; [Y28] tellurium or tellurium compounds; [Y29] mercury or mercury compounds; [Y30] thallium or thallium compounds; [Y31] lead or lead compounds; [Y32] inorganic fluorine compounds (excluding calcium fluoride); [Y33] inorganic cyanides; [Y35] acidic solutions or acids in solid form; [Y36] asbestos (dust and fibres); [Y37] organic phosphorous compounds; [Y38] organic cyanides; [Y39] phenols, phenol compounds (including chlorophenols); [Y40] ethers; [Y41] halogenated organic solvents; [Y42] organic solvents excluding halogenated solvents; [Y43] any congenor or polychlorinated dibenzo-furan; [Y44] any congenor of polychlorinated dibenzo.p.dioxin; [Y45] organohalogen compounds other than substances referred to in this Annex.

9 See Kummer *International Management of Hazardous Wastes* 49 and Kummer 1992 *ICLQ*543. This hazardous characteristics referred to in Annex III are the following: [H1] explosive; [H2 ...missing]; [H3] flammable liquids; [H4.1] flammable solids; [H4.2] substances or wastes liable to spontaneous combustion; [H4.3] substances or wastes which, in contact with water omit flammable gasses; [H5.1] oxidizing; [H5.2] organic peroxides; [H6.1] poisonous (acute); [6.2] infectious substances; [H8] corrosives; [H10] liberation of toxic gasses in contact with air or water; [H11] toxic (delayed or chronic); [H12] ecotoxic; [H13] capable, by any means, after disposal, of yielding another material, e.g. laechate, which possesses any of the characteristics above.

10 See Kummer *International Management of Hazardous Wastes* 48 and article 1 of the Convention.

11 Annex I deems the following waste streams to be hazardous: [0] All wastes containing or contaminated by radionuclides, the concentration or properties of which result from human activity; [Y1] Clinical wastes from medical care in hospitals, medical centers and clinics [Y2] Wastes from the production and preparation of pharmaceutical products; [Y3] Waste pharmaceuticals, drugs and medicines; [Y4] Wastes from the production, formulation and use of biocides and phytopharmaceuticals; [Y5] Wastes from the manufacture, formulation and use of wood preserving chemicals; [Y6] Wastes from the production, formulation and use of organic solvents; [Y7] Wastes from heat treatment and tempering operations containing cyanides; [Y8] Waste mineral oils unfit for their originally intended use; [Y9] Waste oils/water, hydrocarbons/water mixtures, emulsions; [Y10] Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs); [Y11] Waste tarry residues arising from refining, distillation and any pyrolytic treatment; [Y12] Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish; [Y13] Wastes from production, formulation and use

substances which have been banned, cancelled or refused registration" for reasons pertaining to human health or the environment, are deemed to be hazardous.

Presently, hazardous waste is not expressly defined in South African environmental law.[12] A definition is, however, proposed in the *Environmental Management: Waste Management Bill*, (*Waste Management Bill*) which was published for comments in January 2007.[13]

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latex, plasticizers, glues/adhesives; [Y14] Waste chemical substances arising from research and development or teaching activities which are not identified and/or are new and whose effects on man and/or the environment are not known; [Y15] Wastes of an explosive nature not subject to other legislation; [Y16] Wastes from production, formulation and use of photographic chemicals and processing materials; [Y17] Wastes resulting from surface treatment of metals and plastics residues arising from industrial waste disposal operations; [Y18] Wastes collected from households, including sewage and sewage sludges; [Y47] Residues arising from the incineration of household wastes. Moreover, wastes having the following constituents are also hazardous wastes under the Bamako Convention: [Y19] Metal carbonyls; [Y20] Beryllium; beryllium compounds; [Y21] Hexavalent chromium compounds; [Y22] Copper compounds; [Y23] Zinc compounds; [Y24] Arsenic or arsenic compounds; [Y25] Selenium or selenium compounds; [Y26] Cadmium or cadmium compounds; [Y27] Antimony or antimony compounds; [Y28] Tellurium or tellurium compounds; [Y29] Mercury or mercury compounds; [Y30] Thallium or thallium compounds; [Y31] Lead or lead compounds; [Y32] Inorganic fluorine compounds excluding calcium fluoride; [Y33] Inorganic cyanides; [Y34] Acidic solutions or acids in solid form; [Y35] Basic solutions or bases in solid form; [Y36] Asbestos (dust and fibres); [Y37] Organic phosphorous compounds; [Y38] Organic cyanides; [Y39] Phenols; phenol compounds including chlorophenols; [Y40] Ethers; [Y41] Halogenated organic solvents; [Y42] Organic solvents excluding halogenated solvents; [Y43] Any congener of polychlorinated dibenzo-furan; [Y44] Any congener of polychlorinated dibenzo-p-dioxin; [Y45] Organohalogen compounds other than substances referred to in this Annex (e.g., Y39, Y41, Y42, Y43, Y44). In terms of Annex II to the Bamako Convention, wastes containing the following characteristics are classified as hazardous waste: [H1] explosive; [H3] flammable liquids; [H4.1] flammable solids; [H4.2] substances or waste liable to spontaneous combustion; [H4.3] substances or wastes which, in contact with water emit flammable gasses; [H5.1] oxidizing; [H5.2] organic peroxides; [H6.1] poisonous (acute); [H6.2] infectious substances; [H8] corrosives; [H10] liberation of toxic gasses in contact with air and water; [H11] toxic (delayed or chronic); [H12] ecotoxic; [H12] ecotoxic; [H13] capable by any means, after disposal, of yielding another material, e.g., laechate, which possesses any of the characteristics listed above.

12 The *National Environmental Management Act* 107 of 1998 (NEMA) merely makes reference to the manner in which hazardous waste should be treated. Similarly, the *Hazardous Substances Act* 15 of 1973 does also not provide such a definition. The *Atmospheric Pollution Prevention Act* 45 of 1965 (APPA) contains provisions regulating the burning of wastes, but it does however not define hazardous waste. Although the *Environment Conservation Act* 73 of 1989 (ECA) is already partially repealed, the provisions dealing with the disposal of waste are still being applied (See Government Notice 1405 of 29 September 2006 in this regard). ECA however only defines waste, and not hazardous waste. The *National Water Act* 36 of 1998 (NWA) also fails to define hazardous waste.

13 GN 1832 of 2007, published 12 January 2007.

Despite it being not yet in force, it proposes to define hazardous waste as:[14]

> ...any waste that may, by circumstances of use, quantity, concentration or inherent physical, chemical or toxicological characteristics, have significant adverse [e]ffects on [human] health and the environment.

Hazardous waste is also not defined under Lesotho law.[15] Hence, and in the absence of a current definition for hazardous waste in the Lesotho and South African legal regimes, the term hazardous waste should in the meantime be defined with reference to the respective annexures to the Basel and Bamako Conventions, as reproduced in footnotes 9, 10 and 12 above.[16]

3. International Framework

3.1. International Environmental Law Principles

When it comes to international enforceability, environmental law is generally seen as soft law by virtue of its consensual and co-operative nature.[17] Nonetheless, the majority of states recognise certain principles of international environmental law as *jus cogens* – in other words: principles applicable to and enforceable against all members of the international community, notwithstanding its unwillingness to be bound by it.[18] Sands[19] rightfully notes that these principles are sufficiently well established to

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14 Section 1(o) of the Draft Environmental Management: Waste Management Bill. Own emphasis added.

15 The *Environment Act* of 2000 contains provisions which endeavour to regulate the management of hazardous waste, but is silent on the definition thereof. Moreover, although acceded to by Parliament, this Act is still not operational. As far as it could be ascertained, previous legislation dealing with environmental issues are also silent on the definition of hazardous waste. In its *National Environmental Policy* which was adopted in February 1996,15 Lesotho makes an express statement that it "must be guided by principles of relevant international and regional conventions, such as the Basel Convention and the Bamako Convention. See Lesotho Gov 2006 HYPERLINK http://www.lesotho.gov.ls/articles/2006/Draft_Hazardous_Waste_Management_Report.htm 9 Oct in this regard.

16 South Africa and Lesotho are signatories to the Basel Convention.

17 See Glazewski *Environmental Law* 45 and Dugard *International Law* 392 in this regard.

18 Sands *Principles of International Environmental Law* 231 and 232.

19 Sands *Principles of International Environmental Law* 232.

provide the basis for an international cause of action and consequential liability.[20] Although the regulation of international law is generally dominated by the notion of consent and co-operation, the elevated status of *jus cogens* principles may render states liable even where they did not consent to such liability under, for example, the Basel- and Bamako Conventions. It is against this backdrop that the principles of international law must be viewed. It is furthermore important to bear in mind that only states and intergovernmental institutions are recognised as entities with true international personality.[21] Accordingly, the position in contemporary international law is that only states (and intergovernmental institutions) will have *locus standi* to bring an international claim against another state.[22] It will therefore be the responsibility of the "guilty" state to channel liability to the responsible individual or company which, for example, are engaged in the unlawful cross-border transportation of hazardous waste.

3.1.1. Sustainable development

In 1987, the Brundtland Commission introduced the concept of sustainable development in its renowned Brundtland report.[23] Although the term "sustainable development" has become the topic of extensive academic debate, it is generally

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20 Not all of the principles have the same status and enforceability in the international law regime. Sands expressly state that some are recognised as: customary international law (in other words, principles applicable to and enforceable against all members of the international community, notwithstanding their unwillingness to be bound by it); emerging legal obligations; and less developed principles. See Sands *Principles of International Environmental Law* 231 and 232.

21 Dugard states that although "individuals benefit from the protection of international law and participate in its processes....they cannot be described as full subjects of international law." Similarly, he states that multinational corporations and Non-Governmental Organisations (NGO's) fail to qualify as subjects of international law. See Dugard *International Law* 1-2 in this regard.

22 It appears as though a responsible individual or company may not incur direct liability where the rules of international law are contravened. It is the state to which that individual or company belongs that will be held liable in international actions and the state will then have to institute action against the relevant individual or company.

23 WCED *Our Common Future* (Oxford University Press 1987). The concept subsequently manifested in various prominent international conferences, such as: the *United Nations Conference on the Environment and Development* (UNCED); the 1992 Rio Declaration; Agenda 21; and the 2002 World Summit on Sustainable for Development.

deemed to be the foundation of modern environmental law.[24] The quintessence of sustainable development is that it seeks to promote economic and social development so that "it meets the needs of the present [generation] without compromising the ability of future generations to meet their own needs".[25] Accordingly, it comes as no surprise that most environmental conventions underscore sustainable development. Any transportation of hazardous waste conducted *contra* the ideals of sustainable development may therefore trigger international liability - and the "guilty state" may, *inter alia,* be held liable to take remedial and precautionary measures.

3.1.2. Responsibility not to cause transboundary environmental harm

Principle 21 of the Rio Declaration proclaims that states are obligated not to cause transboundary harm when exercising their sovereign right to exploit their national resources.[26] This principle is recognised as being one of the cornerstones of international environmental law and its status as customary international law has been

24 According to Sands, "there can be little doubt that the concept of 'sustainable development' has entered the corpus of international customary law, requiring the different streams of international law to be treated in an integrated manner (Sands *Principles of International Environmental Law* 254. Kotze however prefers to use the term "sustainability" as opposed to sustainable development (Kotze *Integrated Environmental Governance* 12-14). Khavari and Rothwell however views sustainable development as a concept and not a principle of international environmental law (Khavari and Rothwell *MULR* 15).

25 Segger and Khalfan *Sustainable Development Law* 19. Kotze states in this regard that "it may be derived...that sustainable development emphasises achieving of an equilibrium between environmental protection and long-term growth and welfare that would be beneficial to present and future generations. See Kotze *Integrated Environmental Governance* 12 and Bray 1998 *SAJELP* 1.

26 It states that: "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." See further Kummer 1992 *ICLQ* 530 and Kummer *International Management of Hazardous Waste* 17.

confirmed by the International Court of Justice (ICJ).[27] Principle 21 is based on the decision in the eminent *Trail Smelter Arbitration,* where it was affirmed that:[28]

> ..under the principles of international law...no State has the right to use or permit the use of territory in such a manner as to cause injury...in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.

For purposes of this dissertation, it may be deduced that Lesotho and South Africa are obligated not to cause environmental damage or harm to one another (or any other state) when importing, exporting or transporting hazardous waste. When this obligation will be violated is hard to say and will depend on the special circumstances of each case.[29]

3.1.3. The preventive principle

De Sadeleer[30] expresses the view that the preventive principle is "expressly and implicitly endorsed by an extensive body of international treaties and related instruments". The nub of the preventive principle is that it strives for the absolute prevention of environmental degradation and damage.[31] Where the complete prevention of environmental degradation or damage is impossible, activities which might result in environmental damage must be reduced, limited or controlled.[32] Pursuant to the preventive principle, states may therefore require one another to prevent or limit damage to the environment within its own boundaries by means of appropriate legal, administrative and other measures.[33] The rationale behind this

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27 According to Sands, the ICJ acknowledged that principle 21 reflects customary international law in its Advisory opinion on *The legality of the Threat or Use of Nuclear weapons.* See Sands *Principles of International Environmental Law* 236 and 241 in this regard. Also note the *Corfu Channel Case* IJC Reports 4(1949) 4-28.

28 As quoted in Sands Principles of International Environmental Law 242 (own emphasis). See further the Trail Smelter Arbitration (1938) 33 *AJIL* 182; Kummer 1992 *ICLQ* 530; Glazewski *Environmental Law* 238 and Dugard *International Law* 394.

29 Sands *Principles of International Environmental Law* 241.

30 De Sadeleer *Environmental Principles* 64.

31 Sands *Principles of International Environmental Law* 246.

32 *Ibid.*

33 *Ibid.*

principle is that once environmental damage has occurred, it is often very difficult (if not impossible) and expensive to rectify.[34] It is therefore better to play it safe and avoid such damage in the first place. States should thus act on the *possibility of damage* and not when damage has already occurred.[35] The implication of the preventive principle for the transportation of hazardous waste is that states should already act where there is a mere possibility that hazardous waste will be transported in an environmentally unsound manner and where such transportation may result in environmental damage.[36] Hence, governments of both South Africa and Lesotho may be required to promulgate legislation (and other appropriate regulatory measures) to ensure that the transportation of hazardous waste conforms to the requirements of the preventive principle.[37]

3.1.4. The precautionary principle

The precautionary principle entails that, in the absence of scientific evidence of potential environmental damage, it is preferable not to proceed with an activity that

34 UNEP *Environment and Trade* 8.

35 *Ibid.* See further Birnie and Boyle *International Law and the Environment* 121-124. See further Sands Principles of *International Environmental Law* 247.

36 The universal acceptance of the preventive principle is evident from the endorsement thereof in the 1972 *Stockholm Declaration;* the 1978 *UNEP Draft Principles*; the 1982 *World Charter for Nature*; and Principle 11 of the 1992 *Rio Declaration.* Sands furthermore provide a whole list of Conventions that recognise and incorporate the preventive principle. As a result, it is argued that "this extensive body of international commitments provides compelling evidence of: the wide support of the principle of preventive action; and the basis upon which states should carry out their commitment to enact effective national environmental legislation pursuant the general requirement of Principle 11 of the Rio Declaration. See Sands *Principles of International Environmental Law* 247 and 248.

37 As was stated previously, uncertainty exists as to who can require a state to take legislative and other measures. As a general rule, only states have *locus standi* before the International Court of Justice (ICJ) – see Dugard *International Law* 459. Although this is the recognised position in modern international law, Dugard expressly mentions that there are calls to expand the jurisdiction of the ICJ to other actors in the international community. A further impediment on the effective enforcement of this duty might be the fact that the ICJ does not have compulsory jurisdiction over states. In this regard, Dugard states that "[t]he ICJ does not...have compulsory jurisdiction over all such states or over all disputes of international law between these states. It has jurisdiction only over those states which consent to the Court's jurisdiction and only in respect to those disputes which such states consent to be heard by the Court." See Dugard *International Law* 460 in this regard.

may cause environmental damage.[38] This means that states are obligated to avoid potentially devastating consequences where there is a lack of certainty as to the damaging nature thereof.[39] According to Birnie and Boyle,[40] this obligation is one of diligent prevention and control and is already recognised by the international community as customary international law.[41] Moreover, the precautionary principle encompasses both transboundary and domestic environmental harm.[42] Sands[43] suggests that the precautionary approach must be limited to situations where there is at least a possibility of "serious and irreversible damage". In other words, where the potential damage seems not to be of a serious and irreversible nature, a state may very well escape the obligation to take precautionary measures. The transboundary movement of hazardous waste is arguably an activity which may cause serious and irreversible damage to the environment and therefore South Africa and Lesotho may find themselves in a position where precautionary measures should be imposed in this regard.[44]

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38 In the words of Birnie and Boyle: "[r]isk is a complex concept, however entailing judgments not only about the probability and scale of harm, but about the causes of harm, and the effects of the activities, substances, or process in question, and their interaction over time. These are not easy questions to answer with certainty, even for scientists." See Birnie and Boyle *International Law and the Environment* 115 and UNEP *Environment and Trade* 9. Sands articulate that the precautionary principle "aims to provide guidance in development and application of international environmental law where there is scientific uncertainty." See Sands *Principles of International Environmental Law* 267. The precautionary principle is also reflected in Principle 15 of the Rio Declaration, which provide that: "Where there are threats of serious or irreversible [environmental] damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation" (as quoted in Sands *Principles of International Environmental Law* 268).

39 UNEP *Environment and Trade* 9 and *Dugard International Law* 398.

40 Birnie and Boyle *International Law and the Environment* 115.

41 *Ibid.*

42 Birnie and Boyle *International Law and the Environment* 104.

43 Sands *Principles of International Environmental Law* 270.

44 Sands makes express reference to the 1991 Bamako Convention and its implicit incorporation of the precautionary principle, by providing that: "[parties are required to adopt and implement] the preventive, precautionary approach to pollution which entails, *inter alia,* preventing the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm. The parties shall co-operate with each other in taking the appropriate measures to implement the precautionary principle to pollution prevention through the application of clean production methods." See Sands *Principles of International Environmental Law* 270 and article 4(3)(f) of the Bamako Convention in this regard. Another argument which may be put forward is that the precautionary principle in effect prohibits activities in respect of which there is uncertainty as regards its impact on the environment and human health. What then, is the position where it is clear that an activity does in fact pose serious threats to both human health and the environment? The precautionary principle cannot be construed so as to allow

3.1.5. Polluter-pays principle

One of the most prominent principles of international environmental law is the polluter-pays principle.[45] In essence, it entails that the full cost of environmental damage should be borne by the polluter.[46] The principle embodies a type of catch-all approach and applies to the broad spectrum of activities that may cause environmental damage. Technically speaking, the polluter pays principle may therefore provide a mechanism to channel liability to a person or enterprise that caused environmental damage during the transportation of hazardous waste.[47]

3.2. International Conventions[48]

3.2.1. Basel Convention

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a dangerous activity where there is evidence that it may result in death and serious environmental damage (amongst others). Hence, the flipside of the argument should be true. That is, the precautionary principle prohibits the transboundary movement of hazardous waste as there is indeed scientific (and factual) certainty as to the damaging nature of the environmentally unsound transportation thereof.

45 Dugard emphasises the fact that the polluter pays principle forms the basis of the International Law Commission's *Draft Principles on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International* Law". See Dugard *International Law* 398. Other liability conferring conventions include, *inter alia,* the *Protocol on Liability and Compensation for Damage Resulting from Transboundary Movement of Hazardous Wastes and Their Disposal* (1999) and the *International Convention on Liability and Compensation For Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea* of 1996 (also referred to as the "HNS Convention").

46 UNEP *Environment and Trade* 9.

47 It is interesting to note that the polluter-pays principle is recognised as international law – in other words: law that can only be enforced by states against states. As a companies and individuals are, strictly speaking, not subjects of international law, it may happen that the polluter-pays principle cannot be exercised directly against the actual perpetrator in an international *forum* (the ICJ). It appears as though the correct procedure to enforce the polluter-pays principle is to exercise it against a state, and that such state must then in turn enforce it against the responsible individual or company.

48 Due to length constraints and focus considerations, this dissertation does not investigate the international legal framework relating to transboundary air pollution, including the *Vienna Convention for Protection of the Ozone Layer* (1985), the *Montreal Protocol on Substances that Deplete the Ozone Layer* (1987), the *United Nations Framework Convention on Climate Change* (1992), and the Kyoto Protocol (1997). Although the majority of articles on this topic investigates the *Rotterdam Convention on the Prior Informed Consent Procedure for Chemicals and Pesticides in International Trade* (2004)(the Rotterdam Convention), it is expressly stated in article 3(2)(c) that the Rotterdam Convention does not apply to waste. Accordingly, and in the light of length constraints in addition to its inapplicability, it is not discussed under the international legal framework.

3.2.1.1. General provisions

The *Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal* of 1989 (the Basel Convention) is generally seen as the most important international instrument dealing with the transboundary movement of hazardous waste.[49] It serves as a compromise between proponents of a complete ban on the transboundary movement of hazardous waste (generally developing countries), and those who merely intend to define and strictly regulate the conditions for its movement, management and disposal (generally developed countries).[50]

The main aspiration of the Basel Convention is to protect human health and the environment against the potentially adverse effects of hazardous waste – with particular reference to its generation, transboundary movement and extra-territorial disposal. This dissertation primarily focuses on the manner in which the Basel Convention deals with the movement (transportation) of hazardous waste.[51] As a point of departure, hazardous waste must as far as possible be disposed of in the country of origin.[52] Where the country of origin's disposal sites are inadequate or have reached its limits, the movement of hazardous waste must be regulated in order to ensure that it is disposed of in an environmentally sound manner.[53] The term "managed" must be understood to embrace the collection, transportation and disposal of hazardous waste.[54]

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49 Morrison and Muffet *Hazardous Waste* 411 and Naldi 2000 *SAJELP* 220.

50 Naldi 2000 *SAJELP* 220. See also Kummer 1992 *ICLQ* 535-538 and Akinnusi 2001 *Stell LR* 308 in this regard

51 It should be borne in mind that the transportation of hazardous waste does not occur in a vacuum, but due to length constraints, the legal framework pertaining to the generation, management and disposal of hazardous waste are not dealt with in this dissertation.

52 See the Preamble to the Basel Convention and Lipman 1999 *Acta Juridica* 273.

53 Article 4(2)(g). See further Kummer *International Management of Hazardous Wastes* 6. Kummer mentions further reasons for the exportation, such as: growing public opposition; a tightening of government rules; and escalating disposal costs. Collectively, these reasons for hazardous waste exportation are referred to as the "path of least resistance".

54 Article 2(2). As was already stated, this dissertation only investigates the legal framework pertaining to the movement (transportation) of hazardous waste.

The Basel Convention makes it clear that the transboundary movement of hazardous waste is only permissible where the country of origin does not have the requisite capacity to dispose of the waste in an environmentally sound manner;[55] or where the waste in question is raw material intended for recycling.[56] Although these are the only instances where the transboundary movement of hazardous waste is expressly permitted, it is not intended to be a *numerus clausus.* In terms of article 4(9)(c), contracting states are free to determine further circumstances under which waste may be exported or imported.[57] Accordingly, member states are in a position to place a *de facto* ban on the importation of any and all hazardous waste into their respective territories by enacting legislation and/or regulations to that effect.[58] The contrary is also true, and states may collectively determine more grounds upon which hazardous waste may be imported or exported.[59]

Where the destination state cannot dispose of the hazardous waste in an environmentally sound manner, any transportation of hazardous waste to that state is deemed to be "illegal traffic." In these instances, the exporting state will be obliged to re-import the waste.[60] From a transportation perspective, it is important to have regard

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55 Article 4(9)(a). The capacity to dispose of hazardous waste encompasses the state's financial, technical and structural capacity. For purposes of this discussion, "structural capacity" should be understood to mean "adequate disposal sites". See further Tladi 2000 *SAJELP* 204; Kummer *International Management of Hazardous Wastes* 9 and Lipman 1999 *Acta Juridica* 273.

56 Article 4(9)(b). See further Tladi 2000 *SAJELP* 204. Howard remarks in this regard that waste is substances which are intended for disposal. "Disposal is by definition limited to operations which do not lead to the possibility of resource recovery, recycling, reclamation, direct re-use, or alternative uses. Thus, any substance transported for recovery, recycling or reclamation is exempt from the provisions of the Convention." See Howard 1990 *HICLR* 228 and also Lipman 1999 *Acta Juridica* 273 in this regard.

57 This provision highlights the inherent conflicts contained in the Basel Convention. It states that hazardous waste may only be exported in two situations, but in the same breath it confers a freedom upon states to determine additional situations in which waste may be exported. It goes without saying that this situation *prima facie* defeats the limitation on hazardous waste exportation, as envisaged in the Basel Convention. Although it seems to be an untenable situation, it has the advantage of only allowing the exportation under circumstances regulated by the legislature. Thus, there is at least some guarantee that the exportation of hazardous waste will only be allowed in circumstances which were subjected to the legislative process.

58 See article 4(2) of the Basel Convention and Howard 1990 *HICLR* 230 in this regard.

59 This is one of the biggest shortcomings to the Basel Convention according to African states. See the discussion of the Bamako Convention at 4.3 *supra* in this regard.

60 Tladi 2000 *SAJELP* 207. What is interesting is the fact that the duty to re-import is placed on the state of export, and not on the actual culprit enterprise. There is however an obligation on the state

to the prior notice-and-consent procedure when importing or exporting hazardous waste.[61] In essence, the exporting state is required to notify the competent authority of the importing state (as well as that of the state of transit) when hazardous waste will be moved or transported internationally.[62] A detailed report regarding the waste, all phases of its movement, and reasons for its movement is required.[63] Alone-standing notification is, however, insufficient – the state of import and the state of transit must both consent in writing that the hazardous waste may enter their respective territories.[64] Where the prior notice and consent procedure[65] is not followed, the parties will be guilty of illegal traffic under article 9.[66] The Basel Convention does not provide for criminal sanctions or penalties where hazardous waste has been moved illicitly.[67] Instead, it places an obligation on the exporting state to ensure that the waste is disposed of elsewhere in an environmentally sound manner[68] and, if this is not possible, that the exporting state is required to re-import the hazardous waste.[69] Article 9 furthermore requires parties to promulgate domestic legislation that will prevent and punish illegal traffic.[70]

3.2.1.2. The Basel Ban

The Basel Convention was amended on 22 September 1995 to reflect a decision by the Conference of Parties (COP) to impose an immediate ban on the import of hazardous

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to ensure that the perpetrator re-imports the hazardous waste, but where such perpetrator cannot do so for some reason, the obligation to re-import remains that of the exporting state. See Kummer *International Management of Hazardous Wastes* 70-71 in this regard.

61 The notice-and-consent procedure is reiterated in article 6 of the Convention. See further Howard 1990 *HICLR* 231.

62 Howard 1990 *HICLR* 231-232. See further Tladi 2000 *SAJELP* 204.

63 *Ibid.*

64 Howard 1990 *HICLR* 232.

65 According to Tladi, the prior informed consent requirement is "probably just a condition of an existing rule of customary [law]." Tladi 2000 *SAJELP* 205. Under article 9 of the Basel Convention, a duty to re-import waste arises where the prior notice-and-consent procedure have not been complied with. See further Tladi 2000 *SAJELP* 207.

66 Howard 1990 *HICLR* 232.

67 *Ibid.*

68 Howard 1990 *HICLR* 232.

69 See article 9 of the Basel Convention and Howard 1990 *HICLR* 232 in this regard.

70 Howard 1990 *HICLR* 233. It appears as though neither South Africa nor Lesotho has promulgated such legislation as at the date of writing.

waste from OECD[71] countries to non-OECD countries.[72] This amendment, also known as the "Basel Ban", is not yet in force since only 35 of the required 62 states have ratified it thus far.[73] When the Basel Ban comes into operation, it will introduce article 4A and Annex VII as the proposed amendment to the Basel Convention.

Annex VII specifies a list of OECD-states, EU-states and Liechtenstein, whilst article 4A places a ban on the transboundary movement of hazardous waste from countries listed in Annex VII to countries not listed in the said schedule. [74] The practical implication hereof is that hazardous waste may only be moved between states named in the Annex VII, and as South Africa and Lesotho are not named in Annex VII, the amendment will have the effect that hazardous waste may not be exported from any of the listed countries to South Africa and/or Lesotho.[75] It seems as though states are reluctant to ratify the Basel Ban (arguably due to economic considerations) and it therefore remains to be seen whether this amendment will in fact become fully operational.

3.2.1.3. Liability Protocol to the Basel Convention (1999)

For environmental proponents, one of the most welcome changes from the inception of the Basel Convention manifested in the *Protocol on Liability and Compensation for Damage Resulting from Transboundary Movement of Hazardous Waste and Their*

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71 Organisation for Economic Co-operation and Development (OECD).

72 Non-OECD countries are mainly developing countries. South Africa and Lesotho falls under this classification. The OECD countries, on the other hand, include: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States of America.

73 Sands *Documents in International Environmental Law* 915. According to Tladi, the Basel Ban will only become binding after incorporation thereof into the treaty by amendment, as provided for under article 17. See Tladi 2000 *SAJELP* 206.

74 Tladi 2000 *SAJELP* 206.

75 The countries listed in Annex VII are OECD-states, EU-states and Liechtenstein. Neither South Africa nor Lesotho is OECD-member or EU-member states. Accordingly, they are non-listed countries to whom exportation of hazardous waste is prohibited in terms of the amendment. See OECD 2007 HYPERLINK http://www.oecd.org/countrieslist/ 27 Jun and Basel Convention HYPERLINK http://www.basel.int/text/con-e-rev.pdf 27 Jun in this regard.

Disposal of 1999 (Liability Protocol).[76] Its main objective is to deter the mismanagement of hazardous waste before, during and after transboundary movement, and to provide for liability and compensation where such mismanagement causes harm to human health and the environment.[77] In essence, the Liability Protocol covers both liability for damage caused without fault (strict liability) and liability for damage caused with fault.[78] For a claim premised on the Liability Protocol to be successful, damage must be proved.[79] Once damage has been established, it should be proved that there was in fact a *nexus* (causal link) between the transboundary movement of hazardous waste and the damage in question.[80]

The Liability Protocol also provides for a shift of liability from the exporting party to the disposing party (normally the importer).[81] The general rule is that the notifying entity (exporter) is liable until the disposer takes possession of the waste, at which point liability will be transferred to the disposer.[82] This ensures that all key role

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76 Adopted on 10 December 1999. For a discussion and the full text, see Sands *Documents in International Environmental Law* 918 and Tladi 2000(7) *SAJELP* 203-211.

77 Tladi 2000(7) *SAJELP* 204.

78 Tladi 2000(7) *SAJELP* 206. Strict liability is covered under article 4 of the Protocol. Under this article, the exporter, notifier, generator, State of Export, importer or disposer can be held liable without fault. The strict liability of the aforementioned parties are not however absolute – it can be excluded in the situations as set out in article 4(5) of the Protocol. Hence, the responsible party is excluded from liability in the case of: armed conflict or war; *vis major*; full compliance of the compulsory measures of the state where the damage occurred; or where a third party wrongfully and intentionally caused the damage. See further Tladi 2000(7) *SAJELP* 208 in this regard. Moreover, fault based liability will arise where hazardous waste was exported in contravention with the Basel Convention. Hence, it is clear that where the damage cannot be attributed to a certain party's fault or negligence, strict liability will be conferred. See Tladi 2000(7) *SAJELP* 208-209 in this regard.

79 Tladi 2000(7) *SAJELP* 206.

80 Ibid.

81 Sands *Documents in International Environmental Law* 918. Tladi notes that the Liability Protocol confers strict liability on either of the parties involved, such as the exporter, generator, exporting state, importer or the disposer. For a full discussion on the shift of liability, see Tladi 2000(7) *SAJELP* 207.

82 Sands *Documents in International Environmental Law* 918. It was argued by Australia that the liability-shift regime under article of the Protocol does not reflect the polluter pays principle. It places responsibility for damage caused on the party who is in control of the waste, and not the party who generated the waste. See Tladi 2000(7) *SAJELP* 208 in this regard. This, the practical implication of this provision to the theme at hand is that Lesotho can be liable for damage caused by the transboundary movement of hazardous waste if it is in control of the waste – despite the fact that it merely served as a state of transit. In other words: if the United States, for example, export hazardous waste through Lesotho (or South Africa for that matter), they may escape liability for environmental damage that occurred when Lesotho (or South Africa) took control of the waste

players in the transportation process will at some point be burdened with responsibility for the safe handling and movement of hazardous waste – which in turn will increase the level of care observed during such movement.

The Liability Protocol is not yet in force and doubt exists whether this will in fact happen in the near future.[83] The absence of a convention or protocol which expressly and directly provides for international liability and compensation in the case of hazardous waste movement does not, however, imply that state parties will escape liability where damage is caused during the transboundary movement of hazardous waste. In the absence of a liability regime, the well-established principles of international environmental law, such as the polluter pays principle; the rule not to cause transboundary harm; the preventive principle and the precautionary principle might nevertheless provide for liability.[84] When the case is of a serious consequence and the injury is established by clear and convincing evidence, there exists no reason why such a claim should be denied.[85]

3.2.2. The Cotonou Agreement of 2000

In June 2000 a multilateral agreement was concluded between EU-member states and those belonging to the ACP.[86] In essence, the Cotonou Agreement reiterates a commitment by the EU to assist the ACP countries in its economic, social and cultural development and to ensure the greater well-being of their population by helping them face the challenges of globalisation. Hazardous waste trade is undoubtedly a

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consignment. It is therefore "risky business" to allow the transit of hazardous waste through a country's territory, as it may result in liability of millions of dollars.

83 See Sands *Documents in International Environmental Law* 918 and Tladi 2000(7) *SAJELP* 203-212 in this regard.

84 See 3.6 *supra.*

85 See the *Trail Smelter Arbitration* 35 *AJIL* (1941) 684 at 716.

86 ACP countries refer to a group of Countries from Africa, the Pacific and the Caribbean and to which South Africa and Lesotho are members. The Cotonou Agreement replaced the so-called Lome Convention, which contained more stringent provisions relating to the transboundary movement of hazardous waste. Article 39 of the Lome Convention proclaimed that: "...Contracting Parties undertake, for their part, to make every effort to ensure that international movement of hazardous waste and radioactive waste are generally controlled, and they emphasise the importance of efficient international co-operation in this area."

consequence of globalisation and although the Cotonou Agreement is not primarily concerned with the regulation of the transboundary movement of hazardous waste, it does provide for co-operation in this regard. Article 32 states that:[87]

> ...cooperation [between EU and ACP countries] in [e]nvironmental protection and sustainable utilisation and management of natural resources shall aim at: ... (d) [t]aking into account issues relating to the transport and disposal of hazardous waste.

As both Lesotho and South Africa are ACP member states, it can be argued that they agreed to co-operate with the EU in the sphere of transboundary movement of hazardous waste. The remainder of the Cotonou Agreement is silent on the transboundary movement of hazardous waste, but it is worth noting that there is yet another agreement in place (apart from the most prominent conventions relating to hazardous waste movement) where South Africa and Lesotho expressed a commitment to co-operate *vis-à-vis* the transboundary movement of hazardous waste.

3.2.3. Draft Articles on Prevention of Transboundary Harm from Hazardous Activities of 2001

The United Nations (UN) adopted the *Draft Articles on Prevention of Transboundary Harm from Hazardous Activities* (Draft Articles) in 2001. In essence, it codifies some of the principles of international environmental law, and makes it directly applicable to hazardous activities.[88] The Draft Articles seek to prevent and regulate hazardous activities which pose a significant risk of transboundary harm.[89] It accordingly, *inter alia,* codifies the preventive principle and the duty not to cause transboundary harm.[90]

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87 Own emphasis added.

88 See the *UN Draft Articles on Prevention of Transboundary Harm from Hazardous Activities* of 2001 from 377 to 379. Although these Articles do not *specifically* deal with the transboundary movement of hazardous waste, it may be argued that it will undoubtedly be classified as a hazardous activity.

89 Sands and Galizzi *Documents in International Environmental Law* 24. The "risk of causing significant transboundary harm" is defined to include risks taking the form of a high probability to cause transboundary harm and a low probability of causing disastrous transboundary harm. The UN comments that the last-mentioned risk caters for ultra-hazardous activities. Moreover, the term "significant" should be determined on a case-by-case basis. It involves factual considerations in addition to the purely legal considerations, and should be understood as something more than

The scope and application of the Draft Articles is limited by article 1 to activities which are not prohibited by international law and which pose a "significant threat of transboundary environmental harm through its physical consequences".[91] It consequently appears that the Draft Articles may serve as a gap-filling instrument where international law (customary international law and international conventions) does not prohibit the transboundary movement of hazardous waste.[92]

From a transportation point of view, the Draft Articles does not apply directly to the transboundary movement of hazardous waste, save for as far as it incorporates the prior notice-and-consent procedure.[93] Article 6 provides that the state of origin must obtain prior authorisation (from the importing state) for activities which pose a significant threat of transboundary environmental harm. South Africa should therefore first acquire written consent for activities which pose a significant threat of damage to the environment in Lesotho, and *vice versa.* It is not always clear for which activities authorisation should in fact be acquired, since there is no hard and fast definition for "significant" transboundary harm. As a result, article 7 provides for environmental impact assessments (EIA's) to guide parties when authorisation should be acquired.[94]

"detectable", but need not be at the level of "serious" or "substantial." It is therefore clear that the precise scope and meaning of "significant harm" is not at all clear.

90 See the discussion at 3.1, 3.2 and 3.3 *supra.* The duty not to cause transboundary harm as an objective was emphasised in Principle 2 of the Rio Declaration and in the advisory opinion of the ICJ on the *Legality of the Use by a State of Nuclear Weapons in Armed Conflict* (8 July 1996). See further the *Draft Articles on Prevention of Transboundary Harm from Hazardous Activities and Comments* of 2001 at 378.

91 See Sands *Documents in International Environmental Law* 24. The following elements must be present in the second limitation (i.e. the limitation that the activities must pose a significant threat of transboundary harm: (i) the potential harm must be transboundary; and (ii) the harm must be caused by such [hazardous] activities through its physical consequences. The Draft Articles may therefore not be available to South African citizens for potentially hazardous activities undertaken by the South African government. What is required is potential harm of a transboundary nature. See also UN 2006 HYPERLINK http://untreaty.un.org/ilc/sessions/58/DC_Chairman_liability.pdf 11 Oct.

92 It appears as though customary international law already makes provision for transboundary environmental harm by virtue of the *jus cogens* principle not to cause transboundary environmental harm and the preventive principle, amongst others. It therefore remains to be seen whether the application of the Draft Articles will in fact be triggered.

93 Article 6.

94 This article should be read together with the *Convention on Environmental Impact Assessment in a Transboundary Context* of 1991 ("the Espoo EIA Convention"). Due to length constraints, the Espoo EIA Convention is not discussed here.

This article implies that an EIA should at least be conducted before hazardous waste is transported from South Africa to Lesotho, and *vice versa.* The purpose of an EIA would be to estimate the potential adverse impacts of an activity (such as the transportation of hazardous waste) on the environment and to ensure that steps are taken to prevent, or alternatively minimise, the risk of damage.

3.2.4. Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities of 2006

Whereas the Draft Articles are mainly concerned with the *prevention* of transboundary harm, the General Assembly expressed the view that the establishment of a liability regime should be considered.[95] This liability regime manifested in the *Draft Principles on the Allocation of Loss in the Case of Transboundary Harm arising out of Hazardous Activities* and was adopted by the International Law Commission (ILC) in 2006.[96] The main objectives of the Draft Principles are to provide for prompt and adequate compensation to victims of transboundary damage[97] and to preserve and protect the environment in the event of transboundary damage.[98] Special emphasis is placed on the mitigation of environmental damage and its restoration or reinstatement.[99] Article 4(1) places an obligation on states to ensure that prompt and adequate compensation is available for victims.[100] This obligation is, however, limited

95 UN General Assembly Resolution 52/156 of 15 December 1997.

96 For the full text on the Draft Principles, see the *Yearbook of the International Law Commission* 2006 Vol. II Part 2.

97 Principle 3(a). "Damage" must be understood to include: the loss of life or personal injury [Principle 2(a)(1)]; loss or damage to property (including property which forms part of a cultural heritage [Principle 2(a)(ii)]; the impairment of the environment [Principle 2(a)(iii)]; the costs of reasonable measures of reinstatement of property, or environment (including natural resources) [Principle 2(a)(iv)]; and the costs of reasonable response measures [Principle 2(a)(v)].

98 Principle 3(b).

99 Principle 3(b).

100 In order to ensure that compensation is always readily available, the responsible person or entity should be required to establish and maintain financial security such as insurance, bonds or other financial guarantees – Principle 4(3). Moreover, industry-wide compensation funds should be established at national level – Principle 4(4). Where the compensation provided for is insufficient, additional financial resources should be made available by the State – Principle 4(5).

to the instances where damage was caused by hazardous activities located within that particular state's territory, or under its jurisdiction or control.[101]

Article 4(2) provides for strict liability of the operator of hazardous activities (or the appropriate persons or entities) and therefore arguably incorporates the polluter-pays principle.[102] Hence, the Draft Principles will confer liability on the operator of a hazardous waste consignment when the transportation thereof results in significant transboundary harm. The absence of fault on the part of the operator does not affect his/her liability. States are furthermore obliged to promptly notify all other states that are likely to be affected by an incident that poses a significant risk of transboundary damage or harm.[103] After such notification, states should consult and co-operate in the mitigation and elimination of the undesirable consequences of the incident.[104] Principle 6 obliges states to ensure that the Draft Principles are enforced at domestic level by having available prompt, effective and adequate remedies.[105] Effectively this might result in states being required to draft legislation which provides for compensation in the aforementioned fashion. Finally, States are required to co-operate with one another in implementing the Draft Principles.[106] South Africa and Lesotho may therefore be expected to align their domestic legislation or at least establish co-operative mechanisms to give effect to the Draft Principles.

101 Principle 4(1).
102 Dugard *International Law* 398. See further the discussion at 3.1.4 *supra.*
103 Principle 5(a).
104 Principle 5(c).
105 Principle 6(1).
106 Principle 8(3).

4. Regional Framework[107]

4.1. African Charter on Human and Peoples' Rights of 1981

The African Community recognises the fundamental right to environmental integrity at a regional level in the *African Charter on Human and Peoples Rights* of 1981. Article 24 proclaims that:[108]

> All peoples shall have the right to a general satisfactory environment favourable to their development.

Van der Linde[109] emphasises the significance of this right, since it "marks the first international recognition to the right to the environment". Although the right is formulated rather vaguely, it should be seen as a step in the right direction, and a potentially powerful mechanism for protecting the environment on the African continent.[110] For purposes of this dissertation, it is relevant to know that the fundamental right to the environment is recognised by many African States, including South Africa and Lesotho.[111] This may result in states applying pressure on one

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107 This dissertation acknowledges that an array of regional instruments exist which are relevant to the transboundary movement of hazardous waste. This dissertation however focuses on the regional instruments relevant for and applicable to Lesotho and South Africa, and is limited to regional instruments within Africa. Accordingly, the following regional instruments (as discussed in Kummer *International Management of Hazardous Wastes* 87-117) are not examined in this work: *The Agreement between the Government of Canada and the Government of the United States of America Concerning the Transboundary Movement of Hazardous Waste* (1986); *The Central American Regional Agreement on the Transboundary Movement of Hazardous Wastes* (1992); *Draft Protocol for the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal* (1991); *Draft ASEAN Convention on the Management and Control of Transboundary Movements of Hazardous Wastes within the ASEAN Region* (1994). The aforesaid agreements are some of the regional agreements in existence at the time of writing. It is however not a reflection of all the different regional agreements around the world and does not reflect any of the European Regional Agreements which may be in existence.

108 See further Van der Linde 2002 *CILSA* 105.

109 Van der Linde 2002 *CILSA* 105.

110 Van der Linde 2002 *CILSA* 106.

111 South Africa recognises the fundamental right to the environment in section 24 of the *Constitution of the Republic of South Africa,* 1996 (see 5.1 below) and Lesotho recognises same in section 36 of the *Constitution of the Kingdom of Lesotho,* 1993 (see 6.1 below). The *Constitution of Angola,* 1992 recognises the right to the environment in article 24; the *Constitution of Mozambique, 1990* recognises the environmental right in article 37. It should also be mentioned that there are African states that fails to recognise the right to the environment in their constitutions. These include Zimbabwe, Namibia and Tanzania, amongst others.

another to take positive action (such as the promulgation of legislation and other measures) to ensure that the transboundary movement of hazardous waste does not encroach upon this fundamental right anywhere on the African continent.[112]

4.2. Treaty Establishing the African Economic Community of 1991

Although the *Treaty Establishing the African Community* (AEC Treaty) is primarily concerned with the promotion of economic, social and cultural development in African states, it contains certain provisions expressly applicable to hazardous waste.[113] Article 35(1)(f) declares that states may impose restrictions or prohibitions on the control of hazardous waste within its territory. Article 59 is even more stringent and places an obligation on all member states "to take every appropriate step to ban the importation and dumping of hazardous wastes in their respective territories". It furthermore provides that states should co-operate in the transboundary movement, management and treatment of waste produced in Africa.

4.3. Bamako Convention of 1991

African states strongly criticised the flexible provisions of the Basel Convention, as it merely regulates the transboundary movement of hazardous waste.[114] In fact, the majority of African states opted for an absolute ban on the importation of hazardous waste into Africa, and as a consequence[115] the *Bamako Convention on the Ban of the Import of Hazardous Wastes into Africa and on the Control of their Transboundary Movements within Africa* (Bamako Convention) was adopted in 1991.[116] It should be borne in mind that the Bamako Convention does not displace the Basel Convention,

112 Van der Linde 2002 *CILSA* 106.
113 The AEC Treaty was ratified by South Africa in November 2000 and by Lesotho in 1991.
114 See Naldi 2000 *SAJELP* 223 and Van der Linde 2002 *CILSA* 107-108.
115 African states were of the opinion that the continent were being used as the "world's dumping ground" for hazardous waste. Accordingly, in May 1988, the Organisation for African Unity (OAU) condemned the importation of hazardous waste into Africa as "a crime against Africa and the African people". See also Kummer 1992 *ICQL* 536 and Morrison and Muffet *Hazardous Waste* 417.
116 The Bamako Convention however only entered into force in 1998.

but in fact supplements it.[117] The main objectives of the Bamako Convention are to establish a common commitment by African States to prohibit the importation of hazardous waste into Africa, and to establish a management regime for hazardous waste generated on the continent.[118]

During the drafting of the Bamako Convention the working group relied heavily on the Basel Convention as a model, but the end result contained some noteworthy additions.[119] The first such addition is that its scope of application is much broader than that of the Basel Convention.[120] The definition of hazardous waste is extended in the Bamako Convention to radioactive waste and all hazardous substances that have been banned from the state of manufacture (irrespective of whether or not these substances were defined as waste or not).[121] The scope of application is thus significantly broader. The most prominent difference between the Basel and Bamako Conventions is contained in article 4(1), which expressly prohibits the importation of all hazardous and nuclear waste from non-contracting parties into Africa.[122] The Bamako Convention does not distinguish between waste destined for recycling and those destined for final disposal.[123] Waste may be moved between member states and this movement between member states is then regulated in a co-operative fashion.[124] Hence, it is clear that an absolute ban is placed on waste imports into Africa, but not

117 Naldi 2000 *SAJELP* 223. See further Kummer *International Management of Hazardous Wastes* 87 where it is explained that the Basel Convention serves as an umbrella for regional hazardous waste treaties, such as the Bamako Convention. See further Kummer *International Management of Hazardous Wastes* 104-105. The only requirement for a regional hazardous waste convention to exist parallel to the Basel Convention is that is does not provide for less sound environmental standards. It may however provide for more stringent rules. See Naldi 2000 *SAJELP* 223 footnote 34 in this regard.

118 Kummer *International Management of Hazardous Wastes* 100. For further reading on the Bamako Convention, see Russel and Shearer 1993 *Environmental Law* 140, Naldi 2000 *SAJELP* 223-236, Akinnusi 2001 *Stell LR* 306-316 and Van der Linde 2002 *CILSA* 107-113.

119 Kummer *International Management of Hazardous Wastes* 99. See further Van der Linde 2002 *CILSA* 108.

120 Kummer *International Management of Hazardous Wastes* 101.

121 *Ibid.*

122 *Ibid.*

123 Kummer *International Management of Hazardous Wastes* 101. See further Van der Linde 2002 *CILSA* 109.

124 Kummer *International Management of Hazardous Wastes* 102.

within Africa.[125] According to Kummer,[126] the exportation from Bamako member states to non-parties is not regulated under the Bamako Convention, and therefore, the Basel Convention will apply in these cases.

Member states must adhere to certain basic rules when transporting hazardous waste between one another. The prior notice-and-consent procedure must be observed.[127] In the event of illegal traffic, the duty to re-import is stricter than the corresponding duty in the Basel Convention.[128] Waste must be returned to the state of origin in every single case, whilst stronger emphasis is placed on the obligation of member states to adopt relevant criminal legislation.[129]

4.4. African Convention on the Conservation of Nature and Natural Resources

The *African Convention on the Conservation of Nature and Natural Resources* was adopted by the AU on 11 July 2002. Its adoption emphasises the intention of African countries to recognise and enforce the conservation of the environment as a common goal. Article VI(3)(c) places an obligation on member states to ensure that the disposal of waste does not result in erosion, pollution or any other form of land degradation.

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125 Van der Linde 2002 *CILSA* 108 and Morrison and Muffet *Hazardous Waste* 419.

126 Kummer *International Management of Hazardous Wastes* 102.

127 The prior notice-and-consent procedure is codified in article 6 and 7. Kummer contends that the prior notice-and-consent procedure is taken "almost verbatim from the relevant provisions of the Basel Convention. The procedure is however stricter in a certain sense, since copies of notification and responses should be filed with the Secretariat of the Bamako Convention under article 13(4). See Kummer *International Management of Hazardous Wastes* 102-103 in this regard.

128 Kummer *International Management of Hazardous Wastes* 103.

129 Kummer *International Management of Hazardous Wastes* 103. For a more in depth discussion on the Bamako Convention, see Kummer *International Management of Hazardous Wastes* 101-107 and Morrison and Muffet *Hazardous Waste* 417-420. It should be clear that the Bamako Convention has a stricter approach than the Basel Convention – this was, after all, the sole reason why African States decided to adopt it. The strict approach is however not devoid from challenges. States are reluctant to ratify the Bamako, despite their agreement (albeit indirectly) in the AEC Treaty "to take every appropriate step to ban the importation and dumping of hazardous wastes in their respective territories" (Van der Linde 2002 *CILSA* 108). Lesotho has signed the Bamako Convention, but remains in default to accede to or ratify it. South Africa failed to sign, accede to or ratify the Bamako Convention.

Article XIII(1) has a more direct bearing on hazardous waste, and reads as follows:

> The Parties shall, individually or jointly, and in collaboration with the competent international organisations concerned, take all appropriate measures to prevent, mitigate and eliminate to the maximum extent possible, detrimental effects on the environment, in particular from radioactive, toxic, and other hazardous substances and wastes. For this purpose, they shall use the best practicable means and shall endeavour to harmonise their policies, in particular within the framework of relevant conventions to which they are Parties.

Article XXII(g) applies directly to the transboundary movement of hazardous waste in the sense that it obliges parties to take concerted action *vis-à-vis* the transboundary movement of hazardous waste. Moreover, an express obligation is placed on member states to implement instruments relating to the transboundary movement of hazardous waste, such as the Basel- and Bamako Conventions.[130]

4.5. The Southern African Development Community (SADC)

SADC[131] was established with the purpose of enabling member states to co-operate and pool its available resources so that collective self reliance and improved living standards can be achieved.[132] This section briefly investigates some SADC instruments applicable to the transportation of hazardous waste.

4.5.1. Declaration and Treaty of SADC

SADC member states recognise the right to effective environmental protection in article 5 of the *Declaration and Treaty of SADC.* In article 21(3)(e), member states agreed to collaborate in the sphere of environmental matters, arguably, including matters such as the transportation of hazardous waste.

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130 Article XXII(g).

131 The SADC Member States are: Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, the United Republic of Tanzania, Zambia and Zimbabwe. See SADC 2006 HYPERLINK http://www.sadc.int 13 May 2007 for more information on the organisation.

132 SADC 2006 HYPERLINK http://www.sadc.int/english/about/history/index.php 12 Oct.

4.5.2. Protocol on Transport, Communications and Meteorology

Currently no legal instrument exists in SADC dealing solely with the transboundary movement of hazardous waste - presumably since it would be a question of re-inventing the wheel in the light of the existing Bamako Convention.[133] The SADC *Protocol on Transport, Communications and Meteorology* of 1996 ("SADC Protocol on Transport") nevertheless contains some relevant provisions which may result in a duty to co-operate in the transboundary movement of hazardous waste. The first relevant provision is contained in article 2(3), which states that:

> Member states' general objective is to establish transport...systems which provide efficient, cost-effective and fully integrated infrastructure and operations, which best meet the needs of customers and promote economic and social development while being environmentally and economically sustainable.

One could arguably read into this provision that a co-operative transport system should be developed to ensure the environmentally (socio-economical) sustainable transportation of hazardous waste between SADC states. Article 3(1)(e) further provides for the establishment of integrated transport services "compatible with responsible environmental management". SADC member states are also required to promote acceptable levels of safety with one of its main objectives being environmental protection.[134] Especially relevant is the provision in article 6(12)(d) which requires member states to develop and implement a co-ordinated regional road traffic management plan in order to protect the environment against wilful and unnecessary damage.[135] States are further required to give effect to the Protocol on Transport by promoting "effective environmental management" with due consideration to international and regional conventions such as the Basel and Bamako

133 It would be sufficient for SADC member states to collectively agree on a recommitment to enforce the Bamako Convention in their respective territories, since this document is complete and available to them. It would not be economically feasible to create another instrument that has the same provisions as the Bamako Convention. Technically speaking, however, nothing precludes SADC states from adopting another convention with stricter rules than the Bamako Convention.

134 Article 6(1).

135 A practical example of such a co-ordinated plan is also provided for in the South African *Cross Border Road Transport Act* 467 of 1998, which makes express provision for multi-lateral agreements in this regard.

Conventions.[136] Over and above the co-operative fashion in which the transboundary movement of hazardous waste should be regulated, member states are required to develop and implement incident management systems for environmental incidents which occurred during road transportation.[137] Environmental incidents may include hazardous spills and the incident management system should provide for the removal of spilled substances[138] and the prompt and effective safeguarding of incident scenes.[139] Although the SADC Protocol on Transport provides for the development and implementation of co-operative transportation systems, it does not lay down concrete rules in this regard.

5. The South African Legal Framework[140]

5.1. Constitution of the Republic of South Africa, 1996

The *Constitution of the Republic of South Africa,* 1996 (the Constitution) brought about considerable changes in the sphere of South African environmental law. The Constitution elevates the environmental right to a fundamental human right in section 24, which states that:

> Everyone has the right... (a) to an environment not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

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136 Article 2(4)(o).
137 Article 6(15)(c).
138 Article 6(14)(2)(d).
139 Article 6(14)(2)(c). For example: when South Africa transports a consignment of hazardous waste by road to Mozambique *via* Lesotho, it needs to ensure that a proper incident management system are in place in order to address incidents involving the hazardous waste in question. So, if the road carrier is involved in an accident in Lesotho, the parties to the transportation of the waste must be able to act promptly and avoid harm to humans and/or the environment. Where harm is unavoidable, the incident management plan ought to ensure that it is minimised to the largest possible extent.
140 Although the South African common law (and in particular the law of delict) will be of great importance for the transboundary movement of hazardous waste and consequential damage suffered as a result of incidents in connection therewith, it is not examined here for the sake of brevity and due to length constraints.

Section 24 places an obligation on the South African government to adopt "reasonable legislative and other measures" to protect the environment.[141] Although section 24 does not exclusively focus on the movement of hazardous waste, it may apply to the protection of the environment in the wide sense. In the light of the fact that the transportation of hazardous waste may encroach upon the fundamental right to the environment, the operation of the constitutional remedies entrenched in section 8 may be triggered.[142]

Section 231 deals with the incorporation of international agreements (such as the Basel and Bamako Conventions) into South African law and proclaims that International conventions only become binding on the Republic once they have been approved by resolution in both the National Assembly and the National Council of Provinces.[143] Moreover, international conventions only become law when incorporated as such by the national legislature in accordance with the so-called dualist approach.[144] Hence, the Constitution requires express enactment before an international agreement will acquire the power of law – which in effect renders the provisions of the Basel and Bamako conventions (amongst others) ineffective until such time as it is expressly enacted into South African law.

The dualist approach does, however, not apply to the principles of international environmental law which have acquired the status of customary international law (*jus cogens*). In this regard, it is important to note that customary international law automatically forms part of South African law – provided that it is not inconsistent with the Constitution or an Act of Parliament.[145] Accordingly, principles such as the

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141 See also Currie and De Waal *Bill of Rights* 522 and 528.

142 Currie and De Waal argues that section 24, when read together with section 8 of the Constitution, has the effect that individuals (or public interest groups) may, "where appropriate, assert their constitutional rights directly against [the state and] other individuals (own emphasis added). See Currie and De Waal *Bill of Rights* 524 in this regard. The constitution provides for a wide variety of remedies, including but not limited to: (i) interdictory relief; (ii) declarations of rights; (iii) so-called constitutional damages; (iv) an order as to appropriate relief. For a comprehensive and discussion of the various remedies, see Currie and De Waal *Bill of Rights* 189-228.

143 Section 231(2).

144 Section 231(4).

145 Section 232.

polluter-pays principle, the preventive principle, the precautionary principle and the principle not to cause transboundary harm "automatically" forms part of South African environmental law. The principles of international environmental law also have significant implications for the interpretation of domestic (environmental) legislation, as the latter must be interpreted in manner which is consistent with international law.[146] In other words, existing environmental legislation must be interpreted alongside and informed by existing international law (which comprises of the *jus cogens* principles of customary international law and international conventions, amongst others).

5.2. National Environmental Management Act 107 of 1998

The main objectives of the *National Environmental Management Act* 107 of 1998 (NEMA) are to provide for, *inter alia*: the development of a framework for integrating good environmental management into all development activities; the promotion of certainty regarding decision-making by organs of state on matters affecting the environment; and proper enforcement of environmental laws. NEMA is South Africa's primary environmental framework Act. Although NEMA does not explicitly deal with the transboundary movement of hazardous waste, it does contain provisions which may find indirect application.

Section 2(4)(a)(iv) of NEMA states that waste should be avoided, and if avoidance is not possible, it should be minimised, reused, recycled or disposed of in a responsible manner.[147] Section 2 endorses the polluter-pays principle, the preventive principle, as well as the precautionary principle. Section 31 provides for transparency as it entitles

146 Section 233 states that a court must interpret (domestic) legislation so as to prefer an interpretation that is consistent with international law. When applied to the transboundary movement of hazardous waste, South African legislation must be interpreted so that it is consistent with the Basel Convention, Bamako Convention and principles of international environmental law. Accordingly, the Constitution has significant implications not only in the sense that it obliges government to incorporate environmental conventions, but also in the interpretation of domestic legislation to conform to international environmental principles and rules. It is against this backdrop that the domestic legislation is discussed in the subsequent sections of this dissertation.

147 Section 2(4)(a)(iv) of NEMA.

South African citizens to a right to information regarding the production, handling, transportation, treatment, storage and disposal of hazardous waste and substances. Such transparency is furthermore enhanced in the sense that emission levels and waste products must be disclosed, insofar as it falls outside the definition of "commercially confidential information."[148]

Section 28 regulates the liability of persons whom caused significant pollution or degradation of the environment. A practical example of such pollution is where a road carrier transporting hazardous waste overturns on a road and pollutes the surrounding environment and affects the health and well-being of people. In the first instance, the responsible person is required to take reasonable measures to prevent environmental pollution or degradation, by for example, ensuring that the hazardous waste is sufficiently packaged. Secondly, where the pollution or degradation cannot be prevented altogether, it must be minimised and rectified. This may imply that positive action should be taken by the company responsible for the movement of the waste by, for example, attending to and treating the scene where the incident occurred. Section 28 therefore provides for a comprehensive duty of care which has as its main objective the prevention of pollution or degradation, and as secondary objective the minimisation and rectification thereof. Preventive measures that should be taken includes, *inter alia*: the conducting of environmental impact assessments (EIA's);[149] informing employees on the manner in which waste should be handled so as to minimise the risk of environmental damage;[150] to cease, modify or control any activity which is causing pollution;[151] and to remedy the effects of pollution.[152]

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148 Section 1 of NEMA. It is clear that "commercially confidential information" means "commercial information the disclosure of which would prejudice to an unreasonable degree the commercial interests of the holder: Provided that emission levels and waste products must not be considered to be commercially confidential information..." Section 32 of the 1996 Constitution (which deals with access to information) as well as the provisions of the *Promotion of Administrative Justice Act* (PAJA) 3 of 2000 must however be borne in mind in this regard.

149 Section 28(3)(a). See further the new EIA regulations which were promulgated under Chapter 5 of NEMA in GN 385 of 2006, published 21 April 2006.

150 Section 28(3)(b).

151 Section 28(3)(c).

152 Section 28(3)(f). It can be argued that this provision incorporates the polluter-pays principle into NEMA.

In the event of an incident where hazardous waste poses a significant risk to human health, well-being or the environment, NEMA provides in article 30(3) that the responsible person should report the incident through the most effective means available.[153] The responsible person should furthermore: take all reasonable measures to minimise the effects of the incident;[154] undertake cleanup procedures;[155] remedy the effects of the incident;[156] and assess the immediate and long term effects of the incident on the environment and public health.[157]

Chapter 6 of NEMA deals with the incorporation of international environmental instruments into South African law and should be read with the constitutional provisions applicable to international law, as discussed above.[158] Section 25 affords the Minister discretion to make recommendations to Parliament regarding the accession and ratification of international conventions pertaining to environmental matters. Where Parliament gives the Minister a mandate to incorporate a particular convention into South African law, the Minister must furnish annual progress reports to Parliament about the implementation and incorporation of such convention.[159] Chapter 5 of NEMA endorses the principles of international environmental law and proclaims that principles of international environmental law must be borne in mind during decision making processes which may have significant effects on the environment. Accordingly, the principles of international environmental law does not only (automatically) form part of our law by virtue of South African constitutional law, but also by virtue of NEMA.[160]

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153 The "responsible person" is described in article 30(b) as: the person responsible for the incident; the owner of the hazardous substance involved; or the person who was in control of the hazardous substance at the time of the incident.

154 Section 30(4)(a).

155 Section 30(4)(b).

156 Section 30(4)(c).

157 Section 30(4)(d).

158 Sections 231(4) and 232 of the *Constitution of the Republic of South Africa*, 1996. See also the brief discussion at 5.1 above.

159 Section 26.

160 Apart from Chapter 5, where it is stated that the principles should be borne in mind, section 2 of NEMA explicitly incorporates the various principles of international environmental law into the South African environmental law regime.

5.3. Environment Conservation Act 73 of 1989

Although the *Environment Conservation Act* 73 of 1989 (ECA) has almost entirely been repealed by NEMA, the provisions dealing with the disposal of waste are still applicable until such time as new waste legislation is promulgated under NEMA (this is arguably in the form of the *Waste Management Bill*).[161]

Section 20 of ECA primarily deals with the operation and management of disposal sites. This section will therefore be relevant to the extent that waste is imported into South Africa for purposes of disposal within the Republic. One of the most relevant provisions of ECA is contained in section 20(1), which states that no one may provide or operate any disposal site without a permit issued by the Minister of DEAT.[162] The remainder of the provisions in ECA are, however, silent on the transportation of hazardous waste.[163]

5.4. Hazardous Substances Act 15 of 1973

The *Hazardous Substances Act* (HSA) 15 of 1973 has as its main objective the "control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable

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161 GN 1405 of 2006, published 29 September 2006. At present, parliament is in the process of promulgating new waste legislation. This is evidenced by the *Environmental Management: Waste Management Bill,* which was published in January 2007 for comments. See 5.9 *supra* in this regard.

162 Section 20(1) originally stated that the permit must be issued by the Minister of Water Affairs, but this authority has been transferred to the Minister of Environment and Tourism in a recent Government Notice. It must also be borne in mind that an EIA must be conducted in hazardous waste disposal operations. See the discussion at 5.2 *infra.*

163 In terms of section 21(1) of ECA, the Minister may, by notice in the Gazette, identify activities which may have a substantial detrimental effect on the environment. As far as could be ascertained, no regulations relating to the transportation of hazardous waste have been promulgated under section 21(1). However, in GG 15987 of 1994, published on 30 September 1994, the Minister has published a Policy on Hazardous Waste Management, which contains comprehensive guiding principles for the generation, treatment, transportation and final disposal of hazardous waste. Unfortunately, this policy has been published pursuant to the authority deriving from section 2 of ECA, which has been expressly repealed by section 50(1) of NEMA. As a result, it is unclear whether these guiding principles are still applicable – especially in the light of the fact that the source of its existence has been repealed.

nature". It furthermore endeavours to control the importation, disposal or dumping of such hazardous substances. Although the definition of "hazardous substance" does not explicitly refer to waste, hazardous waste may by its very definition be classified as a hazardous substance (depending on how one interprets it).[164]

Certain hazardous substances may not be sold, used or operated without a license issued in terms of section 4.[165] Section 4(4) makes it clear that a license may not be granted unless the Director-General[166] is satisfied that, amongst others: the applicant is a suitable person or company;[167] that the applicant will be able to exercise sufficient control over the activities authorised by the license;[168] and that issuing of the license would be in the public interest.[169] Moreover, Group IV hazardous substances may not be imported, exported or conveyed unless a written authority has been obtained under section 3A(2).[170] Failure to obtain such a written authority is an offence, and punishable by a fine or imprisonment not exceeding 10 years, or both such a fine and imprisonment.[171]

From a transportation point of view, the HSA provides some form of control when it comes to hazardous waste transportation. Apart from this, it does not adequately provide for the technical aspects involved in the transportation of hazardous waste,

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164 The term "hazardous substance" is not defined with reference to its characteristics in the *Hazardous Substances Act* 15 of 1973. Instead, the Act refers one to certain groups of hazardous substances. The term "grouped hazardous substance" means "any Group IV hazardous substance and any substance, mixture of substances, product or material declared in terms of section 2(1) to be a hazardous substance of any kind". Moreover, the Act defines "Group I, Group II or Group III hazardous substance[s]" as any "substance, mixture of substances, product or material declared in terms of section 2(1) to be a Group I, Group II or Group III hazardous substance respectively. Section 2(1) of the Act allows the Minister to declare certain substances as hazardous (by notice in the Government Gazette) where such substance, in the course of its customary or reasonable handling or use, might cause injury, ill health or death to human beings by reason of its (toxic, corrosive, irritant, strongly sensitizing, or flammable) nature. Hazardous waste will without a doubt cause injury, ill-health or even death to human beings if not transported in accordance with special procedures.

165 Section 3(1).

166 The Director-General of National Health and Population Development.

167 Section 4(4)(a).

168 Section 4(4)(c).

169 Section 4(4)(e).

170 Section 3A(1).

171 Section 19(1)(a).

such as the prior notice-and-consent procedure and the shift of liability from the various role players involved in the transportation of hazardous waste.

5.5. National Water Act 36 of 1998

One of the main objectives of the *National Water Act* 36 of 1998 (NWA) is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in such a way that it meet the needs of present and future generations.[172] In the vast majority of cases, the ultimate objective of the transboundary movement of hazardous waste is its disposal. Surface water resources are popular destinations for hazardous waste disposal - and it is also exposed to possible groundwater contamination where disposal operations are conducted on adjacent land.

Although the NWA does not explicitly refer to the transboundary movement of hazardous waste, there is no doubt that it will apply to the disposal of hazardous waste into national water resources.[173] In this regard, the NWA stipulates that waste may not be discharged into a water resource without a license[174] - which licence will arguably not be granted easily in the case of hazardous waste.

5.6. National Road Traffic Act 93 of 1996

The *National Road Traffic Act* 93 of 1996 does not explicitly address the issue of hazardous waste transportation. It does however contain provisions dealing with the transportation of "dangerous goods".[175] As hazardous waste may per definition be dangerous,[176] it is argued that the Act may also apply to hazardous waste.

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172 Section 2(a).

173 Section 21 defines the term "water use" to include "the discharge of waste or water containing waste into water resources".

174 Section 22 states that no person may use water (i.e. discharge waste into a national water resource) without a license. See further Kotze 2006 *PER* 6.

175 The Act defines "dangerous goods" are as the "commodities, substances and goods listed in the standard specification of the South African Bureau of Standards SABS 0228 "the identification

Section 49(f) places an obligation on the operator of a motor vehicle to ensure that, where dangerous goods are conveyed, all requirements for its conveyance under any law or act are complied with.[177] Section 54 prohibits the transportation of dangerous goods, unless it takes place in accordance within the prescribed parameters of the Act.[178] In terms of Chapter VIII of the *National Road Traffic Act Regulations* of 2000 (the Regulations), no person shall operate any vehicle transporting dangerous goods on a public road, unless it is done in accordance with the Regulations.[179] Section 277 of the Regulations elaborates on the duties of the operator, driver, consignee and/or consignor of dangerous goods. In essence, it entails that only an appropriately qualified person may be nominated for the transportation of dangerous goods.[180] It also states that the vehicles in/on which dangerous goods are transported must comply

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and classification of dangerous substances and goods". See section 1(xi) of the *National Road Traffic Act* 93 of 1996 in this regard.

176 The Oxford Thesaurus defines the word "dangerous" as "hazardous, perilous, risky, high-risk, unsafe..." and in the textual sense, dangerous goods include hazardous waste.

177 The "operator" is defined as "any person who is responsible for the use of a motor vehicle of any class contemplated in Chapter IV, and who has been registered as the operator of such vehicle" - section 1(xliv). As was already pointed out, the *jus cogens* principles of international environmental law forms part of South African law without the need for enactment. Accordingly, it may be argued that the operator of a motor vehicle must ensure that the transportation of dangerous goods (i.e. hazardous waste) are conducted in such a manner that it does not infringe or contravene the preventive principle, the precautionary principle or the obligation not to cause transboundary harm.

178 Section 54 stipulates as follows: "No person shall, except as prescribed, offer for transportation in a vehicle, or accept after transportation in, on or by a vehicle, any prescribed dangerous goods". It should be clear that the obligation not to transport dangerous goods is placed on the person who requests another to transport dangerous goods, as well as on the person who will eventually transport the dangerous goods. Arguably, the transportation should also take place in accordance with the SANS (and SABS) standards relating to dangerous goods transportation. These standards include: *Transport of Dangerous Goods – Packaging and large packaging for road and rail transport – Part 1: Packaging* (SANS 10229-1:2005); *Transportation of Dangerous Goods – Packaging and large packaging for road and Rail Transport – Part 2* (SANS 10229-2:2007) and *Transport of Dangerous Goods – The reprocessing of previously certified processing: Consolidated edition incorporating amendment No. 1* (SANS 10406:2007 [Ed 1.1]). See also GN 398 of 2007 (published in GG 30144 of 10 August 2007) for a list of standards issued in terms of section 16(3) of the *Standards Act* 29 of 1993.

179 GN 225 of 2000 (published in GG 20963 of 17 March 2000). In this regard, it is noteworthy to mention that there are strict requirements relating to the design of vehicles in which dangerous goods are to be transported. The SABS *Transportation of Dangerous Goods: design requirements for road tankers* (SABS 1518) are of particular importance here.

180 Section 280 of the Regulations expressly states that the driver of a dangerous goods consignment must undergo proper training at an approved body.

with the appropriate SABS and SANS standards.[181] Moreover, section 55 of the NRTA provides for the appointment of dangerous goods inspectors, whose functions are to ensure that dangerous goods are transported in accordance with the laws of South Africa, including the regulations promulgated under the NRTA.[182]

Apart from the aforesaid, the NRTA does not provide for damage resulting from the transportation of dangerous goods. Section 89 provides for offences and penalties, but it seems as though it does not specifically provide for offences under the dangerous goods provisions contained in section 54. This is perhaps due to the fact that the NRTA is mainly concerned with the regulation of everyday traffic of citizens and that it fails to take proper cognisance of the environmental and compensatory dimensions of incidents involving the transportation of dangerous goods. It also does also not provide for clean-up operations (as in the case of NEMA) and emergency measures in the case where the incident might lead to potentially devastating consequences *vis-a-vis* human health and the environment.

5.7. National Railway Safety Regulator Act 16 of 2002

Some of the main objectives of the *National Railway Safety Regulator Act* (NRSRA) 16 of 2002 are the promotion of safe railway operations; the prime responsibility and accountability of operators in ensuring safe railway operations; and the harmonisation South Africa's railway operation regime with that of SADC.[183] The Act applies to all

181 The relevant standards include inter alia: SABS *Transportation of Dangerous Goods – Operational Requirements for Road Vehicles* (SABS 0231),

182 Section 75(1)(h) authorises the Minister to make regulations (after consultation with the MEC's), which includes regulations relating to, amongst others: the classification of dangerous goods; the powers and duties of traffic officers in respect of the transportation of dangerous goods; the conditions for the transportation of dangerous goods; the manner in which dangerous goods may be transported; and dangerous goods which may not be transported under any circumstances. The powers of dangerous goods inspectors are discussed in detail in section 283 of the *National Road Traffic Regulations,* 2000, as contained in GN 255 of 2000 (published in GG 20963 of 17 March 2000).

183 Section 2.

railway operations within South Africa, and as hazardous waste may be transported by rail, it will arguably also apply to these operations.[184]

Although the Act does not specifically deal with the transportation of hazardous waste, it provides for the promulgation of regulations which may apply indirectly to these cases. Section 24(e) bestows upon the Chief Executive Officer (CEO) of the Regulator the authority to lay down conditions for the transportation of dangerous goods[185] and section 30 authorises the Minister to make safety regulations for the carriage of dangerous goods by rail (and any other safety related matters that he/she may deem necessary). Moreover, section 36 allows a railway safety inspector to issue directives where he believes that a condition or activity poses a threat to safe railway operations. A "threat to safety" is defined in section 1(7) as:

> ...a hazard or condition that could reasonably be expected to develop into a situation in which illness or injury to, or death of, a person or in which damage could be caused to the environment or property, and a threat to safety is immediate if such a situation already exist.

A further significant provision is found in section 46, which states that a court may conduct an enquiry into harm or damage caused to any person or the environment as a result of an unsafe railway operation. In this regard, the court may award damages to the person who suffered damage;[186] order the convicted person to pay for the costs of any remedial measures which may be necessary;[187] and order that the convicted person implement the aforesaid remedial measures.[188] Although the Act does not clearly stipulate the manner in which dangerous goods (and accordingly, hazardous waste) should be transported by rail, it may very well provide a mechanism to found a claim where such transportation caused damage to another person or the environment.

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184 Section 3.
185 The term "dangerous goods" is defined as "commodities, substances and goods listed in the standard specification of the South African Bureau of Standard SABS 0228 "The identification and classification of dangerous substances and goods".
186 Section 47(a).
187 Section 47(b).
188 Section 47(c).

5.8. Disaster Management Act 57 of 2002

The *Disaster Management Act* (DMA) 57 of 2002 provides for an integrated and co-operative disaster management strategy that focuses on: the prevention or reduction of the risks of disasters; the mitigation of the severity of disasters; emergency preparedness; as well as rapid and effective responses to disasters and post disaster recovery.[189] A "disaster" is defined in section 1 as:

> ...a progressive or sudden, widespread or localised natural or human-caused occurrence which – (a) causes or threatens to cause (i) death, injury or disease; (ii) damage to property, infrastructure or the environment; (iii) disruption of life of a community; and (b) is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources.

It is evident that the definition of disaster does not only denote natural disasters, but also human caused disasters. There is accordingly no doubt that damage caused by hazardous waste will qualify as a disaster in terms of this Act. It must be noted that, once again, the Act does not expressly deal with hazardous waste or the transportation thereof. It is also worth mentioning that the responsibility to manage the effects of a disaster is primarily placed on the National Executive. In other words, the responsible person or company is not required to manage the consequences of a disaster in terms of the DMA.

The relevance of the DMA is that it may be utilised as a gap-filling instrument where other legislation does not provide for the expedient neutralisation and remediation of serious damage caused during the movement of hazardous waste.[190] It is thus conceivable that the relevant provisions of NEMA and the various other environmental laws must however first be exhausted before the remedies in the DMA may be exploited.

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189 Preamble.

190 Section 2(1)(b) expressly states that the *Disaster Management Act* will not apply to an occurrence "to the extent that that occurrence can be dealt with effectively in terms of other legislation...aimed at reducing the risk, and addressing the consequences of occurrences of that nature".

5.9. Environmental Management: Waste Management Bill[191]

In January 2007, the Department of Environmental Affairs and Tourism (DEAT) published the *Environmental Management: Waste Management Bill* (the *Waste Management Bill*) for comments.[192] The main objective of the *Waste Management Bill* is the reformation of South African law relating to waste management with a view to protect human health, well-being and the environment.[193] The *Waste Management Bill* endeavours to address waste management in the broad sense, and not only the transportation of hazardous waste. The *Waste Management Bill* furthermore proposes a definition for hazardous waste, as discussed above.

"Waste management activity" (for which a license or notice is required under the Act) is furthermore defined to include the importation and exportation of waste,[194] the handling of waste,[195] trading in waste,[196] the transportation of waste,[197] the transfer of waste,[198] the disposal of waste,[199] and [the] remediation [of waste].[200] At some point during the transportation process, waste will have to be stored somewhere, and section 25 of the Waste Management Bill sets out some general requirements in this regard. The person or company storing the waste must, *inter alia*, take steps to ensure that the

191 As at the date of writing, the *Waste Management Bill* was still in the process of being finalised. In fact, and according to the proposed agenda of DEAT's parliamentary committee program, the committee proposed to discuss and attempt to finalise the *Waste Management Bill* on Tuesday 20 November 2007. In this regard, see DEAT 2007 HYPERLINK http://www.environment.gov.za 20 Nov.

192 Kotze *SA Public Law* 20 (to appear 2007).

193 The preamble read together with section 2(a). See further Kotze *SA Public Law* 20 (to appear 2007). Further objectives include: the endeavour to avoid and minimise the generation of waste; the recovery, re-use and recycling of waste; the treatment and disposal of waste as a last resort; the prevention of pollution and ecological degradation; securing ecologically sustainable development, while promoting economic and social development that is justifiable; promoting and ensuring effective waste delivery service; remediating land where contaminations poses, or may pose a significant risk of harm; and to achieve integrated waste management planning and reporting. See section 2(a) in this regard.

194 Section 1(uu)(i).

195 Section 1(uu)(iv).

196 Section 1(uu)(vii).

197 Section 1(uu)(viii).

198 Section 1(uu)(ix).

199 Section 1(uu)(x).

200 Section 1(uu)(xi).

container in which waste is stored are in tact and fit for such storage,[201] accidental spillage or leaking is prevented,[202] that the waste cannot be blown away[203] and that pollution of the environment and harm to human health are prevented.[204]

Section 29 deals with the duties of persons transporting waste. Firstly, this section authorises the Minister or MEC to require by notice in the Government Gazette that a transporter of certain types of waste must register with the Waste Management Officer in his or her province.[205] The transporter must also ensure that all reasonable steps are taken to prevent any spillage or littering of waste from a vehicle used for its transportation.[206] A duty is furthermore conferred upon the transporter to ensure that the place of destination gives consent that the hazardous waste may be offloaded at that place. Such consent must be furnished in writing[207] and must precede the transportation of hazardous waste.[208] The place of destination must also be authorised to accept the offloading of the hazardous waste consignment in question.[209] It is conceivable that this requirement is an incorporation of the prior notice-and-consent procedure, as enunciated in the Basel- and Bamako Conventions.

6. The Lesotho Legal Framework

A study conducted by the Basel Convention Regional Centre (BCRC) in 2001 revealed that hazardous waste production in Lesotho primarily consists of medical waste, agricultural waste and waste oil.[210] It is, however, clear from the report that information relating to hazardous waste importation and exportation activities to and from Lesotho is not readily available and that a precise determination of the extent

201 Section 25(a).
202 Section 25(b).
203 Section 25(c).
204 Section 25(e). See further section 28 of NEMA.
205 Section 29(1).
206 Section 29(2).
207 Section 29(3) and section 29(4).
208 Section 29(3).
209 Section 29(4) deals specifically with hazardous waste transported for a reason other than disposal.
210 BCRC 2001 HYPERLINK http://www.baselpretoria.org.za 8 Jul.

these activities is therefore impossible.[211] One can, however, safely assume that hazardous waste is transported to and from Lesotho on a regular basis.

6.1. Constitution of the Kingdom of Lesotho of 1993

The *Constitution of the Kingdom of Lesotho* of 1993 recognises the right to a satisfactory environment in section 36, which states that:

> Lesotho shall adopt policies designed to protect and enhance the natural and cultural environment of Lesotho for the benefit of both present and future generations and shall endeavour to assure to all citizens a safe and sound environment adequate for their health and well-being.

It is evident that the notion of sustainable development underscores the constitutionally entrenched environmental right and that the government of Lesotho is obliged to take positive measures (i.e. to adopt policies and possibly legislation) to ensure the protection of this right for the benefit of both present and future generations. The operative part in this section is perhaps the fact that the Lesotho government must adopt policies to ensure that citizens enjoy an environment that is acceptable to their health and well-being.

6.2. National Environment Policy of 1995

The *National Environment Policy* (NEP) of 1995 reiterates Lesotho's commitment to implement Agenda 21 and expressly state that Lesotho endorses the internationally accepted principles as contained in the 1972 Stockholm Declaration and the 1992 Rio Declaration.[212] The Policy also states that Lesotho will continue to accede to internationally acceptable environmental protocols.[213] It is thus clear that international

211 *Ibid.*

212 See the Preamble in this regard. The Policy furthermore expressly refers to the attainment of sustainable development, as well as the incorporation of the polluter pays-principle as matters of importance in the Lesotho environmental law regime (section 2).

213 *Ibid* (own emphasis added).

environmental law and its principles are in theory fundamentally important to Lesotho's environmental law regime.

The NEP includes a provision that Lesotho will endeavour to co-operate in good faith with other SADC countries, as well as international organisations in order to achieve optimal use of shared transboundary natural resources and the effective prevention or abatement of transboundary environmental impacts.[214] This may result in the potential alignment of environmental policies between Lesotho and South Africa with a view of reducing transboundary environmental impacts that may be caused by, *inter alia,* the transboundary movement of hazardous waste.

Section 3 of the NEP deals with Lesotho's national development priorities. The policy specifically provides for initiatives that will focus on toxic and hazardous substances, as well as waste management.[215] Although the Policy does not specifically refer to the transportation of hazardous waste, it may be argued that the notion of "waste management" should include the transportation of hazardous waste, as in the case of South Africa.[216]

Section 4.17 deals with the regulation of toxic- and hazardous substances and specifically states that its regulation must take cognisance of the provisions of the Basel- and Bamako Conventions. "Toxic- and hazardous substances" may therefore, by analogy, be interpreted to include hazardous waste. The policy also requires that Lesotho keep an up-to-date register of toxic, hazardous and radioactive substances (and waste).[217] Especially relevant is the fact that the Policy places an obligation on Lesotho to "set up a national framework and standards to regulate the transboundary

214 Section 2 (Own alteration).
215 Section 3.2.
216 This interpretation is in line with the definition of "management" contained in article 2(2) of the Basel Convention, which means the "collection, transport and disposal of hazardous wastes or other wastes, including after-care of disposal sites".
217 It may be derived from the BCRC report conducted in 2001 that this is not applied very strictly. See BCRC 2001 HYPERLINK http://www.baselpretoria.org.za 8 Jul in this regard.

movement hazardous and radioactive wastes".[218] Lesotho must also control the generation of hazardous wastes and ensure that those banned shall be stringently controlled.[219] As far as could be established, these have not been promulgated at the time of writing.

Lesotho is also required by the Policy to "monitor the effects and control all phases of the life cycle of all substances likely to have an adverse impact on human health and [the] environment".[220] As the transportation of hazardous waste may potentially affect human health and the environment adversely, it is plausible to argue that hazardous waste must be monitored through all phases of its movement.

6.3. Environment Act 15 of 2001

The *Environment Act* 15 of 2001 (the *Environment Act*) is Lesotho's primary legislative instrument devoted to the protection of the environment. At the time of writing, the *Environment Act* is not yet entered into force.[221] Even so, section 3(2)(a) reiterates Lesotho's dedication to "assure everyone living in Lesotho [of] the fundamental right to a clean and healthy environment".[222] Part II contains the principles upon which the Act is based, which include, *inter alia*, the attainment of sustainable development[223] and the polluter-pays principle.[224] The precautionary principle is also endorsed in section 4(4)(b) of the *Environment Act.*

Section 3(2)(o) provides that the government of Lesotho must promote co-operation with other governments and relevant national, international and regional organisations concerned with the protection of the environment. This may imply that Lesotho should co-operate, *inter* alia, with the South African government and the Basel Convention

218 Section 4.17.
219 *Ibid.*
220 *Ibid.*
221 Ministry of Tourism, Environment and Culture *Draft Hazardous Waste Management* 32.
222 See section 36 of the Constitution of the Kingdom of Lesotho, and 6.1 above.
223 Section 3(2)(b).
224 Section 3(2)(n).

Regional Network (BCRN) when it comes to issues relating to the movement of hazardous waste. The government of Lesotho is furthermore obliged in section 38(b) to issue guidelines for the handling, storage and transportation of hazardous waste.

From section 77(1)(d) it is clear that no person may handle or transport hazardous waste unless he or she is in possession of a license authorising him or her to do so.[225] The *Environment Act* does in fact state in unambiguous terms that the importation of hazardous waste is banned[226] and that hazardous waste generated in Lesotho may only be exported with the written consent of the destination state.[227] It is also important to mention that the movement of hazardous waste within Lesotho is only permissible if the appropriate license has been obtained. It goes without saying that the movement of hazardous waste must furthermore comply with the conditions upon which the license was granted.[228] A person who fails to comply with these provisions and whom imports hazardous waste into Lesotho will be responsible for its removal and to arrange for its safe disposal elsewhere.[229]

It is clear that the *Environment Act* not only takes cognisance of the Basel- and Bamako Conventions, but also incorporates some of its provisions into Lesotho's domestic law. Where environmental damage has already occurred as a result of the transboundary movement of hazardous waste, section 84 provides that the government of Lesotho may make an environment restoration order in terms of which the responsible person may be required to restore the environment (or natural resource) as near as possible to the condition it was in before the damage in question occurred.[230]

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225 Section 77 deals with the application procedure for such a license, and will be highly relevant for any person who considers transporting hazardous waste in Lesotho. Failure to acquire the license contemplated in section 77 before transporting hazardous waste, will result in criminal liability punishable with a fine not exceeding M150 000 or imprisonment not exceeding 15 years, or both such a fine and imprisonment.

226 Section 78(1).

227 Section 78(2).

228 Section 78(3). A person who transports hazardous waste in contravention of section 78, will be liable to: a fine of not less than M20 000 and not more than M200 000; imprisonment of not less than 10 years but not more than 20 years; or both such a fine and imprisonment - section 75(8).

229 Section 78(6).

230 Section 84(2)(a).

6.4. Environment Amendment Bill of 2004

The *Environment Amendment Bill* of 2004 is intended to address the shortcomings of the *Environment Act* of 2001.[231] In particular, the Amendment Bill introduces new provisions dealing with the spillage of pollutants, such as hazardous waste. Section 3 defines a "spill" as:

> ...a discharge of a pollutant into the environment from or out of a structure, vehicle, vessel, aircraft or other carrier or container, which (a) is abnormal having regard to all the circumstances of the discharge; and (b) poses a serious threat to the environment or human health.

A spill is one of the typical incidences which may occur during the transportation of hazardous waste. In the event that a spill does in fact materialise, the owner of the spilled substance must without delay inform the Director of the Department of Environment (the Director) of said spill.[232] Furthermore, every officer who becomes aware of a spill is obliged to notify the Director of that spill.[233] The Director must be furnished with information relating to the circumstances of the spill,[234] as well as information relating to the steps (or proposed steps) in mitigation of the damage.[235] As a general rule the owner of hazardous waste must prevent the adverse effects caused by its spillage[236] and must take steps to restore the environment.[237] Should the owner of hazardous waste not be in a position to ensure the prevention of environmental damage, or where he/she cannot restore of the environment, he/she may call upon the Director's assistance.[238] In such a case, the Director may initiate any action and take

231 It is interesting to note that the *Environment Act* of 2001 was amended even before it came into effect. As was already stated, at the date of writing, the *Environment Act* of 2001 is not yet in force.
232 Section 44A(2).
233 Section 44A(1).
234 Section 44A(2)(b)(i).
235 Section 44A(2)(b)(ii).
236 Section 44A(2)(c)(i).
237 Section 44A(2)(c)(ii).
238 Section 44B(1)(c).

any measures necessary to rectify the consequences of the spill, provided that such action and measures are in the public interest.[239]

It should be mentioned that the *Amendment Bill* seeks to introduce a total ban on the importation into Lesotho of substances and chemicals specified in Schedule II.[240] The manufacture, handling, selling and transportation of any hazardous chemical listed in Schedule II is furthermore expressly prohibited in section 83A(2). Whether or not the prohibition on the importation and transportation of listed substances and chemicals will in fact apply to hazardous waste remains to be seen. It is, however, argued that hazardous waste containing any of the chemicals or substances listed in the proposed Second Schedule may be subject to the total ban pursuant to section 83A.

6.5. Disaster Management Act 2 of 1997

The purpose of the *Disaster Management Act* (DMA) 2 of 1997 is to provide for the protection of life and property in the event of emergencies arising out of disasters.[241]

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239 Section 44B(1). The Director's assistance may be (and in fact, should be) requested where the polluter does not have the capacity to remedy the impairment of the environment. In terms of section 44B(3), the Director may request a contingency plan from a person who conducts an activity which may cause a spill. The Director further has the authority to modify an existing contingency plan, if he deems it appropriate [section 44B(3)(b)] and he may also make regulations which sets out requirements for contingency plans [section 44B(4)]. Moreover, the procedure for clean-up and removal operations may also be prescribed by the Director by notice in the Gazette [section 44C(a). Section 44D provides that, where a private individual is affected by a spill, he or she may claim damages from the owner. Where damage is caused to the environment, on the other hand, the Attorney-General may claim damages from the owner of the spilled pollutant [section 44D(3)]. In terms of section 44D(1)(a), it is presumed that the owner of the spilled pollutant is liable for damage caused by a spill. Where liability is denied, the *onus* rests on the owner to prove that damage was not caused by him or her [section 44D(1)(c). It is submitted that the carrier of hazardous waste (who is normally not the owner of the transported hazardous waste), will not *per se* be liable for damage – even where he or she clearly acted negligently. The requirement is that the owner must first rebut the presumption of liability. Hence, if the owner does not supply proof that liability should in fact be attributed to the carrier, he (the owner) may be held liable on the presumption. Where the Director assisted the polluter in a clean-up or removal operation, the costs and expenses may be recovered from the polluter [section 44E(1)]. The costs and expenses will be seen as a civil debt owed by the polluter to the Government of Lesotho [section 44E(2)].

240 Section 83A(1).

241 Preface to the Act.

A "disaster" is defined in section 2 as:[242]

> ...a progressive or sudden, widespread or localised, natural or man-made event including not only prevalent drought but also heavy snowfalls, severe frosts, hailstorms, tornadoes, landslides, mudslides, floods, serious widespread fires and major air or *road traffic accidents*.

It is clear that not only natural disasters are included in the definition, but also expressly in this case, major road traffic accidents. Although the term "major road traffic accident" is not defined, it may be argued that an accident involving a hazardous waste carrier may very well constitute such an accident. Section 3 empowers the Prime Minister to declare a state of disaster in a particular area where he is of the opinion that exceptional measures are necessary to assist and protect the public in that area.[243] Section 4 grants the Prime Minister wide emergency powers to deal with the disaster. In particular, section 4(m) authorises him to "take all necessary steps in order to prevent, alleviate, control or minimise the effects of disasters".[244] Although entirely silent on the transportation of hazardous waste, the Act will at least provide a mechanism to aid in the prompt remediation and mitigation of environmental damage occasioned by the transportation of hazardous waste.

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242 Own emphasis.

243 This should be done on advice from the Disaster Management Board.

244 Where a disaster has been declared, the Disaster Management Authority must prepare a National Disaster Management Plan, which must, amongst others, deal with mitigation-, preparedness-, response- and recovery measures [section 5(1)]. In addition to the National Disaster Management Plan, the Chief Executive must prepare an appropriate National Disaster Relief Plan, which must be implemented after approval by the Cabinet [section 6(a)]. On district level, each District Secretary must prepare an appropriate District Disaster Relief Plan, which must be implemented after it has been approved by the Chief Executive [section 6)b)]. The remainder of the Act provides for the establishment of various institutions that will be responsible for implementing the various Disaster Management- and Relief Plans. Amongst others, it provides for the establishment of: the National Disaster Relief Task Force (section 8); the National Disaster Management Authority (section 11); District Disaster Management Teams (section 23) and voluntary groups that will enjoy delegated disaster management responsibilities (section 27). Section 34 furthermore provides for the establishment of the Disaster Management Fund, out of which the disaster management activities are to be financed. As the *Disaster Management Act* is not primarily concerned with environmental protection, it does not come as a surprise that it does not provide for liability of the person responsible for the disaster, by incorporating the polluter-pays principle. Nonetheless, the relevance of this Act should not be underestimated, as the polluter will not always be in the financial position to make good all the consequences of his actions. Where this is the case, the *Disaster Management Act* will be available to at least mitigate the consequences of a hazardous waste incident.

7. Assessments and Recommendations

The transboundary movement of hazardous waste is a perceptibly dangerous activity which poses significant risks to the environment, as well as human health and well-being. Accordingly, it is imperative that hazardous waste should be regulated during all phases of its movement with a view to ensure that it is transported, handled and disposed of in an environmentally sound manner.

7.1. International Framework

From an analysis of the international framework, it is evident that there is at least one international convention which is directly applicable to the transboundary movement of hazardous waste, namely the Basel Convention.[245] There are furthermore various international agreements which have indirect application[246] and a number of conventions which, although *prima facie* appearing to be applicable, do not apply to the movement of hazardous waste.[247] It is also apparent that there are certain principles of international environmental law which have acquired the status of customary international law (*jus cogens*) and which will trigger international remedies when they are infringed during the transboundary movement of hazardous waste.[248]

The international legal framework does, however, involve a few predicaments. The enforcement of international conventions may prove a daunting, if not impossible,

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245 The Basel Ban (amendment to the Basel Convention) and the Protocol on Liability and Compensation for Damage Resulting from the Transboundary Movement of Hazardous Waste and Their Disposal of 1999 are not yet in force and are therefore not taken into account.

246 The Cotonou Agreement of 2000; Draft Articles on Prevention of Transboundary Harm from Hazardous Activities of 2001; Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities of 2006; the Rio Declaration; Convention on Environmental Impact Assessments in a Transboundary Context of 1991 (amongst others).

247 An example of such a convention is the *Rotterdam Convention on the Prior Informed Consent Procedure for Chemicals and Pesticides in International Trade* of 2004. Article 3(2)(c) expressly states that the Rotterdam Convention does not apply to waste.

248 These principles are the principle of sustainable development (although its status as customary international law is often debated); responsibility not to cause transboundary harm; preventive principle; precautionary principle; polluter-pays principle. See the discussion at 3 *infra*.

task. Generally speaking, treaties and conventions are deemed to be soft law which are rather ineffective in lieu of state co-operation. A further dilemma is presented by the fact that international law only regulates the relationships between states.[249] A company or individual whom causes environmental damage during the movement of hazardous waste can therefore not incur international liability in the true sense, as they fail to qualify as subjects of the international community. Conversely, it is trite law that companies and individuals lack the necessary *locus standi* to seek relief from international forums such as the ICJ.[250] There is a possibility that a state may under certain circumstances be held responsible for the actions of its citizens, but there is no mechanism to ensure liability where a state refuses to voluntarily subject itself to the jurisdiction of the ICJ.[251] In the premises, it is argued that the international legal framework does provide an effective legal mechanism to regulate the transboundary movement of hazardous waste in theory, but, whether this framework could be sufficiently implemented and enforced in practice remains to be seen. States may impose economical and political sanctions and embargoes against perpetrators, but it must be emphasised that these are political mechanisms and not legal mechanisms. For the international rules applicable to the transboundary movement of hazardous waste to enjoy any efficacy, it must be incorporated and enforced at a domestic level.

7.2. Regional Framework

From an analysis of the regional legal framework it is apparent that there exists at least one regional instrument directly applicable to the transboundary movement of hazardous waste, namely the Bamako Convention. South Africa has, however, illustrated a reluctance to recognise the Bamako Convention by not signing it, and

249 Dugard *International Law* 1.

250 Dugard *International Law* 459. Despite calls for an expansion of the rule that only states are recognised as true actors in the international community, the position in contemporary international law is still unchanged.

251 Dugard remarks as follows: "The ICJ does not, however, have compulsory jurisdiction over all such states or over all disputes of international law between these states. It has jurisdiction only over those states which consent to the Court's jurisdiction and only in respect of those disputes which such states consent to be heard by the Court". See Dugard *International Law* 460 in this regard.

Lesotho remains in default of ratifying same. It is proposed that South Africa and Lesotho should attend to the necessary and accede and ratify the Basel- and Bamako Conventions, and also incorporate these instruments domestically.

Furthermore, there are various regional instruments which recognise an environmental right and which place an obligation on African states to promulgate the necessary domestic legislation and regulations to address the issues connected with the movement of hazardous waste. These instruments place great emphasis on the obligation of states to collaborate in their endeavours to regulate the movement of hazardous waste across the African continent, but as far as it could be ascertained, little has been done in this regard. Moreover, it is argued that regional instruments face the same predicaments as the international framework, in the sense that states cannot be compelled to perform their regional treaty obligations. Hence, the regional framework must, in similar vein, enjoy domestic incorporation before it becomes effective and enforceable.

7.3. South Africa[252]

Arguably, one of the most effective ways to achieve the sometimes idealistic objectives of international environmental law, is to enforce it at a domestic level. As pointed out above, the principles of international environmental law automatically form part of South African law (without the need for express enactment) and there is accordingly a mechanism in place to ensure that the international principles (such as the preventive principle and the polluter pays principle) are enforced in the South Africa. With regard to international conventions, the 1996 Constitution requires express enactment before it will acquire the status of South African law, and for that reason, the Basel- and the Bamako Conventions fail to qualify as South African law.

252 Due to length constraints this exposition of the South African legal framework does not take the common law into account. The common law, and in particular, the law of delict will be of vital importance and must be borne in mind throughout. See Neethling *Law of Delict;* Van der Walt and Midgley *Principles of Delict* for authoritive material in this regard.

An analysis of the existing environmental regime demonstrates that there is no single piece of legislation that deals explicitly with the movement of hazardous waste in South Africa. Several of the existing environmental legislation and regulations have an indirect bearing on the movement of hazardous waste, but these provisions are scattered across various acts and therefore address this topic in a rather fragmented and incoherent fashion.[253] For anyone involved in the movement of hazardous waste, it is a legal labyrinth to determine with ease and certainty what is expected in terms of the law.

It is clear that the fragmented environmental regime at least provides for liability of the owner and/or the operator of hazardous waste and that it incorporates the polluter-pays principle, amongst others. The South African environmental regime is therefore not short of liability conferring provisions. This is however not enough and legal certainty demands an unfragmented regime from which it is unambiguously clear what may and may not be done, as well as what will occur when the rules applicable to the movement of hazardous waste are violated. At this stage, legal uncertainty evidently prevails in the sphere of hazardous waste movement. The author therefore argues that there is a need for a single piece of legislation which addresses some of the following contentious aspects of hazardous waste movement: the circumstances under which hazardous waste may be moved (if it indeed may be moved); the licensing procedure in respect of hazardous waste operators, transporters and generators; compulsory and effective reporting and monitoring systems so as to enable government to be aware of hazardous waste generation and its movement within South Africa; the incorporation of the prior notice-and-consent procedure and a clear explanation of how it works;[254] the duties of the owner, the importer, the transporter and any other person involved in the movement of hazardous waste; the liability of the various role players, and in particular, whether they can be held liable jointly and severally. The author also

253 For further reading on the fragmented nature of South African environmental legislation, see Kotze 2006(1) *PER* 1-44.

254 In this regard, it is argued that the notion of prior informed consent should be expanded so as to require any party who intends moving hazardous waste to not only inform the receiving party, but also a designated government department or representative prior to the movement of hazardous waste.

suggests that security should be furnished to government when the movement of hazardous waste is intended, or at least that some compulsory insurance should be in place to ensure that funds will immediately be available in the event of environmental damage resulting from the movement of hazardous waste.

The advent of 2007 has seen the introduction of the *Environmental Management: Waste Management Bill*, which is however still in the process of being finalised. The *Waste Management Bill* is the first legal instrument in South Africa that will explicitly address the issue of hazardous waste movement (or transportation) to some extent. What is furthermore apparent is that it seeks to address waste management in the broad sense and that it is not specifically devoted to the movement of hazardous waste and that it also does not comprehensively incorporate all the provisions of the Basel- and Bamako Conventions. Moreover, the *Waste Management Bill* seeks to regulate the movement of hazardous waste from a domestic perspective, whereas the transboundary movement of hazardous waste clearly suggests some international dimension. The author's concern in this regard can be explained as follows. As a general rule, South African courts may have jurisdiction to hear cases where a foreign company or individual (*peregrinus)* violated the laws of the Republic (provided of course that jurisdiction are found *ad fundandum jurisdictionem*). It may, therefore, happen that a South African court delivers judgment against a *peregrinus* of South Africa. The author warns that the effective enforcement of domestic judgments against a *peregrinus* may be problematic for a wide array of reasons[255] and that it would be

255 Consider the following scenario: a foreign company exports hazardous waste to South Africa and the vehicle in which it is conveyed overturns and causes significant environmental damage. It is estimated that the costs of remedial measures would be R 20,000,000 In order to found jurisdiction over the *peregrinus,* his person or property must first be attached. Accept that this is done successfully and that the *peregrinus* has property in South Africa to the value of R 500,000 - but that its total wealth in Italy amounts to R 300,000,000. South African courts will only have the competence to execute the judgment against the property of the *peregrinus* that is situated within South Africa (and therefore, the damage of R 19,500,000 will not be recoverable from the *peregrinus.* (See Pete *et al Civil Procedure* 85 in this regard). Many states have however come to accept the practice of recognising and enforcing foreign judgments (Forsyth *Private International Law* 389), but, as Wolff puts it: "...there can be no enforcement of a [foreign] judgment without recognition; but there may be recognition without enforcement". It is not the purpose of this dissertation to investigate the enforceability of domestic judgments against foreign companies and individuals in foreign states. It is however evident that this may provide problems and it is

appropriate to ensure that this is avoided by, *inter alia*, requiring a *peregrinus* to furnish sufficient security for potential environmental damage before hazardous waste is imported into South Africa – even where South Africa is merely being used as the state of transit. The prior notice-and-consent procedure should furthermore be expanded so that prior informed consent should be obtained from both the place of destination and the relevant government authority (*in casu*, the Waste Management Officer). The *Waste Management Bill* must furthermore provide for comprehensive rules *vis-à-vis* responsibility for hazardous waste and for liability during all phases of its movement. In this regard, it is suggested that the obligations of the owner, transporter and operator should be outlined with great particularity and that clear rules should exist so as to ascertain with precision which of the role players are to be held liable at any given stage. The author suggests that the legislature amend the *Waste Management Bill* so that it avoids the particular difficulties connected to the execution of domestic judgments against foreign companies or individuals. In other words: the *Waste Management Bill* should not only regulate the international movement of hazardous waste, but it should provide for effective mechanisms to ensure that its provisions are also effectively enforced against foreign companies and individuals.

7.4. Lesotho

An analysis of Lesotho's domestic legal framework illustrates that there are presently no specific legislation dealing with the movement of hazardous waste in and across Lesotho. The *National Environmental Policy* places a wide array of obligations on Lesotho in respect of the transportation of hazardous waste, but it is evident that the *Environment Act* (which was arguably promulgated to give effect to these obligations) is not yet in force.

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therefore suggested that these problems can be overcome by requiring sufficient security from the *peregrinus* before hazardous waste is allowed to enter through the South African borders. The *Disaster Management Act* may serve as a "safety net" where foreign companies or individuals manage to escape effective execution, but there is no reason why the national purse should endure this situation where it could be avoided.

The Lesotho Constitution furthermore fails to enunciate whether international law is recognised in Lesotho. It is entirely silent on the status of international law and it is therefore uncertain to what extent international conventions and the principles of international environmental law can be enforced in the courts of Lesotho.

At present, it would appear as though the *Disaster Management Act* is the only enforceable mechanism in place to address environmental damage resulting from the movement of hazardous waste in Lesotho. Although not specifically designed to regulate the movement of hazardous waste, it provides for a mechanism whereby the consequences of a hazardous waste disaster can be remedied effectively and expediently by government. After such remediation, the Lesotho government will have a right of recourse against the party that caused the disaster. It must be mentioned that, where the guilty party is a foreign company or individual, the judgment handed down in Lesotho may lack excecutability in a foreign country and it is therefore suggested that Lesotho must take positive action to ensure that this situation is avoided, by *inter alia,* at least ensuring that the *Environment Act* comes into force and by making provision for a scheme of compulsory security (or insurance) before hazardous waste may be imported into Lesotho.

It is furthermore proposed that South Africa and Lesotho should consult with one another with a view to regulate the transboundary movement of hazardous waste in a co-operative fashion by, *inter alia*, entering into bi-lateral agreements. That way, they will not only combine their efforts and knowledge base, but also comply with their regional treaty obligations to co-operate in matters relating to the environment, and in particular, the transboundary movement of hazardous waste.

8. Conclusion

The transboundary movement of hazardous waste poses significant dangers to the environment, as well as human health and well-being. It is for this reason that one finds at least one international treaty (the Basel Convention) and one regional treaty (the Bamako Convention) specifically devoted to the regulation of this activity. There are furthermore a comprehensive body of international environmental law principles applicable to the movement of hazardous waste. Hence, it may be deduced that the international framework theoretically provides for a substantive body of legal rules applicable to the transboundary movement of hazardous waste. The practical enforcement of international conventions do however entail a few challenges, and in particular, it is clear that international law should be incorporated domestically before its enforcement will enjoy any efficacy against legal subjects other than states (such as companies and private individuals).

In the regional context, most regional instruments do not regulate the movement of hazardous waste. It merely states that African states (including South Africa and Lesotho) must co-operate in the governance of areas which may affect the environment. Moreover, these instruments place an obligation on South Africa and Lesotho to promulgate appropriate legislation and regulations, and to adopt and ratify relevant international agreements. Although most regional instruments have very noble aspirations, African states cannot be forced to give effect to their treaty obligations. It furthermore appears as though very little (if not nothing) have been done in this regard.

It should also be clear that South Africa has a very dynamic environmental law regime in place, but that it is fragmented and that no single integrated mechanism exists to effectively regulate the transboundary movement of hazardous waste. The South African waste regime will be changed significantly when the *Waste Management Bill* comes into force, but it is clear that this proposed instrument does not deal with the movement of hazardous waste in a comprehensive manner. Moreover, it addresses the

movement of hazardous waste from a domestic perspective, whilst there is a clear need that it should be addressed from an international dimension as well. The *status quo ante* is that the domestic framework presently constitutes a legal labyrinth for anyone involved in the transportation of hazardous waste, and that legislative measures is therefore necessary to achieve legal certainty and to ensure effective regulation.

The position in Lesotho is that its primary environmental laws are not yet in force, and accordingly, the provisions applicable to hazardous waste are not yet enforceable. Although the *Environment Act* will go a far way to address issues relating to the movement of hazardous waste in Lesotho when it enters into force, it is argued that it does also not address the international dimensions of hazardous waste movement in a satisfactory fashion and that a comprehensive legislative exercise might prove necessary in this regard.

BIBLIOGRAPHY

BOOKS

B

Birnie and Boyle *International Law and the Environment*

Birnie PW and Boyle AE *International Law and the Environment* 2nd ed (Oxford University Press 2002)

C

Currie and De Waal *Bill of Rights*

Currie I and De Waal J *The Bill of Rights Handbook* 5th ed (Juta and Company 2006)

D

De Sadeleer *Environmental Principles*

De Sadeleer N *Environmental Principles: From Political Slogans to Legal Rules* (Oxford University Press 2005)

Dugard *International Law*

Dugard J *International Law: a South African perspective* (Juta Lansdowne 2005)

F

Forsyth *Private International Law*

Forsyth *Private International Law: The modern Roman-Dutch law including the jurisdiction of the High Courts* 4th ed (Juta Lansdowne 2003)

G

Glazewski *Environmental Law*

Glazewski J *Environmental Law in South Africa* 2nd ed (LexisNexis Butterworths Durban 2005)

K

Kotze *Integrated Environmental Governance*

Kotze LJ *A Legal Framework for Integrated Environmental Governance in South Africa and the North-West Province* (Wolf Legal Publishers 2006)

Kummer *International Management of Hazardous Waste*

Kummer K *International Management of Hazardous Wastes: The Basel Convention and Related Legal Rules* (Clarendon Press Oxford 1995)

N

Neethling *Law of Delict*

Neethling J, Potgieter JM and Visser PJ *Law of Delict* 5th ed (Lexisnexis Butterworths Durban 2006)

S

Sands and Galizzi *Documents in International Environmental Law*

Sands P and Galizzi P *Documents in International Environmental Law* 2nd ed (Cambridge University Press 2004)

Sands *Principles of International Environmental Law*

Sands P *Principles of International Environmental Law* 2nd ed (Cambridge University Press 2003)

Segger and Khalfan *Sustainable Development Law*

Segger MC and Khalfan A *Sustainable Development Law: Principles, practices and prospects* (Oxford University Press 2004)

U

UNEP *Environment and Trade*

UNEP *Environment and Trade: A Handbook* (International Institute for Sustainable Development 2000)

V

Van der Walt and Midgley *Principles of Delict*

Van der Walt JC and Midgley JR *Principles of Delict* 3rd ed (Lexisnexis Butterworths Durban 2005)

CASES

Corfu Channel Case IJC Reports 4(1949) 4-28

ICJ Advisory Opinion: *Legality of the Use of Nuclear Weapons in Armed Conflict* (8 July 1996)

Trail Smelter Arbitration 35 *AJIL* (1941) 684

CONVENTIONS

African Convention on the Conservation of Nature and Natural Resources (2002)

Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa of 1991

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal of 1989

Code of Practice on the International Transboundary Movement of Radioactive Waste adopted on 21 September 1990

Cotonou Agreement (2000)

Draft Articles on Prevention of Transboundary Harm from Hazardous Activities (2001)

Draft ASEAN Convention on the Management and Control of Transboundary Movements of Hazardous Wastes within the ASEAN Region (1994)

Draft Principles on the Allocation of Loss in the Case of Transboundary Harm arising out of Hazardous Waste (2006)

Draft Protocol for the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (1991)

Convention on Environmental Impact Assessments in a Transboundary Context (1991)(Espoo Convention)

International Convention for the Safety of Life at Sea, 1974 (SOLAS)

International Convention for the Prevention of Pollution from Ships, 1973 and 1978

International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (1996)(HNS Convention)

Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (1997)

Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)

Lome Convention between EU and ACP States (1975, as updated until 2000 when it expired)

Montreal Protocol on Substances that Deplete the Ozone Layer (1992)

Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal

Protocol on Transport, Communications and Meteorology

Report of the World Commission on Environment and Development (WCED): Our Common Future (1987)

Rio Declaration on Environment and Development (1992)

Rotterdam Convention on the Prior Informed Consent Procedure for Chemicals and Pesticides in International Trade (1998)(Rotterdam Convention)

Stockholm Declaration on the Human Environment (1972)

The Agreement between the Government of Canada and the Government of the United States of America Concerning the Transboundary Movement of Hazardous Waste (1986)

The Central American Regional Agreement on the Transboundary Movement of Hazardous Wastes (1992)

Treaty Establishing the African Community (1991)(AEC Treaty)

United Nations Convention on the Law of the Sea, 1982 (UNCLOS)

United Nations World Charter for Nature (1982)

ILC *Draft Principles on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law* (General Assembly Resolution 52/156 of 15 December 1997)

UNEP Draft Principles of Conduct on Shared Natural Resources (1978)

Vienna Convention for the Protection of the Ozone Layer (1988)

World Summit on Sustainable Development (2002)

CONFERENCES

International Conference on the Safety of Radioactive Waste Disposal held in Tokyo from 3-7 October 2005

United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro from 3-14 June 1992 (Earth Summit)

CONTRIBUTIONS FROM COLLECTED WORK

De Bruin AC "Hazardous Waste Management in Southern Africa" in Forester WS and Skinner JH (eds) *International Perspectives on Hazardous Waste Management* 198-205 (Academic Press Inc London 1987)

Morrison FL and Muffet M "Hazardous Waste" in Morrison FL and Wolfrum R (eds) *International, Regional and National Environmental Law* (Kluwer Law International The Hague 2000)

DICTIONARIES

Waite M, Hollingworth L and Duncan Marshall (eds) *Oxford Paperback Thesaurus* 3rd ed (Oxford University Press 2006)

GOVERNMENT PUBLICATIONS

Department of Environment Affairs and Tourism Notice *Determination on Policy on Hazardous Waste Management in terms of the Environment Conservation Act 73 of 1989* Notice 1064/1994 GG 15987 of 30 September 1994

Department of Water Affairs & Forestry *Waste Management Series: Minimum Requirements for the Handling and Disposal of Hazardous Waste* (Pretoria 1994)

GN 385 of 2006, published 21 April 2006.

GN 398 of 2007, published 10 August 2007

GN 1832 of 2007, published 12 January 2007

GN 1051 of 1998, published 21 September 1998

GN 1405 of 2006, published 29 September 2006

GN 225 of 2000, published 17 March 2000

GN 29862 of 2007, published 4 May 2007

GN 1832 of 2007, published 12 January 2007

Ministry of Tourism, Environment and Culture *Draft Hazardous Waste Management Report and Legislation (Bill and Regulations)* (Maseru 2006)

National Environmental Secretariat Ministry of Environment, Gender and Youth Affairs *State of the Environment in Lesotho 1997* (Maseru 1999)(ISBN 99911-633-0-1)

SABS *Transportation of Dangerous Goods: design requirements for road tankers* (SABS 1518)

SABS *Transportation of Dangerous Goods – Operational Requirements for Road Vehicles* (SABS 0231)

SANS *Transport of Dangerous Goods – Packaging and large packaging for road and rail transport – Part 1: Packaging* (SANS 10229-1:2005)

SANS *Transportation of Dangerous Goods – Packaging and large packaging for road and Rail Transport – Part 2* (SANS 10229-2:2007)

SANS *Transport of Dangerous Goods – The reprocessing of previously certified processing: Consolidated edition incorporating amendment No. 1* (SANS 10406:2007 [Ed 1.1])

JOURNAL ARTICLES

A

Akinnusi AO "The Bamako & Basel Conventions on the Transboundary Movement and Disposal of Hazardous Waste: A Comparative and Critical Analysis *Stellenbosch Law Review* 306-316.

B

Bray E "Co-operative Governance in the Context of the National Environmental Management Act 107 of 1998" 1999 *SAJELP* 1-19

Bray E "Towards Sustainable Development: Are we on the Right Track? 1998 5(1) *South African Journal of Environmental Law and Policy* 1-15

C

Choongh S and Grekos M "Finding a Workable Definition of Waste: Is it a Waste of Time?" *HICLR* 1990 Vol 14 No 1 on 436-479

G

Glazewski "Regulating transboundary movement of hazardous waste: international development and implications for South Africa" 1993 *CILSA* Vol XXVI No 1 on 234-249

H

Howard K "The Basel Convention: Control of Transboundary Movements of Hazardous Wastes and Their Disposal" 1990 *HICLR* Vol 14 No 1 on 223-246

K

Khavari A and Rothwell A "The ICJ and the Danube Dam Case: A missed opportunity for International Environmental Law?" 1999(5) *MULR* 50 on 15

Kotze LJ "The interpretation of claims for pure economic loss under section 1(6)(c) of the Hazardous and Noxious Substances Convention" 2002 *SAYIL* 171-191

Kotze LJ "Improving unsustainable environmental governance in South Africa: the case for holistic governance" 2006(1) *PER* 1-44

Kotze LJ "Revisiting the South African integrated pollution prevention and control (IPPC) regime: a critical survey of recent developments" 2007 *SA Public Law* (to appear in 2007)

Kummer K "The International Regulation of Transboundary Traffic in Hazardous Wastes: The 1989 Basel Convention" *International and Comparative Law Quarterly* Vol. 41 No. 1 on 530-562

L

Lawrence R "How Manageable is South Africa's New Framework of Environmental Management?" 1996 *SAJELP* 61-65

Lipman M "Transboundary movement of hazardous waste: environmental justice issues for developing countries" 1999 *Acta Juridica* 266-286

Lipman Z "A Dirty Dilemma: The Hazardous Waste Trade" 2002 *Harvard Law Review* 67+ [Found on the internet] Number 23 Vol. 4 HYPERLINK http://hir.harvard.edu/articles/958/2/ [Date of use 20 September 2006]

N

Naldi G "The Regulation of the Transnational Trade in Hazardous Wastes – The African Response" 2000 *SAJELP* 213-236

R

Russell C and Shearer "Comparative Analysis of the Basel and Bamako Conventions on Hazardous Waste" 1993 *Environmental Law* Vol. 23 No. 1993 on 141-183

T

Tladi D "The quest to ban hazardous waste import into Africa: first Bamako and now Basel" 2000 *CILSA* 210-226

Tladi D "The Liability Protocol to the Basel Convention on Transboundary Movement of Hazardous Wastes: An Overview" 2000 *SAJELP* 203-212

U

UN "Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities" 2006(Vol II)(Part 2) *Yearbook of the International Law Commission*

V

Van der Linde M "African responses to environmental protection" 2002 *CILSA* 99-113

INTERNET

BCRC 2001 HZW Generation in Lesotho [Found on the internet] HYPERLINK http://www.basilpretoria.org.za [Date of use 8 July 2006]

Anon 2006 Nigeria Waste Imports from Italy [Found on the internet] http://www.american.edu/TED/nigeria.htm [Date of use 2 March 2006]

DEAT 2007 Proposed draft DEAT Parliamentary Committee's Programme 2007: Fourth Term [Found on the internet] HYPERLINK http://www.environment.gov.za [Date of use 20 November 2007]

Lesotho Government 2006 Draft Hazardous Waste Management Report and Legislation (Bill and Legislation) [Found on the internet] HYPERLINK http://www.lesotho.gov.ls/articles/2006/Draft_Hazardous_Waste_Management_Report.htm [Date of use 9 October 2006]

SADC 2007 South African Development Community [Found on the internet] HYPERLINK http://www.sadc.int [Date of use 13 May 2007]

SADC 2007 History, Evolution and Current Status [Found on the internet] HYPERLINK http://www.sadc.int/english/about/history/index.php [Date of use 12 October 2006]

LEGISLATION

Lesotho Legislation

Constitution of the Kingdom of Lesotho, 1993

Customs and Excise Act 10 of 1982

Disaster Management Act 2 of 1997

Environment Act 15 of 2001

Environment Amendment Bill of 2004

Import and Export Act of 1984

National Environment Policy of 1995

Promotion of Administrative Justice Act 3 of 2000

Road Traffic Act 8 of 1981

Road Transport Act 6 of 1981

South Africa Legislation and Bills

Atmospheric Pollution Prevention Act 45 of 1965

Constitution of the Republic of South Africa, 1996

Cross Border Road Transport Act 467 of 1998

Disaster Management Act 57 of 2002

Draft Environmental Management: Waste Management Bill

Dumping at Sea Control Act 73 of 1980

Environment Conservation Act 73 of 1989

Hazardous Substances Act 15 of 1973

Marine Pollution Prevention Act 2 of 1986

National Environmental Management Act 107 of 1998

National Railway Safety Regulator Act of 2002

National Road Traffic Act 93 of 1996

National Water Act 36 of 1998

Standards Act 29 of 1993

Other Jurisdictions

Constitution of Angola of 1992

Constitution of Mozambique, 1990

RESOLUTIONS

UN General Assembly Resolution 52/156 of 15 December 1997