A CRITICAL ANALYSIS OF THE LEGAL PROVISIONS FOR RESPONDING TO ENVIRONMENTAL EMERGENCY INCIDENTS IN SOUTH AFRICA, WITH PARTICULAR EMPHASIS ON THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA) EMERGENCY PROVISIONS.

SUPERVISOR: PROF. JOHN GIBSON

Research dissertation presented for the approval of Senate in fulfilment of part of the degree of Masters of Laws in approved courses and a minor dissertation. The other part of the requirement for this qualification was the completion of a programme of courses.

I hereby declare that I have read the regulations governing the submission of the degree of Master of Laws dissertations, including those relating to the length and plagiarism, as contained in the rules of the University, and that this dissertation conforms to those regulations.

24th June 2005
ACKNOWLEDGEMENTS

A number of people encouraged and strengthened me in various ways as I struggled to write this thesis. Some of these people deserve special mention.

In the first place, I would like to thank my supervisor, Professor John Gibson, for his most precise and considered comments on my drafts; his clear guidance and for making himself readily available for consultation.

Many thanks go to my husband, Bwalya Stanley Kasonde Chiti, for trusting and believing in me and letting me undertake the LLM course; and for all the financial and material support rendered to me; my son Makumba, for being so understanding and bearing with all my frustrations; my daughter Chikwanda, for all the reassurances, encouragement and for helping to lift my spirits when I was feeling low and under.

I would also like to thank some ‘Bishops moms’ particularly, Carrie Wooley, Lee- Anne Hyslop, Irene Irvin, Joana Bell and Nella Freund, each of whom in their own special way, helped me to cope with the mammoth task of being a mother as well as a student. I feel deeply indebted to them all in this regard.

Above all, I would like to thank the lord almighty for making it possible for me to not only to go through the LLM course, but also to write this thesis.
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INTRODUCTION

In this age of technological advancement, large scale industrialisation and increased global trade, we very often hear of oil refineries having burst into flames; some hazardous substance having been accidentally spilt on land or into a water resource in the course of its transportation; a ship having run aground or having collided with another causing massive pollution of the sea; and so on. In South Africa too, it is quite usual to read reports in the media about such chemical spills and fires.

In the not so distant past, when any of these incidents occurred, the question that would immediately come to the minds of legislators, administrators, and indeed the general public, was whether there had been any human casualties in terms of injury or death; or indeed damage to, or loss of property. Insurance companies would be concerned about the possible settlement of claims that might arise therefrom, whilst salvage companies would be considering salvage operations (in relation to those accidents occurring on the sea.) Consideration of any damage caused, or the long-term effects of such incidents to the environment, was far-fetched and if at all considered, this would not be a matter of priority. In other words, the major concern was for human life and property.

With the growing global realisation that there is a need to protect the environment in order to ensure the continued survival of the human race, there is now added to the list of the above concerns: the mitigation of damage caused to the environment, how to protect it from further damage, the undertaking of remediation/clean-up procedures. There are also issues concerning liability and compensation for environmental damage and other related matters, which must be addressed. Indeed, environmental considerations are now “set to take centre-stage both globally and locally in the new millennium.”

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1Jan Glazewski Environmental law in South Africa LexisNexis Butterworths Durban 2000 Pg v.
In South Africa, protection of the environment has begun to receive much attention. “Environmental rights have been lifted to the status of fundamental constitutional and human rights”\(^2\) and this is evidenced by the inclusion of an environmental clause in the Bill of Rights chapter of the Constitution, which in addition to creating a legally enforceable environmental right also prompts the passing of environmental laws.\(^3\)

Whilst the importance of protecting the environment has been acknowledged and accepted globally, there is need to balance this against other equally important developmental needs. In the report of the World Commission on the Environment and Development, Gro Harlem Brundtland\(^4\) stated that “the environment is where we all live and development is what we do in attempting to improve our lot within that abode.” Although reconciling the two positions is not always easy, “we need a marriage between ecology and economy, however difficult such marriage be.”\(^5\) These statements basically allude to the concept of sustainable development.

Development is synonymous with industrialisation, a process that is inherent with potential industrial hazards. It is therefore important to have legal provisions, not only for the protection of the environment, but also for responding to the inevitable emergency incidents.

In South Africa, legislation for the protection of the environment is contained in various Statutes and Regulations and can be broadly classified under three interrelated categories, that is to say: land use management, resource conservation and waste management and pollution control. There are also provisions for responding to environmental emergency incidents, which are to be found in some of this legislation.

The aim of this thesis is to examine the legislative provisions relating to emergency incidents in South Africa and to determine whether they provide an adequate and effective national response mechanism for dealing with such incidents, as well as legal and other related issues, which arise as a consequence thereof, such as liability for damage to the environment and property; injury to persons; and compensation.

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\(^2\) Terry Winstanley “Entrenching environmental protection in the new Constitution” (1995) 1 SAJELP Pg 5
\(^3\) Section 24 of the Constitution.
\(^4\) Chairman of the World Commission on Environment and Development.
For the avoidance of doubt, the emergencies covered are not those that envisaged by the Disaster Management Act No 57 of 2002. Other occurrences dealt with in terms of the State of Emergency Act No 64 of 1997 are also not covered by this thesis.

The National Environmental Management Act (NEMA) has the most “extensive provisions for the control of emergency incidents.” It will therefore be the main focus of the analysis.

The thesis covers five chapters, as follows:

Chapter I aims to put the subject matter of the thesis into context and proceeds with an introduction of environmental emergency incidents in terms of their nature, their causes, the environment in which they occur etc. A brief definition of the environment is also given. The legal framework governing the environment in South Africa is provided, in which both the statutory position and the relevant common law principles are considered by way of a general overview. The overview also highlights the interface between the interpretation of the common law principles and their application in the context of the environment.

Chapter II provides a synopsis of the legislation dealing with environmental emergencies and sets out the general content of the respective emergency provisions. The first two chapters of the thesis therefore lay the foundation and set the scene for chapters III and IV.

Chapters III and IV undertake the critical analysis of the emergency provisions of the relevant legislation, in line with the above stated purpose of the thesis.

Chapter V makes some conclusions and recommendations.

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Op cit. fn 1 Pg 683.
CHAPTER I

1. Environmental emergency incidents

Whilst the importance of protecting the environment has been acknowledged and accepted, there is need to balance this against other equally important developmental needs. The process of development is synonymous with industrialisation, technological advancement, and international trade. Inherent in this process, are potential industrial hazards and therefore, environmental accidents or emergencies are inevitable. With this state of affairs, it is important not only to have legal provisions for the protection of the environment, but also to make specific provision for responding to such emergency incidents.

1.1 The environment

Before entering into a discussion of environmental emergency incidents, it is an essential starting point, to briefly consider the definition of the term ‘environment,’ in order to put the subject matter into context. “There is at present no universally accepted concept of environment”.7 The term is widely used but each profession tends to assign different meanings to it depending on the circumstances.8 “In every day usage, it has thus become common to speak of a natural environment, a built environment, a social or cultural environment, and even an economic environment.... when applied to man, the single term relates to the totality of objects and their interrelationship which surrounds and routinely influences the lives of men.”9 Existing legislation and international conventions all have different definitions of ‘environment’.

In South Africa, the position is not any different. Current legislation defines this term in varied ways. The National Environmental Management Act No 107 of 1998 (NEMA) for example, defines ‘environment’ as:

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8 R F Fuggle, M A Rabie (Eds) Environmental Concerns In South Africa: Technical and Legal perspectives Juta and Co Ltd 1983 at Pg 1.
9 Ibid. Pg 2.
“…. the surroundings within which humans exist and that are made up of:

(i) the land, water and atmosphere of the earth;
(ii) micro-organisms, plant and animal life;
(iii) any part or combination of (i) and (ii) and the interrelationships among
and between them; and
(iv) the physical, chemical and aesthetic and cultural properties and conditions
of the foregoing that influence human health and well being”

The Environment Conservation Act No 73 of 1989 (ECA) on the other hand, has a different definition. In this Act, ‘environment’ means:

“…the aggregate of surrounding objects, conditions and influences that influence
the life and habits of man or any other organism or collection of organisms.”

As there is no one universally accepted definition of ‘environment’, the definition provided by NEMA is adopted and this is the context in which environmental emergency incidents are discussed in this thesis.

1.2 Causes and types of environmental emergency incidents

Environmental emergency incidents can be caused by activities of the earth, which give rise to natural disasters such as floods, earthquakes, and other similar catastrophes. They can also be the result of certain human activity arising from industrial processes.

This thesis is concerned with the latter, (industry-related environmental incidents which occur in the course of transportation, storage or the handling certain hazardous and noxious substances, and from emissions, spills, etc.) These incidents can cause damage to the environment per se, that is say: damage to “common goods of nature (res communis omnium: soil, ground water, habitats, species of flora and fauna, aesthetic and natural values, etc.)”

10 Section 1 (xi) NEMA.
11 Section 1 ECA.
They can also lead to loss of life, impairment of health, personal injury and damage to, or loss of property. The overall result of environmental emergency incidents is inevitably, pollution of one form or the other.

Pollution is an environmental problem, which traverses all the three environmental media (land, air and water) and is defined as:

“ …any change in the environment caused by-
(i) substances;
(ii) radioactive or other wastes; or
(iii) noise, odours, dust or heat,
emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by a person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future.” 13

Examples of industry-related environmental emergency incidents are numerous and have been recorded worldwide. They include:

The Torrey Canyon incident, which occurred in 1967 off the West coast of England, and resulted in the spillage of massive amounts of crude oil, causing substantial damage to the British and the French coasts. This was the first incident to alert the international community to the risk of marine pollution from the transportation of oil in large tankers.14

The Amoco Cadiz, which sank off the French coast in 1978, spilling more than 220,000 tonnes of crude oil into the sea and badly polluting almost 180 miles of coastline of one of the country’s most important tourist and fishing regions.15 Similarly, the Exxon Valdez went aground in 1989 and spilt over 11 million gallons of crude oil into the sea, polluting the pristine area surrounding Alaska’s Prince William Sound.16

13 Section 1 (xxiv) NEMA.
15 Op Cit. fn 12 Pg 30.
16 Ibid.
In 1986, one of the Chernobyl nuclear reactors exploded in the Ukraine, resulting in extensive contamination of soils and waterways and severe damage to human immunities and the genetic structure of human cells.\textsuperscript{17}

“South Africa may not have undergone the intensive and extensive industrialisation that has characterised much of Europe and North America,”\textsuperscript{18} but it has not been spared from environmental incidents and has had its own share of these occurrences:

In 1983, a Spanish super tanker, the Castillo del Bellver, ran aground approximately 14 nautical miles off the Saldanha Bay, breaking in half and spilling 175,000 tons of crude oil, which subsequently ignited. Although the shoreline was miraculously not polluted, owing to some strong offshore winds, the oily soot rising from the burning on the sea and the vessel, (before it sank,) was blown high into the air and finally settled on to crops and buildings.\textsuperscript{19}

Still in South Africa, a large quantity of black liquid containing soapy skimming was spilled at the Ngodwana paper mill in Mpumalanga, in 1989. Having found its way into the Elanda and Crocodile rivers, the substance caused significant damage to the riverina biota, killed vast masses of fish and contaminated water used for irrigation by the farmers in the area, as well as the Kruger National Park ecosystem.\textsuperscript{20}

A lot of the incidents involving personal injury are the kind where consequences become apparent only after a long time, particularly injury caused by radiation.\textsuperscript{21} In the Chernobyl incident for example, some thousands of people, including children who were exposed to radioactive iodine-131 began to develop thyroid cancers after four years.\textsuperscript{22}

The above incidents only go to show how the world has rapidly changed through the creation of industrial hazards.\textsuperscript{23}

\textsuperscript{17} Adriana Petryna \textit{Life Exposed- Biological citizens after Chernobyl} Princeton University Press 2002 Pg 1.
\textsuperscript{18} Friedrich Soltau “The National Environmental Management Act And Liability for Environmental Damage” in Focus On NEMA 1999 SAJELP Pg 34.
\textsuperscript{19} Op cit. fn 1 Pg 786 (Quoting from Hare Shipping Law and Admiralty Jurisdiction in South Africa 1999).
\textsuperscript{20} Ibid. Pg 760.
\textsuperscript{21} Op cit. fn 12 Pg 30.
\textsuperscript{22}Op cit. fn 17 Pg 2.
Therefore, the need for adequate legal provisions to protect the environment and to appropriately respond to emergency incidents arising from industrial activities and processes, both at the national and international levels, cannot be overemphasised.

1.3 The South African legal framework for the environment

A discussion of the emergency provisions necessitates the examination of the context in which they operate. The legal framework governing the environment in South Africa is accordingly given below. The statutory position and the relevant common law principles are considered together with international law, by way of a general overview.

1.3.1 Statute Law

In South Africa, environmental legislation is contained in various statutes, provincial ordinances, local bye-laws and ministerial regulations.24 In terms of hierarchy, the Constitution, which is the highest law of the land, is at the very top. The Constitution incorporates within its Bill of Rights, an environmental right, which requires the passing of appropriate environmental legislation for the protection of the environment.25 It also provides a basis for the administration of environmental laws.

Falling immediately below the Constitution is what is referred to as framework legislation, which is of general application and embraces all three fields of environmental concern, that is to say: land use planning, resource conservation, and pollution control and waste management.26 Framework legislation comprises: the NEMA, the ECA, the Promotion of Access to Information Act No 2 of 2000 (PAIA) and the Promotion of Administrative Justice Act No 3 of 2000 (PAJA).

Below the framework legislation, is sectoral legislation relating to specific resources. This is grouped together and classified under land use planning, conservation of natural resources and waste management and pollution control.

24 Op cit. fn 8 Pg 35.
25 Section 24 of the Constitution.
26 Op cit. fn 1 Pg 166.
The land use legislation deals with planning and development, environmental impact assessment, and protected areas; resource conservation legislation relates to natural resources i.e. water, marine living resources, minerals, heritage, biodiversity and agricultural resources; whilst the waste management and pollution control legislation is for the control of fresh water, marine, land and air pollution. The subject of environmental emergency incidents would fit neatly into the last category of environmental legislation.

The classification into land use, resource conservation and waste management and pollution control “is one of convenience and of emphasis, rather than one of underlying principle…in actual fact, these aspects do not constitute watertight components.”  

South African environmental legislation is also strongly influenced by international law, which has not only been acknowledged, but has been formalised in the Constitution.

Figure I is given in the Appendix to this thesis, by way of illustrating and summing up the South African legal framework governing the environment.

It must be pointed out that a number of the earlier statutes, ordinances and bye-laws, particularly in relation to pollution control, were not designed for the protection or conservation of the environment, but for “the abatement of specific nuisances, mainly in favour of adjoining land owners and for the protection of public health.” Similarly, land use planning was done mainly in relation to urban and regional planning at the provincial and local levels, without regard to any ecological considerations.

The conservation of natural resources legislation on the other hand, did have an environmental concept as it was specifically aimed at conserving natural resources. It should therefore not be surprising to find that the various statutes, provincial ordinances and bye-laws do not make specific reference to the environment, although they may have environmental implications and are therefore considered to be environmental laws.

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27 Andre Rabie *South African Environmental Legislation* The Institute Of Foreign And Comparative Law University Of South Africa Vol 1 Pg 2.
28 Sections 231-233 of the Constitution.
29 Op cit. fn 8 Pg 33.
30 Ibid. Pg 34.
31 Ibid. Pg 33.
1.3.2 Common law principles

It is widely accepted that the field of environmental law does not operate in isolation from other laws. “Legal provisions relating to the environment are encountered in many conventional fields of law, such as administrative law, tax law, the law of delict and jurisprudence.”\(^{32}\) This is also the case in South Africa, where for instance, common law principles such as *sic utere tuo ut alienum non laedas* (use your property in a way which does not harm another), which forms the basis of current day neighbour law and the law of nuisance, underlie contemporary South African law, regulating waste management and pollution control.\(^{33}\) The law of delict is particularly pertinent to this subject.\(^{34}\)

(i) The law of delict

The law of delict is founded upon aquilian action and *actio injuriarum*, with the former being the remedy for wrongs committed to interests of substance, whilst the latter is a remedy for wrongs to interests of personality.\(^{35}\) A delict has been defined by one of the many writers on the subject as “a civil wrong…an infringement of another’s interests that is wrongful irrespective of any prior contractual undertaking to refrain from it – though there may also be one.”\(^{36}\) Accordingly, a defendant is liable for damage wrongfully caused by an intentional or negligent act to the person or property of another.\(^{37}\)

Relating the foregoing to the environment, and seen particularly in the context of pollution control: a prima facie case in delict is founded upon the emission of a pollutant by a neighbouring industrial concern, which causes physical harm to person or property, against the person responsible for generating the pollutant concerned, subject to satisfying the court that the essential elements of a delict have been established,\(^{38}\) that is to say: that a wrongful act or omission, fault, harm, causation, and patrimonial loss are present.\(^{39}\)

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\(^{32}\) Ibid. Pg 32.

\(^{33}\) Op cit. fn 1 Pg 12.

\(^{34}\) Ibid. Pg 764.


\(^{36}\) P Q R Boberg *The Law Of Delict Vol 1 Aquilian Liability* Juta & Company 1984 Pg 15.

\(^{37}\) Op cit. fn 1 Pg 632.

\(^{38}\) Ibid. Pg 635.

\(^{39}\) Op cit. fn 36 Pg 24 – 25.
In the context of an environmental emergency incident, a prima facie case should be similarly founded against any person responsible for an accidental emission which results in harm to other persons or their property or indeed, to the environment.

However, the law of delict is limited in several ways as a tool for recovering environmental damages in that while these elements of the aquilian action are trite law, establishing them for purposes of recovering damages for harm to the environment or indeed to persons is, as will become apparent in the following discussion, riddled with problems. These elements are now discussed in turn:

**Act or omission**

The act or omission complained of must have caused harm to another or his property; and must have been wrongful, either on account of being perceived as wrong by the community, or is wrongful in the eyes of the law, in the sense that it involves the invasion of a right or the violation of a legally protected interest pertaining to the plaintiff. The wrongfulness of an act is also in relation to a violation of the duty of care imposed by law. “The duty to take care is the duty to avoid doing or omitting to do anything, the doing or omitting to do, which may have as its probable consequence injury to others, and the duty is owed to those to whom injury may reasonably and probably be anticipated if the duty is not observed.”

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\(^{40}\)Op cit. fn 18 Pg 36.  
\(^{41}\)Op cit. fn 1 Pg 636.  
\(^{42}\)Op cit. fn 35 Pg 13.  
\(^{43}\)Ibid. Pg 26.
**Fault**

“It is not sufficient that the defendant has infringed the plaintiff’s right: the law must also be prepared to hold him accountable for it.”  
Therefore, “fault, which may consist in either intention or negligence” must be present. In other words, for one to establish liability, it is essential for them to prove the existence of fault. However, this element does not apply where strict liability is imposed for example, by statute, or where it arises under common law.

Fault may be defined as “that element of a delict which induces the law to impute a man’s wrongful conduct to him in the sense of holding him legally responsible for it, and... it is constituted either by intention (dolus) or by negligence (culpa).” In relation to pollution control, one would have to ask the question whether or not a particular defendant was acting negligently when he/she released or discharged a particular pollutant into the air, land, or waste for purposes of imputing fault. This is particularly relevant since polluters will normally not cause damage intentionally. The term negligence denotes the absence of due care, that is to say: wrongful and careless conduct, whilst dolus means an intentional and wrongful infliction of harm.

**Harm**

An action in delict will usually consist of a claim for compensation for the harm to person or property suffered as a result of the defendant’s wrongful and negligent act. The term ‘harm’ is used “in an extended sense to denote not merely material damage, that is, pecuniary loss, but also moral or sentimental damage and, in an action for personal injuries, pain and suffering.”

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44 Op cit. fn 36 Pg 268.
46 Op cit. fn 1 Pg 642.
47 Op cit. fn 36 Pg 268.
48 Op cit. fn 1 Pg 640 – 641.
50 Op cit. fn 35 Pg 13.
51 Ibid. Pg 2.
The whole purpose of awarding damages is to put the plaintiff as far as money possibly can, in the position he would have been if the delict had not been committed. Related to the need to show the harm suffered is the issue of quantifying the harm suffered in monetary terms. However, this can be very difficult to address, particularly in relation to damage suffered by the environment. “On a practical level it is difficult to measure the economic value of the environment.”

**Patrimonial loss**

In order for a claim for damages to succeed in delict, harm must have been suffered in quantifiable monetary terms, (which is also known as patrimonial loss), as a result of the defendant’s wrongful and negligent act. In the environmental context therefore, the plaintiff must be able to show that there has been an infringement of a patrimonial interest in the environment and its conservation.

Patrimonial loss is pecuniary or monetary loss associated with property rights; that is to say, loss suffered by one’s estate or patrimony, as a result of the defendant’s unlawful and negligent act. This must be distinguished from harm suffered in relation to personality rights such as mental distress, annoyance or injured feelings, inconvenience, etc., which are referred to as non-patrimonial loss and are claimable under *actio injuria*. Further distinctions are made between damage, which has already occurred and that which is anticipated; damage to property and pure economic loss; and between direct and consequential loss.

Although generally, damages are awarded only in cases where there is patrimonial loss, they may also be awarded for pain and suffering and other non-patrimonial loss, under a separate

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52 Op cit. fn 36 Pg 478.
53 Op cit. fn 18 Pg 37.
54 Op cit. fn 1 Pg 643.
55 Op cit. fn 18 Pg 36.
56 Op cit. fn 1 Pg 643.
57 Ibid. Pg 644.
action. The term ‘damage’ refers to the loss suffered by the plaintiff, while ‘damages’ refers to monetary compensation that the court awards him in respect of it.

**Causation**

Causation is the element of delictual liability, which requires that there must be a causal link between the act or omission of the defendant and the harm occasioned to the plaintiff. In other words, the defendant’s act or omission must have caused the harm. Causation must be present both in fact (*conditio sine qua non*) and in law (legal causation.) This is because “the defendant is not liable unless his conduct in fact caused the plaintiff’s harm; and the defendant is not liable merely because his conduct in fact caused the plaintiff harm - such liability would be too wide.” Legal causation is an open-ended enquiry for determining whether the relationship between the conduct in question and the consequence can be sufficiently attributed to the wrongdoer.

In the environmental context of pollution control, the issue of causation arises in cases where the plaintiff is trying to establish a causal link between the defendant’s act and the state of his ill health; for example, that a particular production process which had been undertaken in the past by the defendant has led to the illness of the plaintiff. However, “one of the most onerous procedural hurdles for a plaintiff to overcome in any civil liability regime is to prove, to the requisite standard, that the defendant is responsible for the acts or omissions that have given rise to harm.”

One such difficulty in proving causation is encountered where more than one wrongdoer may have contributed to harming the environment, in which case it becomes difficult to establish whether, and to what extent a particular wrongdoer caused the harm. It is also conceivable that where there is an existence of a chain of events, it makes it difficult to prove the link between an act and the consequence.

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58 Op cit. fn 36 Pg 475.
59 Ibid.
60 Op cit. fn 1 Pg 635.
61 Op cit. fn 36 Pg 380.
62 Op cit. fn 18 Pg 39.
64 Op cit. fn 18 Pg 39.
(ii) The law of nuisance

The law of nuisance is basically an import of English law, which infiltrated South African law at certain times of its history, “although the extent of its reception and interaction with the local Roman Dutch Law system is somewhat controversial.”\(^{65}\)

Most writers on this subject have indicated that the term ‘nuisance’ is difficult to define. It has sometimes been defined by reference to certain actions where for instance, “the defendant causes noise, emits noxious fumes, or scatters dust in the environs of the plaintiff’s land which in some material way, makes it unliveable on, i.e. constantly filthy, impossible for sleep, conversation, or breathing, and so on.”\(^{66}\) Flowing from this definition, one can discern the meaning of nuisance simply as an act, which interferes with, or violates a landowner’s legal right to use and enjoy his land conveniently and comfortably.

The above conduct (of creating nuisance) is relevant to pollution control in the sense that it does not only affect the plaintiff’s property rights, but it also has a negative impact on the quality of the environment and human health.

(iii) Neighbour law

South African neighbour law is founded upon the principle that one should not use his property in a way that will harm another - (\textit{sic utere tuo ut alienum non laedas}). This effectively means that property rights are not absolute, and must be exercised within the prescribed legal limits, whilst keeping the interests and well being of others in mind. It has a strong English influence of nuisance law, which when seen in the context of the environment,

\(^{65}\) Op cit. fn 36 Pg 650 and fn 1Pg 650.
\(^{66}\) J E Penner “Nuisance the morality of Neighbourliness and Environmental Protection” \textbf{Op cit. fn 63 Pg 29} in John Lowry and Rod Edmunds (Eds) \textit{Environmental Protection and the Common Law} Hart Publishing 2000 Pg 29.
makes it possible for a single pollution incident to give rise to an action in delict, involving both nuisance and neighbour law.  

1.3.3 International law

“International law is traditionally stated to comprise the body of rules which are legally binding on States in their intercourse with each other.”  

“Although the rules of public international law primarily govern relations between states, it is now widely accepted that states are no longer the only subjects of international law, and that rules of international law can, and do, impose obligations upon other members of the international community, in particular international organisations and, to a more limited extent, non-state actors, including individuals and corporations.”

The sources of international law are generally considered to be defined in Article 38 of the Statute of the international Court of Justice (ICJ). “Though this Article was drafted before the rapid growth in the number and diversity of states or the emergence of environmental consciousness, it lays down the generally accepted sources of international law to be applied by the ICJ, namely, international conventions (treaties), whether general or particular; international custom; general principles of law; and, as secondary sources, judicial decisions and the teachings of the most highly qualified publicists.”

The above sources also referred to as ‘hard law’, are the ones that the ICJ would look to, for purposes of determining the existence of a legally binding principle or rule of international environmental law and they have the effect of creating legally binding obligations.

Other than the ‘hard law’, there are rules of ‘soft law’ which are non-binding in nature, but have played an important role in the field of international environmental law, particularly in

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67 Op cit. fn 1 Pg 652.
69 Ibid. Pg 124.
71 Op cit. fn 68 Pg 123.
terms of their potential for becoming formally binding obligations in future, their ability to establish acceptable norms of behaviour and to reflect rules of customary law.\textsuperscript{72}

International law is said to address environmental issues at several levels and issues that have transboundary effects such as air or water pollution, or conservation of migratory animals, are the earliest examples that illustrate the manner in which international law has been used to regulate environmental concerns globally. International law has also increasingly begun to address national or domestic environmental problems, through international human rights law, conservation of biological diversity, protection of natural heritage areas, or the promotion of sustainable development.\textsuperscript{73}

In the environmental perspective, the sources of international law are the same as those from which all international law emanates, in view of the fact that international environmental law is considered to be a branch of general international law.\textsuperscript{74}

Among the sources of international law, treaties, which are also known as conventions, protocols and agreements, have become the most frequently used method of creating binding international rules in relation to the environment.\textsuperscript{75} Although they may have certain special features, environmental treaties are essentially the same, in character and in terms of the rules that govern them, as other treaties.\textsuperscript{76}

What is the role of international law in protecting the environment? This is essentially the same as domestic environmental law, and can be summarised as follows:\textsuperscript{77}

\begin{itemize}
  \item [(i)] It provides mechanisms and procedures for negotiating rules and standards for settling disputes, supervising, implementing and ensuring compliance with treaties and customary rules. In so doing, it facilitates and promotes co-operation between states, international organisations and non-governmental organisations. To a limited extent, it also provides international trusteeship;
\end{itemize}

\textsuperscript{72}Ibid. Pg 124.
\textsuperscript{73}Op cit. fn 70 Pg 6
\textsuperscript{74}Ibid. Pg 11.
\textsuperscript{75}Ibid. Pg 13.
\textsuperscript{76}Op cit. fn 68 Pg 128.
\textsuperscript{77}Op cit. fn 70 Pg 7 – 8.
(ii) It regulates environmental problems by setting common international standards and objectives for preventing or mitigating harm, and providing a rule-making process with a flexible mechanism for amendment in the light of technological, scientific and other knowledge;

(iii) It has the effect of harmonising national laws, globally or regionally. Examples of such harmonisation include treaties on civil liability for nuclear accidents and oil pollution damage at sea. It envisages that to a large extent, national law will replicate the provisions of these treaties, with the result that it will essentially be the same in each state party. It is noteworthy in this regard, that South Africa has replicated the provisions of the 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties and the 1973 Protocol Relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil, in its Marine Pollution (Intervention Convention) Act No 64 of 1987 as Schedules 1and 2 respectively.

Thus, international law does not only influence global trends in the protection of the environment, but it has also driven the development of national environmental laws including those of South Africa.
CHAPTER II

Having set out the legal framework within which South African environmental law operates, in the preceding discussion, chapter II will identify specific legislation that deals with emergency incidents, and give an overview of the respective emergency provisions, before proceeding to undertake a critical analysis thereof in chapters III and IV.

2. Legislation dealing with environmental emergency incidents

As pointed out in chapter I above, most of the older statutes were not tailored specifically for the protection of the environment. Therefore, they do not have provisions for responding to environmental emergencies *per se*.

The main emergency provisions are in part 2 of chapter 7 of the NEMA. There are also similar provisions in part 5 of chapter 3 of the National Water Act No 36 of 1998, which specifically deal with fresh water pollution in the event of an emergency incident.

In addition, there are provisions for emergency incidents relating to the marine environment. These should be seen in the context of international law, which as stated in chapter I above, has had tremendous influence on the domestic law. The Marine Pollution (Intervention Convention) Act No 64 of 1987 gives effect to the International Convention Relating to Intervention on the High Seas in cases of Oil Pollution Casualties, 1969 (the Intervention Convention) and its Protocol of 1973, by providing that the two instruments shall have the force of law in the Republic. 78

The background to the above statutes and conventions, together with an overview of their respective emergency provisions is now given below.

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78 Section 2 Marine Pollution (Intervention Act).
2.1 The National Environmental Management Act (NEMA)

The NEMA was passed in November 1998 and came into force a few months later, in January 1999. This Act has its foundations in “the White paper on an Environmental Management Policy for South Africa, which was the outcome of an extensive public participation process known as the Consultative National Environmental Policy (CONNEP).”

The NEMA is the cornerstone of environmental management and “is regarded as a landmark statute in environmental affairs in South Africa.” “It is also the first ‘umbrella’ national legislation which endeavours to establish an integrated environmental management framework.” Thus, it is a framework Act embracing “all the three fields of environmental concern…. namely, resource conservation and exploitation; pollution control and waste management; and land-use planning and development.”

In addition to providing a general framework of environmental law in South Africa, the NEMA “fulfils the duty incumbent on the state in terms of Section 24(b) of the Constitution to protect the environment through ‘reasonable legislative measures.”

The objectives of the NEMA are many and can be extracted from its rather elaborate preamble. However, the main objective of this Act is:

“…to provide for co-operative governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state; and to provide for matters connected therewith.”

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79 Op cit. fn 1 Pg 162.
80 Elmene Bray “Co-operative governance in the context of the National Environmental Management Act 107 of 1998” SAJELP Vol. 6 No 1 1999 Pg 1.
81 Ibid.
82 Op cit. fn 1 Pg 166.
83 Op cit. fn 18 Pg 33.
84 See the preliminary section of the NEMA.
As Milton aptly puts it, the NEMA is an “…innovative measure, aimed at enhancing the management of the environment in South Africa.”

The NEMA is founded upon “a bed-rock of national environmental management principles based on the global ideal of sustainable development,” which brings it in line with the United Nations Conference on Environment and Development (Rio Declaration of 1992.) There are altogether eighteen such principles, which include the precautionary principle; the polluter pays principle; the preventive principle; the public trust doctrine; etc.

The environmental management principles “apply throughout the Republic to the actions of all organs of state that may significantly affect the environment and shall apply alongside all other appropriate and relevant considerations.” They serve as the general framework for environmental management; as guidelines for organs of state in the exercise of their functions and decision-making; as a reference point in the making of recommendations in conciliation proceedings; and as a guide for the interpretation, administration and implementation of the NEMA.

In terms of administration, the NEMA falls under the Department of Environmental Affairs and Tourism and it is considered to be the flagship statute of that Department.

All in all and within its ten chapters, the NEMA provides for environmental management principles; the creation of institutions to give effect to these principles; procedures for cooperative governance; decision-making and conflict resolution; and international obligations and agreements. It also provides for compliance and enforcement (which is divided into two parts: the first deals with environmental hazards; and the second, with information, enforcement and compliance). The Act provides further for environmental management cooperation agreements; its administration; and finally, it provides for general and transitional provisions.

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85 John Milton “Sharpening The Dog’s Teeth: Of NEMA And Criminal Proceedings” SAJELP Vol. 6 No1 1999 Pg 53.
86 Op cit. fn 1 Pg 167.
87 Ed Couzens “NEMA-A Step To Coherence?” SAJELP Vol. 6 No 1 1999 Pg 14.
88 Section 2(1) (a).
89 Section 2(1) (b)-(e).
2.1.1 An overview of the NEMA emergency provisions

The emergency provisions in the NEMA are set out in chapter 7 under section 30 entitled, ‘control of emergency incidents’.

In terms of Section 30 (1), an ‘incident’ is defined:

“…an unexpected sudden occurrence, including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed.”

Section 30 imposes obligations on the responsible person, or his/her employer where the incident occurred in the course of that person’s employment, in terms of the measures that must be taken following upon the occurrence of an incident. These include reporting the incident forthwith after the knowledge of the same and providing the specified details to the Director-General of Environmental Affairs and Tourism; the South African Police Services and the relevant fire prevention service; the relevant provincial head of department or municipality; and persons whose health might be affected by the incident.

Section 30 (1) (b) defines the ‘responsible person’ to include

“any person who-
(i) who is responsible for the incident;
(ii) owns any hazardous substance involved in the incident;
(iii) or was in control of any hazardous substance involved in the incident at the time of the incident.”

The responsible person, or his/her employer, in the event of the incident occurring in the course of employment, must take measures to minimise the effects of the incident on the environment, human health and property. Clean-up procedures must be undertaken and an

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90 Section 30 (1) (a).
91 Section 30 (3) (a) – (d) (i ) (iii).
assessment of the immediate and long-term effects of the incident on the environment and public health must be made. These measures must be undertaken “as soon as reasonably practical after the knowledge of the incident.”

In addition, the responsible person, or where the incident occurred in the course of his/her employment must, within 14 days, report the occurrence of the incident, giving details relating its nature; the type and quantity of substance involved; the possible effect on persons and the environment; as well as the data required for assessing the effects.

The initial measures taken in order to minimise the impacts must be stated along with details of the cause of the incident and the measures for preventing a recurrence thereof.

The relevant authority also has its share of obligations. In particular, it must prepare comprehensive reports on an incident in respect of which it has taken specified measures and avail them to the public, the Director-General of Environmental Affairs and Tourism, the South African Police Service, the relevant provincial head of department and all persons who may be affected by the incident.

The relevant authority means:

(i) “a municipality with jurisdiction over the area in which an incident occurs;
(ii) a provincial head of department or any MEC in a province in which the incident occurs;
(iii) the Director-General;
(iv) any other Director-General of a national department.”

Other than the obligation imposed on the relevant authority, it has right to take certain steps, such as directing the responsible person to undertake specific measures to fulfil his/her stated obligations, within a prescribed period. The manner in which the relevant authority may take any steps that it is authorised to take is specified in section 30 (2) (a)-(c).

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92 Section 30 (4) (a) – (d).
93 Section 30 (5) (a)-(c).
94 Section 30 (10) (a)-(e).
95 Member of the Executive Council to whom the Premier has assigned the performance of in the province of functions entrusted to a MEC by or under such a provision (as defined in section 1 of the NEMA).
96 Section 30 (1) (c).
97 Section 30 (6).
The directives must be given with due regard to certain matters such as the principles set out in section 2 of the NEMA (and referred to in chapter 1 above); the severity of any impact on the environment and the costs of the measures under consideration; as well as measures already taken or proposed to be taken.\textsuperscript{98} Also to be taken into account, is the question whether it would be desirable for the State to fulfil its role as the custodian holding the environment in public trust for the people; and any other relevant factors.\textsuperscript{99} In accordance with section 30 (7), verbal directives must be confirmed in writing by the relevant authority, at its earliest opportunity, within a period of seven days.

In the event that the responsible person fails to comply, or inadequately complies with the directive; or in a case where there is uncertainty as to the identification of the responsible person; or where an immediate risk of danger is posed to the public or indeed where there is some potentially serious detriment to the environment; the relevant authority has power to take appropriate measures for minimising or remedying the effects of the incident, or to undertake clean-up procedures."\textsuperscript{100} In this regard, the relevant authority is entitled to claim reimbursement for all reasonable costs incurred relation to these measures, from every responsible person, jointly and severally.\textsuperscript{101}

2.2 The National Water Act 36 of 1998 (the NWA)

Prior to the enactment of the current water legislation, there were hundreds of Acts in the water statute book, which had developed during the colonial era and had eventually been consolidated into the Water Act of 1956.\textsuperscript{102} The NWA was passed in August 1998, repealing the Water Act of 1956, and some one hundred or so other Acts, except the Water Services Act 108 of 1997, which must now be read together with the NWA.\textsuperscript{103}

The passing of the NWA was preceded by a public participation process, which was initiated by the Department of Water Affairs and Forestry, and culminated into the formulation of the White Paper on a National Water Policy for South Africa, tabling twenty-eight principles and

\textsuperscript{98} Section 30 (6) (a) –(c).
\textsuperscript{99} Section 30 (6) (d) & (e).
\textsuperscript{100} Section 30 (8) (a)-(c) (i)-(iii).
\textsuperscript{101} Section 30 (9).
\textsuperscript{102} Op cit. fn 1 Pg 512.
\textsuperscript{103} Ibid.
objectives, upon which the Water Act of 1998 is founded. These principles are based on sustainability and equity and have been “identified as central guiding principles in the protection, use, development, conservation, management and control of water resources.”

The purpose of the NWA is “to ensure that the nation’s water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors: meeting the basic human needs of present and future generations; promoting equitable access to water; redressing the results of past racial and gender discrimination; promoting the efficient, sustainable and beneficial use of water in the public interest; facilitating social and economic development; providing for growing demand for water use; protecting aquatic and associated ecosystems and their biological diversity; reducing and preventing pollution and degradation of water resources; meeting international obligations; promoting dam safety; managing floods and droughts.”

Although the NWA should be seen firstly in the context of the Constitutional imperative to “heal the divisions of the past…. and to improve the quality of life,” it does “redress these past social imbalances while respecting the constitutional right to property and taking cognisance of the public environmental interest.” The emphasis on environmental considerations in water management is quite strong throughout the NWA and this can be noted from the very first substantive section, which states:

“…. the Minister must ensure that water is allocated equitably and used beneficially in the public interest while promoting environmental values.”

Unlike the NEMA, the NWA is not a framework Act, but it is sectoral in nature, in that it relates to a particular resource- water. The Department of Water Affairs and Forestry administers the NWA.

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104 Ibid. Pg 511.
105 See the preliminary note to chapter I of the NWA.
106 Section 2(a)-(k).
107 Op cit. fn 1 Pg 512.
108 Preamble of the Constitution.
110 The Minister of Water Affairs and Forestry.
111 Section 3(1) of the NWA.
2.2.1 An overview of the NWA emergency provisions

The emergency provisions are covered in part 3 of chapter 5 under section 20 entitled, ‘control of emergency incidents’. These are specifically for dealing with water pollution following upon an emergency incident such as an accident involving the spilling of a harmful substance that ends up, or may find its way into a water resource. The NWA basically builds on the emergency response provisions of its predecessor, the National Water Act 54 of 1956.\footnote{op cit. fn 1 Pg 772.}

Even though they are specifically meant for water pollution, the content of the emergency provisions in the NWA is substantially the same as those found in the NEMA.

In terms of section 20 (1) of the NWA, an “incident” includes:

“any incident or accident in which a substance
(i) pollutes or has the potential to pollute a water resource; or
(ii) has, or is likely to have, a detrimental effect on a water resource”

The “responsible person” includes any person:

(i) who is responsible for the incident;
(ii) owns the substance involved in the incident; or
(iii) was in control of the substance involved in the incident at the time of the incident.”\footnote{Section 20 (2) (a)-(c).}

Following upon the occurrence of an incident, the responsible person; any other person responsible for the incident; or any other person who has knowledge of the incident has an obligation to report the incident to the Department of Water Affairs and Forestry; the South African police service or relevant fire department; or the relevant catchment agency; as soon as it is reasonably practical so to do.\footnote{Section 20 (3) (a)-(c).}
Whereas the obligation of any person who has knowledge of the incident ends at reporting such incident, the responsible person has an additional obligation to take reasonable measures to contain, minimise, and remedy the effects of the incident. Further, the responsible person must undertake clean-up procedures and take any measures that the catchment agency may give verbally, or in writing, within a specified period. Where verbal directives are given, they must be confirmed in writing within 14 days, otherwise they will be deemed to have been withdrawn.

In the event that the responsible person fails to, or does not adequately comply with the directive, or if it is not possible to give the directive timeously, the catchment management agency is authorised to take measures it considers necessary to contain, minimise, and remedy the effects of the incident as well as to clean-up. All reasonable costs (including labour, administration and overhead costs), which are incurred in this respect, may be recovered by the catchment agency from all the responsible persons jointly and severally.

The catchment management agency has an obligation to apportion liability, where more than one person is liable, upon the request of any of those persons and after giving the others an opportunity to be heard. However, such apportionment does not relieve any of the responsible persons of joint and several liability for the full amount of the costs.

2.3 The Marine Pollution (Intervention Convention) Act 64 of 1987

South Africa is a coastal State situated in between two vast oceans - the Atlantic Ocean spanning the west coast, whilst the Indian Ocean traverses the east coast. In the wake of increased international trade and transportation of goods by sea and the movement of huge tankers carrying massive tonnes of oil over long distances on the sea, accidents (emergency incidents) are inevitable. Hence the need for legal provisions for responding to such incidents.

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115 Section 20 (4) (a)-(d).  
116 Section 20 (5).  
117 Section 20 (6) (a) (b) (i) - (iii).  
118 Section 20 (7) & (8).  
119 Section 20 (9).
Marine emergency incidents can be the result of accidental spillage of oil and other hazardous substances arising from collisions at sea, shipwrecks, fires, explosions, etc., all of which can cause extensive pollution of the marine environment.

When a maritime accident occurs on the high seas, the question arises as to whether a State can take measures to prevent or reduce the resulting pollution; in order to protect its coastline and other related interests such as fishing.

Initially, it was not clear whether a coastal State had the power under customary international law, to intervene on the high sea. In the Torrey Canyon incident of 1967, the government of the United Kingdom decided to bomb the vessel to set its cargo of oil on fire, in an effort to reduce pollution from the vessel. However, the Torrey Canyon was a Liberian-registered vessel and the accident had occurred in an area outside the United Kingdom’s territorial sea. The question consequently arose as to whether a coastal State could intervene and take measures to prevent pollution in an area beyond its national jurisdiction.

The government of the United Kingdom referred this question to the International Maritime Organisation (IMO), which eventually led to the preparation and adoption of the International Convention relating to Intervention on the High Seas in cases of Oil Pollution Casualties, 1969 (The Intervention Convention). This convention was adopted on the 28th of November 1969 and entered into force on the 6th of May 1975.

South Africa has ratified both the Intervention Convention and the subsequent 1973 Protocol, and has given effect to these instruments in the Marine Pollution (Intervention Convention) Act 64 of 1987. The purpose of this Act to provide for the application in the Republic of the 1969 Intervention Convention, which it does by a single sentence in section 2(1) declaring:

“the Convention shall, subject to the provisions of this Act, apply to the Republic.”

120 Op cit. fn 14 Pg 355.
121 Referred to in chapter I.
122 Op cit. fn 68 Pg 448 and fn 14 Pg 353- 354.
123 The IMO is the United Nations Agency responsible for global shipping issues, including marine pollution.
The Intervention Convention and the 1973 Protocol are reproduced as Schedules 1 and 2 of the Marine Pollution (Intervention Convention) Act.

Under section 3 (1) the Minister of Transport has the power to make regulations to give effect to any provision of the Convention and make it applicable to in the Republic; and to prescribe fees, as well as provide for the recovery of any expenditure incurred in the course of applying the Convention to the Republic. However, by an amendment to section 2 (3) of the Act, the powers and responsibilities for intervention on the high seas that the Convention and the Protocol confer on States, have been delegated to the South African Maritime Safety Authority.

2.3.1 Emergency provisions in the Intervention Convention

In terms of Article 1 (1) of the Intervention Convention, coastal States are allowed to:

“…take such measures on the high seas as may be necessary to prevent, mitigate or to eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequences.”

In addition to providing States with the right to intervene, the Convention sets out amongst other things, provisions that shall apply to the exercise of such right; it outlines matters to be taken into account in determining the proportionality of intervention measures and provides for compensation for damage caused by excessive measures and for the settlement of disputes in relation thereto. Dispute resolution is provided for by way of Conciliation and Arbitration.

The Intervention Convention was originally limited to situations involving crude oil, fuel oil, diesel oil and lubricating oil. However, it was extended by a protocol of 1973 to include a large list of bulk oils, noxious substances, liquefied gases and radio active substances, together with any other substances “which are liable to create hazards to human health, to

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124 Articles III, V, VI, VII & VIII.
125 Chapters I & II of the Annex to the Intervention Convention.
harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.”\textsuperscript{126}

In 1982, the International Law of the Sea Convention further widened the powers of intervention by coastal States, in response to the Amoco Cardiz oil spill. Article 221 (1) of the Convention declares:

“Nothing in this part shall prejudice the right of States, pursuant to international law, both customary and conventional, to take and enforce measures beyond the territorial sea proportionate to the actual or threatened damage to protect their coastline or related interests, including fishing, from pollution following upon a maritime casualty or acts relating to such a casualty, which may reasonably be expected to result in major harmful consequences.”

It is therefore no longer necessary for the danger to be ‘grave’ and ‘imminent’ before a coastal State can take intervention measures.

The first and second chapters set out to put the subject matter of the thesis into context and to basically set the scene for its discussion. This was done initially by outlining the nature of environmental incidents and their consequences, the legal framework governing the environment in South Africa, including the underlying common law principles; and thereafter, by giving the background and general content of the relevant legislation, together with the respective emergency provisions. It is in order at this stage, to undertake a critical analysis of the said provisions. This follows in chapters III and IV.

\textsuperscript{126} Article 1.
CHAPTER III

In a world that is rapidly changing through industrialisation and the creation of industrial hazards, the need for legal provisions for responding to emergency incidents arising from industrial activities and processes, cannot be overemphasised.

When an environmental emergency incident occurs, the focus is on two main issues relating to liability and compensation for damage to the environment and property, or injury to persons, or loss of life.

This chapter will critically analyse the environmental emergency provisions in the NEMA, which as earlier stated, are of general application covering land, air, and water pollution and constitute the main emergency provisions in the South African environmental legislation. The analysis will be done in the context of the guiding principles of the NEMA and the ‘polluter pays’ principle is of particular relevance in this regard.

The polluter pays principle was originally enunciated as an economic principle with the objective of the internalisation of otherwise external costs, but it has now been incorporated as a rationale for liability in cases of environmental damage.  

This principle advances the argument that anyone who carries on an inherently hazardous activity should be made to bear the risk if damage is caused by it, rather than the victim or the society at large.  

It has been argued in this regard, that if the principle is not applied to covering the costs of restoration of environmental damage, either the environment would remain un-restored or the State, and ultimately the tax payer, would have to pay for it and that therefore, an initial objective should be to make the polluter liable for the damage he has caused.

129 Ibid. Pg 14.
The polluter pays principle is reflected in Section 2(4) (p) of the NEMA and it holds that:

“the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.”

The overriding principle in the NEMA however, is the achievement of sustainable development, which has been defined as:

“development that meets the needs of the present without compromising the ability of the future generations to meet their own needs”\textsuperscript{130}

In terms of section 2(1) (e) of the NEMA, the above stated principles and others set out within this provision must guide the interpretation, implementation of the NEMA and any other law concerned with the protection or management of the environment.

The analysis will within the stated context, focus on determining the adequacy and effectiveness of the provisions, in terms of dealing with emergency incidents and related issues concerning liability, and compensation for damage to the environment, for personal injury or loss of property, as well as economic loss. In other words, an attempt will be made to answer the question whether the emergency provisions adequately and effectively deal with the legal issues and other related consequences that arise from the occurrence of an emergency incident.

For purposes of this discussion, the term ‘adequacy’ is used in the simplest form to mean sufficiency or capacity to deal with the above stated issues. ‘Effectiveness’ on the other hand, is used in reference to the ability to achieve the required results; for example, ensuring the remediation of the environment, or the compensation of persons who have suffered injury, or whose property is damaged as a result of an emergency incident. It is also used to mean efficiency; for instance, time frames for achieving the required results, cost implications, etc.

\textsuperscript{130} The Report of the World Commission on Environment and Development (The Brundtland Commission).
The analysis will be done in three parts, with the first one dealing with liability, the second with compensation, while the third will look at the duties and obligations of the relevant authorities.

**Part I**

**3.1 Liability**

“Legislation dealing with environmental liability should ideally deal with a number of issues… It must establish the basis of liability, and the persons who may be liable… As regards the rule for liability, the choice is between the two rough categories of fault or strict (risk) liability.”\(^{131}\)

Section 30 (1) (b) of the NEMA assigns liability for damage caused to the environment as a result of an emergency incident to responsible persons. It is submitted that this liability must be seen in the context of Section 28 (1) of the NEMA, which imposes a general duty of care on “every person who causes, has caused or may cause significant pollution or degradation of the environment” to “take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.”

**3.1.1 Nature and extent of liability**

Although it is not explicitly stated, the wording of Section 30 (1) (b) suggests that this is strict liability, as there is clearly neither the opportunity nor necessity for the establishment of fault. “Strict liability means that fault of the actor need not be established, only the fact that the act (or omission) caused the damage.”\(^{132}\) This can also be implied from the operation of the ‘polluter pays’ principle, which is the underlying guiding principle in this regard. According to Soltau,\(^{133}\) this principle is “concretised and manifested” in section 30 of the NEMA.\(^{134}\)

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\(^{131}\)Op cit. fn 18 Pg 34.

\(^{132}\)Op cit. fn 128 Pg 18.

\(^{133}\)Op cit. fn 18 Pg 33.

\(^{134}\)And in section 28 NEMA.
At this point, it is useful to consider the reasoning generally, for the introduction of strict liability in respect of harm caused by pollution of the environment.

In recent times, a number of national and international environmental liability regimes have the tendency of being based on the principle of strict liability, because of the assumption that environmental objectives are better reached that way.\(^\text{135}\) It has been argued in this regard, that the imposition of strict liability applies the ‘polluter pays’ principle of environmental policy.\(^\text{136}\)

A strict liability regime is said to have a deterrent effect, which makes operators conduct their activities more carefully, in view of the likelihood of a successful claim for compensation in the event of damage being caused. The regime is also said to have the ability to bring about a situation where only those enterprises, which possess the financial resources to bear enormous liability and the technical expertise to minimise the risk of incurring such liability, will engage in activities with the potential to cause environmental damage.\(^\text{137}\)

There are other reasons that have been advanced for the preference for strict liability, which are primarily related to the inadequacies of the traditional civil law in terms of providing recovery for loss caused by environmental damage.\(^\text{138}\)

In this last mentioned context, strict liability is considered to be necessary to ease the difficulties confronted by plaintiffs in bringing successful actions.\(^\text{139}\) One argument advanced in support of this consideration is that there are certain circumstances in which the facts or evidence may be peculiarly in the defendant’s domain due to its technical or scientific nature and that in such a case, it would be appropriate to require that the defendant disprove fault rather than to require fault to be demonstrated by the plaintiff.\(^\text{140}\)

\(^{135}\) Op cit. fn 128 Pg 18.
\(^{137}\) Ibid. Pg 20 – 21.
\(^{138}\) Op cit. fn 18 Pg 35.
\(^{139}\) Op cit. fn 136 Pg 21.
\(^{140}\) Ibid. Pg 22.
Further justification for strict liability in the above context, is that “many a potential plaintiff is deterred from taking action because of the uncertainty of whether or not he can successfully prove fault, combined with a fear of the cost involved, especially when the defendant is a wealthy company,” and that therefore, by imposing strict liability which is easy to establish, justice is more likely to be done.\footnote{J Mc Loughlin and E G Bellinger \textit{Environmental Pollution Control: An Introduction to Principles and Practice of Administration} Graham & Trotman/ Martins Nijhof 1993 Pg 110.}

“In South Africa, strict liability imposed by means of legislation is not altogether an alien idea.”\footnote{L A Feris “The asbestos crisis- the need for strict liability for environmental damage Acta Juridica Juta & Company Ltd 1999 Pg 299.} Other than the NEMA, examples of statutes, which impose strict liability, include the Nuclear Energy Act No 92 of 1982, which makes a licensee strictly liable for any nuclear damage that is caused during the period of his/her responsibility and the National Water Act. “If one acknowledges that the goal of the law of delict is to compensate victims of negligent injury and to appropriately allocate the burden of damages to the wrongdoer, a strong case could be made for incorporating the notion of strict liability for environmental damage into South African law.”\footnote{Ibid. Pg 144.}

All the foregoing points speak in support of the strict liability regime entrenched in the emergency provisions under Section 30 of the NEMA. However, questions arise as to whether the regime does in actual fact serve the various purposes for which it is advocated and in particular, whether, other than establishing liability, it ensures that the polluter pays for damage caused to the environment, and that compensation is awarded for injury to persons and for damage, or loss of property. These questions are answered in the discussion, which follows below.

It has been argued that even though strict liability may facilitate success for some plaintiffs, it must be borne in mind that the imposition of such liability “does nothing in itself to assist in the situation where the most significant problem for the plaintiff relates not to proof of fault but to proof of causality.”\footnote{Op cit. fn 136 Pg 22.}
As shown in the earlier discussion of common law principles and the elements of delictual liability, causation is the greatest difficulty faced by plaintiffs and it stems from inter alia, the fact that “the various branches of environmental science are at quite an early stage of development and there may be real doubt or uncertainty with regard to any link between the actions or activities of the defendant and the plaintiff’s damage.”

The difficulty is compounded by the fact that environmental contamination or pollution (even where it arises from an emergency incident) usually takes a long time, sometimes even years, to become manifest. Because of the long latency period it is not easy, let alone possible, to prove for a fact that the defendant’s act did actually cause particular damage. Undoubtedly, damage to the environment or to property, or indeed personal injury, arising from an emergency incident may be immediately visible. It is also possible however, that some other effect of the incident may only manifest years later, as was the case in the Chernobyl incident.

Further with regard to the argument that strict liability is necessary to ease the problems of plaintiffs in their actions, a pertinent question has been asked as to why the application of this special civil liability rule should benefit plaintiffs who have suffered harm which is quite ordinary, just because such harm is a consequence of pollution or some environmental damage caused by the defendant. In other words, why should it be the case that other plaintiffs who are equally or even more deserving of sympathy, be denied the advantage of the strict liability rule?

This question alludes to the problem of integration in respect of which Jones asserts, “Environmental lawyers and others should be concerned if such stark contrasts in liability principles are produced by legislative reforms.” However, Mc Loughlin and Bellinger are of the view that even though it would be wrong to have a different set of rules or criteria for pollution damage than for other forms of damage, the different standards can be justified in special cases.

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145 See chapter I above.
146 Op cit. fn 136 Pg 23.
147 Nicolette Rogers “Civil Liability for Environmental Damage: The Role of Breach of Statutory Duty” Centre for Commercial and Property Law Queens land University of Technology Brisbane Australia 1994 Pg 117.
148 See chapter II above.
149 Op cit. fn 136 Pg 24.
150 Op cit. fn 141 Pg 105.
It is submitted that the latter position would support the argument that the imposition of strict liability is called for in emergency incidents, as these may be appropriately considered as ‘special cases.’

The argument that the imposition of strict liability has a deterrent effect can be countered by the lack of proof of the impact that such imposition has on the conduct of enterprises.\(^{151}\) In relation to the capacity that a strict liability regime is said to have for restricting activities with the potential for environmental damage to those enterprises with financial and technical resources, it may be argued that environmental emergency incidents are not confined to such enterprises and further, that these incidents have no regard for financial and technical considerations.

Smaller enterprises “often become responsible for a higher share of damage than their size would indicate.”\(^{152}\) It is submitted that in these circumstances, a strict liability regime may have negative economic impacts on the said enterprises in the event that they cause substantial environmental damage, a factor that may be undesirable for long-term economic development.

In view of the foregoing position, “is there not something deeply unsatisfactory, and ultimately rather pointless, about civil liability rules which may render defendants liable to sums out of all proportion to their capacity to pay?”\(^{153}\) It also becomes questionable if the imposition of strict liability is the most effective way of implementing the ‘polluter pays’ principle, as has been argued. In an apparent answer to these questions, Henri Smets states that “to make the polluter pay, he must have no legal loophole to escape liability, and he has to be solvent, even if the pollution results from an accident that has totally destroyed the enterprise concerned.”\(^{154}\)

\(^{151}\) Op cit. fn 136 Pg 20.
\(^{152}\) Op cit. fn 128 Pg 23.
\(^{153}\) Op cit. fn 136 Pg 25.
Liability under section 30 (1) can also be said to be absolute in that it does not provide for any defences.\(^{155}\)

Because such a form of liability (strict liability) could operate harshly or unjustly in some circumstances, most systems of law permit exceptions in certain cases.\(^{156}\)

This is quite usual within the international community of States, which even though they prefer strict liability, they do grant some of the most commonly accepted defences or exceptions such as the ones relating to acts of god; acts of war or other hostilities (force majeure); acts or omissions of the plaintiff or third parties with the intent to cause damage or in a case where for instance, an operator caused damage by an activity that he conducted following a compulsory order given by a public authority; and for natural phenomena of exceptional, inevitable and irresistible character.\(^{157}\)

An element of vicarious liability is introduced by the requirement under Section 30 (3) (4) and (5), that where the incident occurred in the course of the responsible person’s employment, the employer must take certain specified action on behalf of the employee. “The principle of vicarious liability requires one person to be convicted and punished for the criminal act of another…Thus an employer is convicted of an offence where the actual contravention of the law was perpetrated by his servant.”\(^{158}\)

In addition, provision is made in terms of section 30 (9) for the imposition of joint and several liability for situations where more than one person caused or contributed to the harm.

This is quite obviously meant to favour recovery of costs incurred by a relevant authority in respect of containing, minimising the effects of the incident, clean-up procedures and remediation. However, the operation of joint and several liability might “work hardship on polluters who contributed only marginally to the pollution at the site in question, (the ‘minimal polluter’).”\(^{159}\)

\(^{155}\)Op cit. fn 141 Pg 122.

\(^{156}\)Ibid. Pg 108.

\(^{157}\)Op cit. fn 128 Pg 18.

\(^{158}\)Op cit. fn 85 Pg 56.

\(^{159}\)Op cit. fn 18 Pg 35.
Joint and several liability can also bring about amongst other things, disputes over the correct apportionment and “the so-called deep pocket effect, whereby plaintiffs would sue those with the greatest and readiest purse rather than necessarily consider bringing all those culpable to account.”

In general terms, Section 30 gives an idea of the nature and extent of liability. What is not clear from this provision however, is exactly what kind of environmental harm will trigger liability. The wide and almost open-ended definition of an “incident” does not help much in this respect because there is no indication as to what magnitude the occurrence need be, to be considered as such an incident. As Soltau aptly puts it, “provision should be made in legislation that deals with environmental liability for some indication of the kind of environmental harm that will trigger liability so that the responsible authorities are able to say with reasonable certainty, when a site is ‘polluted’…. does damage mean impact on the environment which affects human health, or also the integrity of ecosystems, and if so, what level of impact?”

Further, Section 30 does not provide for any limitation of liability. The term ‘limitation of liability’ is used to mean monetary limits, which may be applied to any specified kind of liability arising from a special cause. It is submitted that in the absence of any limitation of liability, the responsible person has no protection and is therefore vulnerable to financial prejudice, a factor that may also have the effect of discouraging commercial and industrial enterprise.

**What does liability under Section 30 relate to?**

The responsible person’s liability under Section 30 of the NEMA, is in relation to taking certain procedural action prescribed by sub-sections (3) and (5). Liability also lies in respect of taking measures specified by sub-section (4).

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160 Op cit. fn 63 Pg 219.
161 Op cit. fn 18 Pg 35.
162 Op cit. fn 141 Pg 122.
3.1.2 Liability for taking procedural action

In terms of Section 30 (3):

“the responsible person or, where the incident occurred in the course of that person’s employment, his employer must forthwith after the knowledge of the incident, report through the most effective means reasonably available-

(a) the nature of the incident;
(b) any risks posed by the incident to public health, safety and property;
(c) the toxicity of substances or by-products released by the incident;
(d) any steps that should be taken in order to avoid or minimise the effects of the incident on public health and the environment to-

(i) the Director – General
(ii) the South African Police Services and the relevant fire prevention service;
(iii) the relevant provincial head of department or municipality; and
(iv) all persons whose health may be affected by the incident

The first question that comes to mind in terms of this requirement is how can one be sure that the information given in the report is adequate and has been disclosed to the fullest possible extent required by this provision? It is submitted that there is a possibility for the responsible person, particularly if it is a big corporation, to want to withhold some of the information for business, political, or even public relations purposes. The corporation may wish to underplay the effects of a particular incident to the peril of the environment and people’s health.

Secondly, how can it be ensured that the specified authorities and the persons whose health might be affected are informed “forthwith after the knowledge of the incident” as required by this provision? These questions bring forth some issues, which have a critical bearing on emergency incidents.

The Chernobyl nuclear disaster163 ably demonstrates the importance of these issues. In that incident, Soviet engineers were running tests to establish how long the generators of one of their units could operate without steam supply in the event of a power failure.

163 See chapter II.
In the course of testing, the operators sharply reduced power, blocked steam to the reactor’s generators and disabled many of its safety systems. There was a huge power surge, which led to two large explosions. Large-scale pressure gradients carried radioactive plume to as high an estimated eight kilometres. The graphite core burnt for days, but it took eighteen days for Mikhail Gorbachev, the then General Secretary, to appear on television and acknowledge the nuclear release to the populace. During that period, tens of thousands of people were either knowingly, or unknowingly exposed to radioactive iodine-131, which was rapidly absorbed in their thyroids, resulting inter alia, into a sudden and massive onset of thyroid cancers, four years later. Such onsets could have been curtailed had the government of Russia distributed non-radioactive pills within the first week of the disaster. 164

In South Africa too, it is usual to read in the press about similar incidents having taken place in industry. It is also quite usual to hear those who may be classified as ‘responsible persons’ assuring the nation that all is well and everything is under control; that the hazardous substance that may have been spilled into the soil or into the sea, or escaped into the atmosphere was within the normal prescribed limits; and so on.

Depending on whether the responsible person was a government institution, it is possible to hear such assurances even from a government official. All this may be well intended, genuine and may be necessary to ensure that the public do not panic unnecessarily. It is submitted however, that until such an incident has been acknowledged, the much-needed action may be delayed, more damage may be done to the environment and more people may be exposed to the hazard, as was the case in the Chernobyl incident.

It goes without saying, that in emergency incidents, it is of utmost importance to communicate full and accurate information timeously and effectively, particularly to the affected persons. It is equally important to promptly take steps to contain and minimise the effects of the emergency incident.

164 Op cit. fn 17 Pg 1-2.
Section 30 (3) of the NEMA does not provide for the verification of the action taken by the responsible person, and even if this were the case, at least two questions would arise; firstly, in respect of which one of the listed authorities would take charge of such verification and secondly, whether or not the said authority has the technology for undertaking such an exercise.

Moving further with regard to liability for taking procedural action, Section 30 (5) requires that:

“The responsible person or, where the incident occurred in the course of that person’s employment, his or her employer, must, within 14 days of the incident, report to the Director-General, provincial head of department and municipality such information as is available to enable an initial evaluation of the incident, including-

(a) the nature of the incident;
(b) substances involved and an estimation of the quantity released and their possible acute effect on persons and the environment and data needed to assess these effects;
(c) initial measures taken to minimise impacts;
(d) causes of the incident, whether direct or indirect, including equipment, technology, system, or management failure; and
(e) measures taken and to be taken to avoid a recurrence of such an incident.”

It is obvious that the relevant authorities depend on the responsible person to furnish them with the information required to enable an initial evaluation of the incident. This is to be expected because the information relating to the incident is inevitably in the possession of the responsible person. It is submitted however, that unless there is some form of auditing or the possibility exists for having independent evaluation done, total reliance on information provided by the responsible person may not be the best way of getting the most comprehensive and genuine picture of the incident.
The use of the words, ‘initial evaluation’ in section 30 (5) implies that there will be a further evaluation. If this is the correct interpretation, then one might say that the subsequent assessment would provide a good opportunity for an independent evaluation to be done through a relevant authority.

The question would then turn on which relevant authority would do the assessment and whether such authority had the technical and manpower capacity to do so. A further question would relate to the recovery of the costs of the evaluation, since this is not included in the costs that are recoverable by a relevant authority under section 30 (8) of the NEMA.

In relation to the details that are required to be in the report, it is submitted that there is a possibility for the responsible person to give a very subjective view, in the quest to hide its own inefficiencies, or to protect its image, or for any other business, reasons. It is submitted further, that the imposition of strict liability in terms of Section 30, coupled with the fact that there is no way of limiting this liability, may be just another reason why the responsible person would not be inclined to fully and genuinely disclose the required details.

With particular regard to the obligation to furnish information including that, which relates to technology, it is possible for the responsible person to hide behind the right to protect its technology. Although this may seem to be a far-fetched proposition in theory, it is submitted that in practice, this issue has the potential of getting into the way of full disclosure by the responsible person, of the required information.

A general point worth noting in respect of Section 30 (3) and (5) is that it does not specify what would happen in the event that the responsible person failed to discharge the obligations imposed upon him/her and it is not clear whether such failure would constitute a breach on the part of such person.
3.1.3 Liability for taking measures

Section 30 (4) requires that:

“The responsible person or, where the incident occurred in the course of that person’s employment, his or her employer, must as soon as reasonably practicable after knowledge of the incident-

(a) take all reasonable measures to contain and minimise the effects of the incident, including its effects on the environment and any risks posed by the incident to the health, safety and property of persons;
(b) undertake clean-up procedures;
(c) remedy the effects of the incident;
(d) assess the immediate and long-term effects of the incident on the environment and public health;

It may be argued that the use of the words, “as soon as reasonably practicable,” in relation to taking measures to “contain and minimise the effects of the incident,” is justified on the basis that circumstances are likely to differ from one incident to another, and that therefore, it would not be practical to set a time frame within which the responsible person must institute the required measures.

It is submitted however, that these words do not encourage efficiency in relation to the responsible person’s obligation for cleaning up, remedying and assessing the effects of the incident. Leaving the specified matters to be undertaken when it is “reasonably practicable,” means that there are no deadlines and therefore, a responsible person can defend his/her delay in the commencement of these processes by claiming that it was not reasonably practical to do so. For the same reason, the duration of these processes can be unnecessarily drawn out. Undoubtedly, these are matters that must be attended to expeditiously.\(^{165}\)

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Section 30(6) appears to salvage the above situation by giving power to a relevant authority to
direct the responsible person to undertake specific measures within a specified period, by way
of fulfilling their obligation under subsection (4) and (5), provided that the relevant authority
takes into account certain specified matters.

It should be noted firstly, that the time at which the relevant authority comes into the picture
for purposes of giving the directions is not specified. From the wording and viewed
particularly in the context of the matters that have to be taken into account when considering
the directive, it does not appear to be the case that the relevant authority must give the
directives immediately following upon the occurrence of an incident.

Secondly, the relevant authority is not under an obligation to give such directions because the
use of the term ‘may’ implies that this function is discretionary. If the opposite were the case,
there would be a serious contradiction between Sub-Section (4) and (6) in that whilst the
former provision would give the responsible person the leeway to undertake the specified
measures “as soon as reasonably practicable after the incident”, the relevant authority would
have the obligation under the latter provision, to direct the responsible person to do that
within a particular period. This surely, could not have been the intention of the drafters and
one can therefore argue that Sub-Section (6) cannot come to aid of Sub-Section (4) in terms of
providing the necessary time frames for the timely commencement of clean-up procedures,
remediation and the assessment of the immediate and long-term effects.

Some pertinent questions arise in particular regard to the responsible person’s obligation
undertake clean-up procedures and remediation. They include:

(i) to what level or standard should the clean-up or remediation be done? As
one writer asks, “how clean is clean?”166 Related to this is the question of which
authority should establish the standards;

(ii) whether there is technical capacity for assessing the damage to the environment
to the fullest extent possible (for purposes of determining an appropriate form of
clean-up and remediation);

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166Op cit. fn 127 Pg 614.
(iii) what type of remediation measures should be implemented; who should make the decision; whether this decision should be left to the responsible person to make; etc.

Section 30 and the NEMA as a whole falls short of providing answers to the foregoing questions and the concern is that there is no way of telling or ensuring that the clean-up procedures and remediation measures are adequate, appropriate and satisfactory. To compound this situation even further, “South Africa has not expressly adopted a normative guide for the different levels of pollution prevention technology such as Best Possible Environmental Option (BPEO) and Best Available Technology Not Entailing Excessive Cost (BATNEC).”\(^{167}\)

It is submitted that the lack of standards may lead to different approaches of clean-up/remediation being imposed on responsible persons, or different levels of these processes being achieved as and when incidents occur.

The obligation to remedy the effects of the incident is quite wide in that it does not specify exactly what effects are to be remedied. In particular, it is not clear whether this remediation must be undertaken regardless of the magnitude of the impact on the environment and public health. In other words, there is no threshold for undertaking remediation. It is also not clear whether remedying is in relation only to the effects on the environment, or it includes the effects on persons and or their property. As the provision stands, one could argue the open-ended construction of the Sub-Section in either way. However, the possibility for argument does not take away the need for clarity in this respect.

With regard to the requirement for the responsible person to assess the immediate and long-term effects of the incident on the environment and public health, it is submitted that in the absence of a verification process, there is potential for the responsible person to undertake this task in a very subjective manner.

\(^{167}\)Op cit. fn 18 Pg 46.
In concluding discussion relating to clean-up and remediation, it is noted that the obligation for the responsible person to undertake these measures presupposes that this will always be practical, but what if this were not the case? Clearly this is a conceivable possibility for which some contingent or alternative provision ought to be made.

Part II

3.2 Compensation

As seen in the last two chapters, compensation is one of the major legal issues that arise following upon the occurrence of an emergency incident. Attention in this regard, is focussed on damage to the environment, personal injury, property damage or loss, as well as economic loss.

Before turning to the legal provisions under Section 30 of the NEMA, it is instructive to briefly consider what compensation means in relation to the above mentioned issues.

3.2.1 Damage to the environment

In relation to damage to the environment *per se*, that is, to the common goods of nature such as soil, ground water, habitats, species of flora and fauna, aesthetic and natural values, etc, compensation may take the form of reinstatement of the environment, such as restocking the waters with young fish, replanting new flora, and cleaning the banks after a pollution incident or, in cases where this is either impossible or is not economically feasible, by making financial compensation. Environmental impairment, for instance an explosion of an industrial plant, which is likely to cause extensive personal injuries and property damage and economic losses (both consequential and pure economic losses), will give rise to compensation by way of an award of damages payable in monetary terms.

It is submitted that the above distinction is relevant because firstly, the two emergency situations give rise to different issues for consideration. For example, in the case of damage to

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168 Op cit. fn 12 Pg 1.
169 Ibid.
the environment per se, issues for consideration will usually include: the entitlement to the right to claim damages, the extent of such damages, the type of damages that may be claimed, the method of assessing damages, which includes determination, quantification, and the measure of damages.\textsuperscript{170} Secondly, the distinction provides guidance for determining how these issues should be addressed. As it is possible for an emergency incident to give rise to either the impairment of the environment, or damage to the environment per se, or even a combination of both, it is submitted that emergency provisions must anticipate and address these situations.

Section 30 of the NEMA does not specifically refer to compensation, although the requirement for clean-up and remediation by the responsible person under Section 30 (4) shows the intention to compensate damage to the environment in that particular form. It is submitted however, that this Section is worded in very general terms; it is open-ended and lacks detail and particularity; and is certainly not responsive to the distinction referred to above.

The emphasis in Section 30 (4) is on remediation and clean-up, rather than monetary compensation. This emphasis is also reflected in Section 30 (8) (a) and (9), which allows a relevant authority to undertake clean-up and remediation, in the event of failure by the responsible person to undertake these measures, or where this is done partially; and entitles such authority to claim all reasonable costs incurred in respect of taking the said measures, from the responsible person/s.

The measure of damages in this case would appear to be the cost of clean-up and remediation, which is in line with the practice in many countries, and also civil liability conventions that have approved reasonable restoration costs as a basic measure for recoverable damages,\textsuperscript{171} although a question arises as to how to measure reasonableness of the costs involved.

\textsuperscript{170}Ibid. Pg 2 - 3.
\textsuperscript{171}Ibid. Pg 6.
3.2.3 Personal injury, property damage or loss of property

Section 30 (1) (a) refers to “danger to the public”, whilst section 30 (3) (b) and (4) (a) make reference to “risk posed by the incident to public health, safety and property.” Other than these inferences, there is no specific mention of compensation for personal injury, property damage or loss. It may be assumed therefore, that this has been left to be dealt with by other legislation, such as the Occupational Safety and Health Act No 85 of 1993. However, this legislation covers only the place of work, so that in the event of the incident occurring at the place of work, the injured workers would have recourse to the said legislation. Therefore, those seeking compensation in respect of personal injury and damage to property, and are not protected by this or other legislation, must necessarily turn to common law for redress. The most relevant remedies are those that are provided by the acquilian action in the law of delict and nuisance law.¹⁷２

As seen in chapter I, the common law option is not without hurdles. The plaintiff must prove the existence of delictual elements, that is to say: a wrongful act or omission and fault (intention or negligence) on the part of the defendant, as well as causation and patrimonial loss, with the most difficult of these elements to prove being those of fault and causation.

In most cases, the chances of success in the plaintiff’s claim are either reduced substantially, or rendered impossible by the requirement for proof of these elements. In short, common law remedies are not very useful in this regard.¹⁷³

In addition to the problems of founding a delictual action, there are also social and financial implications - some plaintiffs may not have financial resources to take legal action and in cases where the defendant is a huge corporation, the plaintiffs may feel ‘too small’ to litigate against the defendant. In any event, the process of litigation can be lengthy and costly and in the absence of effective liability insurance, the system does not provide compensation when

¹⁷²Op cit. fn 142 Pg 295.
¹⁷³See chapter I discussion of common law principles.
the person liable is insolvent and neither can it obtained where the person liable is not identified.\textsuperscript{174}

In view of the foregoing position, plaintiffs seeking compensation for personal injury, damage or loss of property as a result of an emergency incident will continue to have little or no recourse, for as long as there is no specific provision under Section 30 or anywhere else in the NEMA to address this issue.

Henri Smets argues that whenever there is a case of accidental pollution, the victims of that pollution should be compensated for the prejudice suffered and that “whatever the reason for a Bhopal type accident, whether it was caused by bad management on the employer’s part, sabotage by an employee with a grudge, or even lightning, the victims deserve compensation.” He argues further, that “pollution is an act of social aggression, which should at least be compensated for, whenever it is not possible to avoid it” and proceeds to point out that “the victim’s right to compensation, together with the polluter pays principle, shows who the payer should be and that the fact that governments recognise this principle in domestic law and even go as far as to declare that the polluter pays principle is a principle of international environmental law should have resulted in the efficient organisation of full and rapid compensation of victims by the polluter.”\textsuperscript{175}

3.2.4 Economic loss

Economic loss can take the form of either consequential loss, or pure economic loss: the former being loss, which is as a result of personal injury or property damage, such as loss of earnings due to disablement; and the latter, loss that is suffered where there is no physical injury to person or property.\textsuperscript{176}

Examples to illustrate pure economic loss are where commercial fishermen lose the pre conditions for fishing due to marine pollution,\textsuperscript{177} or where a hotelier experiences a down-turn

\textsuperscript{174}Op cit. fn 12 Pg 5.
\textsuperscript{175}Op cit. fn 154 Pg 12.
\textsuperscript{176}Bjorn Sandvik and Satu Suikari “Harm and Reparation in International Treaty Regimes: An Overview” in Op cit. fn 12.
\textsuperscript{177}Ibid. Pg 64.
in custom, as a result of reduced tourist activity arising from damage occasioned to a local amenity.\footnote{178}

According to Sandvik and Suikari, most jurisdictions have traditionally accepted claims for consequential economic losses, while being more or less reluctant about claims for pure economic losses. As shown in chapter I, this is also the case in South African law, although purely financial costs, such as clean-up expenses are recoverable provided they are consequential to actual or physical damage to property, preventative measures, which may be classified as pure economic loss, are not recoverable.\footnote{179} It is not surprising therefore, that Section 30 of the NEMA is silent about economic loss.

Several reasons have been advanced for the reluctance to accept claims for economic loss and they include the problems associated with the chain of causation. In particular, that the chain of causation might be very long and it would be difficult to draw a line between the claims which should be compensated and those that should be dismissed on account of being too remote.\footnote{180} Perhaps, this is also the reasoning behind the silence of Section 30 in this regard.

Although the reasoning for not awarding damages for pure economic loss is understandable, it is submitted that the economic hardship suffered by persons whose livelihoods depend on the affected activities such as fishing or running a hotel, deserves some serious consideration.

**Part III**

**3.4 The role of a relevant authority**

Section 30 (6) to (10) of the NEMA sets out the rights and duties of a relevant authority following upon the occurrence of an incident.

The manner in which the relevant authority may take any steps that it is authorised to, is specified in Section 30 (2) (a)-(c). Essentially, this Section establishes some kind of hierarchy...
and protocol whereby one relevant authority cannot take action unless another specified authority within the hierarchy has not taken any steps.

It appears that from the very outset, a relevant authority has to adopt a ‘hands-off’ approach because “this Section imposes a negative obligation on relevant authorities to refrain from taking action when an incident occurs rather than imposing a positive obligation to do so.” ¹⁸¹

It is submitted that this kind of approach takes away the motivation for a relevant authority to initiate action because of the knowledge that even if they do not act, the next in line will.

This section also raises issues of co-ordination among the relevant authorities. As a matter of necessity, it calls for a very efficient communication mechanism, which should indicate the precise point at which a particular authority can be said to have failed to take action, in order to give way to the next in line to proceed. It may be argued that the provision was intended to avoid the potential for overlapping action between the relevant authorities. However, the counter argument would be that what was sought to be prevented may well be the existing situation. This is because in practice, it is difficult to draw a neat line between the lack of action by one authority, and the appropriate time for the next in line to commence action. Therefore, because the possibility for a communication breakdown exists, some overlapping action is also inevitable.

In view of the foregoing, even though there is a proviso to Section 30 (2), which stipulates that “any relevant authority may nevertheless take such steps if it is necessary to do so in the circumstances and no other person referred to in subsection (1) (c) has yet taken such steps,” the requirements of this provision have the potential of causing inordinate delay, in what might be crucial action following upon an emergency incident. Indeed, the potential for conflict, it is submitted, cannot be ruled out completely in the absence of a specifically designated authority to take particular action at a particular time. There appears to be an overwhelming need for a more unified and harmonized approach.

A relevant authority has the right to direct a responsible person to undertake specific measures to fulfil his/her stated obligations within a prescribed period.¹⁸² All verbal directives must be confirmed in writing within a period of seven days.¹⁸³

¹⁸¹Op cit. fn 1 Pg 183.
¹⁸² Section 30 (6).
Matters requiring due regard in terms of giving the directives are stipulated by section 30(6) (a-e). Arguably, this has the advantage of guiding the authorities, so that they can be reasonable, consistent and avoid making arbitrary decisions.

An interesting point worth noting in relation to the matters that need to be considered by a relevant authority, prior to giving directives is that the public trust doctrine is reflected in Section 30 (6) (d). This provision requires the relevant authority to consider “the desirability of the State fulfilling its role as custodian holding the environment in trust for the people.”

The public trust doctrine is one of the eighteen guiding principles enumerated in Section 2 of the NEMA. This principle holds that

“the environment is held in trust for the people; the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people’s common heritage.”

It is to be assumed therefore, that a relevant authority acts on behalf of the State in its capacity as “custodian holding the environment in trust for the people,” and that in the course of that duty, the relevant authority must act in such a way as not to prejudice or compromise this position. The question that arises however, is what rights does the public have against arbitrary or inadequate action on the part of the relevant authorities?

In specified circumstances where for example, the responsible person fails to comply or complies partially, a relevant authority may undertake measures such as containing, minimising, remedying the effects of the incident, and cleaning up

An initial question that arises is what amounts to adequate compliance, in view of the observation made above that there are neither guidelines, nor standards for clean-up or remediation provided by Section 30? Another question is whether the relevant authority is technically equipped to undertake the measures. Undoubtedly, cleaning up and remediying

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183 Section 30 (7).
184 Section 2 (4) (o).
185 Section 30 (8).
environmental damage “are remarkably complex tasks requiring a co-ordinated effort of several scientific disciplines.”\textsuperscript{186}

There is something to be said about the line up of the relevant authorities in relation to the requirements of Section 30 (8), and that is the lack of a multi-disciplinary composition. One would have expected to see authorities with different forms of expertise and from different departments, which would combine their efforts in the spirit of cooperative governance, for purposes of dealing with an emergency incident.

A relevant authority appears to have some wide discretion in terms of the measures it can take under Section 30 (8) (i) – (iii), by virtue of the fact that it “may take the measures it considers necessary,” by way of minimising and remedying the effects of the incident, as well as cleaning-up. It is submitted that such discretion and the subjective nature of this provision may do some injustice to the responsible person, (from whom the related costs are expected to be recovered,) in the event that the said measures prove to be too costly.

The only cap to the claim for costs incurred by a relevant authority is provided by section 30 (9) by the use of the words, “reasonable costs.” As has been observed earlier, there is no guide to what constitutes reasonableness.

It must be noted that even though a relevant authority has the right to take measures it considers necessary, there is no obligation to exercise this right. It is submitted that in addition to giving the right to take action, the use of the term “may” in Section 30 (8) also implies the presence of some discretion on the part of a relevant authority, to choose not to take such action. In such event, the whole purpose of the provision would be defeated. Whilst the intention of the provision is discernable, it is submitted that the language in which it is couched does not reflect such intention in an absolute and positive manner.

Section 30 (9) entitles a relevant authority to claim the costs as above stated but the question must be asked as to whether the said authority has the financial and manpower capacity to undertake any of these measures in the first place. This point is particularly relevant to the

\textsuperscript{186} William D Brighton and David F Askman “The Role of Government Trustees in Recovering Compensation for Injury to Natural Resources” Pg 182 in Op cit. fn 12.
smaller municipalities. Further in this regard, it must be noted that there is no special procedure for a relevant authority to claim the costs incurred by it in respect of undertaking the said measures and one can only assume that this is to be done through the traditional civil litigation process. It is submitted that this position may bring about some reluctance on the part of a relevant authority to undertake any of the specified measures due to the concern about the recovery of the costs incurred, through the usually slow process of litigation. For this reason, a relevant authority may just be too willing to ‘pass the buck.’

Section 30 (10) imposes a duty on a relevant authority to prepare a comprehensive report on the incident, as soon as it is reasonably practicable, after having taken measures it is authorised to do. This report must be made available to the public and other specified offices. There is no deadline or time limit for the preparation of the report, but this is left entirely to when it is reasonably practicable for the relevant authority to do so. Whilst the reasoning for this flexibility may be understandable, it is possible that this can give way to unnecessary delay, and the public as well as other addressees of the report have no way of questioning any such delay.

In addition, sight must not be lost of the fact that the relevant authorities are basically government bodies, which have other statutory functions to perform. In view of this, one wonders whether in practice, the flexibility availed to them cannot allow their other competing functions to take precedence over the preparation of the report.

In concluding the discussion in this chapter, mention must be made of one general observation made in relation to Section 30, which is that its provisions are very emphatic and focused on reacting to an emergency and they completely overlook the importance of preparedness and the need to have in place, any form of contingency measures. Nowhere in Section 30, or anywhere else in the NEMA is this matter mentioned.

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187 From discussions held with the Department of Environmental Affairs Provincial Office in Capetown.
CHAPTER IV

Having dealt with the main emergency provisions, attention will now turn to provisions relating specifically to water resources. This chapter therefore examines the emergency provisions of the National Water Act and the Marine Pollution (Intervention Convention) Act. There is a related international Convention, namely the 1969 International Convention On Civil Liability For Oil Pollution Damage, which is implemented in South Africa by the Marine Pollution (Control and civil liability) Act No. 6 of 1981 and deals with liability issues arising from incidents occurring in the marine environment. However, due to the word limitation for this thesis, it is not possible to accommodate discussion in respect thereof.

4.1 The National Water Act emergency provisions

As stated in chapter II above, the NWA emergency provisions are substantially the same as those of the NEMA in terms of content and procedure, as well as the manner of imposing liability for damage to the responsible person, the various obligations of the responsible person including reporting and the undertaking of clean-up procedures and remediation etc. Indeed, the form of liability in the NWA is also strict. Thus, all of the points raised and the arguments advanced in relation to these matters, when discussing the NEMA provisions are also applicable to the NWA emergency provisions. Stating them here will only serve as an unnecessary repetition.

The following discussion will therefore dwell on the few areas in the NWA, which reflect some slight differences between the two sets of emergency provisions:

Section 20 (3) of the NWA extends the obligation to report the incident beyond the responsible person, to any other person with the knowledge of the incident. Thus, the net for liability in this regard is cast wider. This practically means that any member of the general public who happens to have knowledge of an incident has the obligation to report. The question however, is whether the public is aware of this obligation, and even if they are, how can they be encouraged to report these incidents?
It has been argued in this regard, that “the success or failure in response to an incident will often depend very much on prompt reporting…of any occurrence which causes or threatens to cause pollution…”\textsuperscript{188} and that…”the most important basis of any plan is to have the information in the right place and at the right time”\textsuperscript{189}

Section 20 (3) does not specify the details that must be included in the report. Although this makes sense in relation to any other person who only has knowledge of the incident, it is difficult to understand the omission in relation to the responsible person.

In terms of Section 20 (5), a verbal directive given by the catchment management agency must be confirmed in writing within 14 days, failing which it will be deemed to have been withdrawn. In addition to indicating the consequence of non-compliance, this provides a useful tool for ensuring that the agency acts within the prescribed period.

In the event that the responsible person fails to comply, or the compliance is inadequate; or where the directive can not be given timeously to the responsible person; the relevant catchment agency is the sole designated authority to take measures it considers necessary to contain, minimise and remedy the effects of the incident, as well as to undertake clean-up operations.\textsuperscript{190} This provision therefore leaves no room for unnecessary delay or even ‘passing the buck’.

The catchment agency is entitled to recover all the reasonable costs incurred in undertaking the specified measures from every responsible person jointly and severally. These costs include labour, administrative and overhead costs.\textsuperscript{191} Although this classification of costs provides some kind of guidance in terms of the nature of recoverable costs, the use of the words, “may include, without being limited to,” means that there are other costs that may be recovered by the catchment agency, and in the absence of a clear meaning of what constitutes “reasonable costs,” this position may do some injustice to a responsible person.

\textsuperscript{188} Collin De La Rue and Charles B Anderson \textit{Shipping and the environment} LLP London 1998 Pg 809.
\textsuperscript{189} David W Abecassis and Richard L Jarashow \textit{Oil Pollution From Ships} 2\textsuperscript{nd} edition Steven & Sons Ltd 1985 Pg 127.
\textsuperscript{190} Section 20 (6) (a) (b) (i)-(iii).
\textsuperscript{191} Section 20 (7) & (8).
Where costs are recoverable from more than one responsible person, the catchment management agency must, upon the request of any of the responsible persons, and after hearing the others, apportion liability, although such apportionment does not relieve any of them of their joint and several liability for the full amount of the costs. The questions that arise in this respect include: on what basis does the catchment management agency apportion such liability? Is it a simple mathematical formula, or according to the degree to each of the responsible person was responsible? Whether such apportionment is binding on the responsible persons and so on.

4.2 The Marine Pollution (Intervention) Convention Act emergency provisions

The Marine pollution (Intervention Convention) Act (the Intervention Convention Act) is basically a reproduction of the Intervention Convention, which was adopted on 28th November 1969 and came into force on 6th May 1975. Having ratified the Convention, as well as the subsequent Protocol of 1973, South Africa has given effect to these instruments in the Intervention Convention Act, whose sole purpose to provide for the application in the Republic of the 1969 Intervention Convention. This is done by a single sentence in section 2(1), which declares that the Convention shall apply to the Republic. The Intervention Convention and the 1973 Protocol are reproduced as Schedules 1 and 2 of the said Act.

The most important provision of the Intervention Convention is in Article 1, which allows State parties to “take such measures on the high seas as may be necessary to prevent, mitigate, or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequences.” This Article, it is submitted, is the centrepiece of the Convention.

It must be pointed out that the right to intervene is exercisable only in specific circumstances where a ship is involved in the maritime casualty; on the high seas; where there is a threat of pollution by oil, which poses a grave and imminent danger to the coastline and other related interests of the coastal State. Thus it is clear from the very outset, that State intervention cannot be arbitrary, but that it must meet certain criteria.

192 Section 20 (9).
Article II of the Convention elaborates on these criteria by providing definitions of the key components of Article I, as follows:

Article II (1) defines ‘marine casualty’ as “a collision, stranding or other incident of navigation or occurrence resulting in actual or threatened damage to a ship or its cargo.” This definition “does not limit the right of intervention to cases where a ship has been damaged in a collision, stranding, explosion or similar incident, but extends to cases where some occurrence results in imminent threat of material damage to a ship or cargo.”

Article II (2) (a) (b) defines a ‘ship’ as “any sea-going vessel of any type whatsoever and any floating craft.” Thus, installations or devices involved in the exploration and exploitation of the seabed and the ocean floor, as well as the subsoil thereof are excluded. Similarly, warships or ships either owned or operated by a State and which are for the time being on government service, are excluded. Other than these exceptions, the definition of ‘ship’ appears not to be limited to oil tankers, in view of the use of the words ‘any sea-going vessel.’

Article II (3) defines oil as “crude oil, fuel oil, diesel oil and lubricating oil. Other pollutants and harmful substances are not included.

“Related interests” are broadly defined by Article II (4) to include activities such as fishing and tourism. It also includes “the well being of the area concerned and the conservation of living marine resources and of wildlife, which are “directly affected or threatened by the maritime casualty.” There is therefore “a power to intervene based on purely environmental grounds, and it is not necessary to show that any proprietary or pecuniary interest is threatened.”

The requirement that the right of intervention must be exercised only on the high seas, means in theory that a coastal State can not intervene in its Exclusive Economic Zone (EEZ) created by the United Nations Law Of The Sea Convention (1982), since the high seas lie beyond the EEZ and there is no other Convention providing for such powers.

193 Op cit. fn 190 Pg 818.
194 Article I (2).
195 Op cit. fn 191 Pg 120 – 121.
If this theory were to be maintained, it would result in a rather illogical situation giving a coastal State greater power of intervention in the high seas than in its EEZ. The explanation for this lacuna is that at the time of drafting the Intervention Convention, the concept of the EEZ had not yet been developed, although it is assumed that the intention at the time was not to “inhibit State intervention beyond the territorial sea.”

The foregoing provisions are significant because they prescribe the scope of the Convention’s application and indicate how the right of intervention arises. The next part of this discussion deals with the manner in which the said right is to be exercised.

The coastal State’s right of intervention is subject to a number of conditions specified under Article III of the Convention.

To start with, there must be “grave and imminent danger”, which is likely to have harmful consequences. These terms indicate the degree or extent of danger. There is an inherent problem in this provision because if an incident occurred at a point very far from the coastline and the effects took a while to manifest themselves, it would not be possible at the time of the occurrence to establish whether or not the danger was ‘grave and imminent.’

Before taking any intervention measures, the coastal State must make consultations with the flag State and other States affected by the maritime casualty. The coastal State may also consult with any of the independent consultants listed by the IMO as provided by Article IV of the Convention. However, in situations of extreme urgency requiring immediate action, the coastal State is permitted to take measures rendered necessary by the urgency of the situation, without having to make previous consultations. However, the coastal State must report the action taken to concerned States, any known physical or corporate persons, as well as the IMO.

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196 Op cit. fn 14 Pg 354 and fn 190 Pg 817.
197 Ibid. Pg 817.
198 Article III (a).
199 Article III (d).
200 Article III (f).
Since the Convention does not specify (under Article I) what precise measures should be taken, the requirement for consultation is one way of limiting the coastal State’s right to take measures.\(^{201}\) It may also be argued, that the consultations are meant to provide a safeguard against possible abuse of power by a coastal State.

In terms of Article V of the Convention, the measures taken must be proportionate to the actual or threatened damage and must not exceed what is reasonably necessary to prevent, mitigate or to eliminate grave and imminent danger. The said measures must cease to be taken as soon as the stated purpose has been achieved. In addition, the coastal State must not unnecessarily interfere with the rights and interests of the flag State, other States or of any interested party.\(^{202}\) This requirement is founded on the principle of customary international law under which the doctrine of self-defence and necessity are essential to justify intervention by a coastal State on the high seas.\(^{203}\) The customary principle similarly requires that the danger must be imminent, the threatened rights or interests substantial, and measures taken must be proportionate to the importance of such rights.\(^{204}\)

The Convention prescribes matters that must be taken into account in considering whether the measures are proportionate to the damage. These are: “the extent and probability of imminent damage if those measures are not taken; the likelihood of those measures being effective; and the extent of damage which may be caused by such measures.”\(^{205}\) By prescribing matters to be taken into account, the Convention makes some considerable improvement on the customary principle of necessity, in terms of providing for the degree or extent of the measures that should be taken.\(^{206}\)

Damage occasioned by a coastal State to others by excessive intervention must be compensated to the extent of the damage caused.\(^{207}\) This is also founded in the customary international law principle of necessity.

\(^{201}\)Op cit. fn 190 Pg 819.
\(^{202}\)Article V (1) (2).
\(^{203}\)Op cit. fn 191 Pg 116 – 117.
\(^{204}\)Ibid.
\(^{205}\)Article V (3) (a)-(c).
\(^{206}\)Op cit. fn 191 Pg 124.
\(^{207}\)Article VI.
Any dispute relating to the measures taken or the payment of compensation, as well as the amount of such compensation, shall in the first instance, be subjected to negotiation and in the event that the parties fail to agree, the dispute must be submitted to conciliation. If conciliation fails, arbitration will follow in terms of the provisions set out in the Annex to the Convention.\textsuperscript{208}

In terms of Article VIII (2) a State, which took measures is not entitled to refuse a request for conciliation or arbitration solely on the grounds that any remedies in its own courts have not been exhausted.

It must be noted that private parties are not allowed to bring proceedings for compensation under the Convention. They can only take advantage of them by being nationals of a contracting State, which must pursue the claims on their behalf. Further, that “the Convention does not create any private law rights enabling governmental authorities to recover from the ship owner, the cost of any measures taken in exercise of the right of intervention…however, such rights are often created by national legislation dealing with similar rights of intervention in territorial waters which are outside the scope of the Convention.” \textsuperscript{209}

A major shortcoming of the Intervention Convention as noted above, lies in its limited application to oil, even though the definition oil is quite wide in scope. As the Convention stands, there is no right of intervention in respect of any other dangerous substances, which have the potential of polluting the marine environment following upon a maritime incident. In addition, the fact that the exercise of this right is subject to so many limitations raises a question of just how much substance or value it brings to the party.

As a result of its limited application, the Intervention Convention was supplemented in 1973, by a Protocol on Intervention on the High Seas In cases of Marine Pollution by Substances other than Oil (1973 Intervention Protocol). This took care of the limitation and extended

\textsuperscript{208} Article VIII.

\textsuperscript{209} Op cit. fn 190 Pg 820.
State intervention to incidents involving bulk oils, noxious substances, liquefied gases, radioactive substances, as well as other substances “which are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.” The 1973 Protocol allows the parties to take the same action in relation to the extended list, as that provided under the Intervention Convention.

Following the Amoco Cadiz oil spill in 1978, the powers of intervention by coastal States have been widened under Article 221 of the International Law of the Sea Convention, which provides that:

“nothing in this part shall prejudice the right of States pursuant to international law, both customary and conventional, to take and enforce measures beyond the territorial sea proportionate to the actual or threatened damage to protect their coastline or related interests, including fishing, from pollution or threat of pollution following upon a maritime casualty or acts relating to such casualty, which may reasonably be expected to result in major harmful consequences.”

By virtue of the foregoing provision, coastal States may exercise the right of intervention in response to any actual or threatened damage likely to have major harmful consequences, provided that these measures are proportionate to the actual or threatened damage. This provision has a broader context than the Intervention Convention.

Under section 3 (1) of the Marine Pollution (Intervention Convention) Act, the Minister of Transport has the power to make regulations to give effect to any provision of the Convention and make it applicable to in the Republic; and to prescribe fees, as well as provide for the recovery of any expenditure incurred in the course of applying the Convention to the Republic. However, to date, no such regulations have been made.

By an amendment to section 2 (3) of the Act, the powers and responsibilities for intervention on the high seas that the Convention and the Protocol confer on States have been delegated to the South African Maritime Safety Authority.

\(^{210}\) Article I of the 1973 Protocol.
CHAPTER V

5. CONCLUSION AND RECOMMENDATIONS

The aim of this thesis was to examine the legislative provisions relating to emergency incidents in South Africa, for purposes of determining their adequacy and efficiency for responding to environmental emergency incidents, as well as legal and other related issues, which arise from such incidents, such as liability and compensation for damage to the environment, property and persons.

The legal framework governing the environment in South Africa was set out in which both the statutory position and the relevant common law principles were considered, highlighting the interface between the interpretation of the common law principles and their application in the context of the environment.

South African legislation dealing with environmental emergency incidents was identified and a critical analysis of the emergency provisions in the NEMA, the NWA and the Intervention Convention Act has been undertaken.

This last part of the thesis now makes some conclusions and recommendations on the said provisions.

It is undisputable that a general legal framework exists for environmental emergency incidents occurring both on land and the marine environment. However, the actual provisions particularly those in the NEMA and the NWA have left a number of questions unanswered and several issues unresolved.

It has been established that the nature of liability in the NEMA emergency provisions is strict and that it is also absolute in the sense that it does not provide for any defences. An element of vicarious liability is also introduced by the requirement that where the incident occurred in the course of the responsible person’s employment, the employer must take certain specified action on behalf of the employee. This liability can be imposed jointly and severally where more than one person caused or contributed to the harm.
The most contentious element is the one relating to it being strict and without any limitation. The same position obtains in the NWA, except that vicarious liability does not arise in this case.

A number of arguments have been advanced in favour of the strict liability regime, but they are far out-weighed by the counter arguments, which lead to the conclusion that a strict liability regime on its own, does not serve the various purposes for which it is advocated and in particular, it cannot on its own, ensure that the polluter pays for damage caused to the environment and that compensation is awarded for injury to persons, or for property damage or loss of property.

The strict liability regime in the NEMA and NWA emergency provisions is seemingly more concerned with the presumption of fault on the part of the defendant, than with any of the other issues, such as whether or not there is any proportionality between the harm caused and the defendant’s ability to pay for the damage caused, and so on.

In view of the foregoing conclusion, it is recommended as follows:

(a) That a requirement for potential polluters to have some insurance to cover their liability for emergency incidents, be incorporated into the emergency provisions;
(b) Some consideration be given to techniques for spreading risks and burdens associated with environmental damage by means of collectively funded arrangements as a way of securing funding for environmental repair, under which the potential polluters would undertake to indemnify all accidental victims in all circumstances. These funds could also guarantee indemnity in cases where the polluter is unable to pay.211

Because a strict liability regime can operate harshly or unjustly in some circumstances, it is recommended that provision be made for the most commonly accepted defences or exceptions such as the ones relating to acts of god; acts of war or other hostilities (force majeure); and for natural phenomena of exceptional, inevitable and irresistible character.

211Op cit. fn 154 Pg 226 and fn 136 Pg 26.
It must be noted however, that it is important to maintain a balance between the defences that are allowed and the division of the burden of proof and that “the positive effects of strict liability should therefore not be undermined by allowing too many defences, or by an impossible burden of proof.”212 Further, that care must be taken to ensure that the range of defences open to the defendants do not introduce fault liability through the back door.213

In addition to permitting exceptions in certain circumstances, some quid pro quo for the strict liability could be offered by way of devising upper limits for environmental liability upon certain sectors of the economy, as long as such limits are not too low and they are set in away which relates in some way, to the financial capacity of the particular defendant or a particular class of defendants.214 Therefore, should these limits be set, they will need to have a size-related element to take care of the smaller enterprises, which would find any limits set in relation to the activities of larger enterprises untenable. However, the need to avoid leaving some damage uncompensated would have to be considered in this whole equation.215

The setting of limits for defendants’ liability for pollution damage has been done in statutory provisions of many countries by way of implementing terms of international conventions such as the International Convention on Civil Liability for Oil Pollution Damage 1992.216 Article V of the Convention provides that:

“The owner of a ship shall be entitled to limit his liability under this Convention in respect of any one incident to the aggregate amount calculated as follows:

(a) 3 million units of account for a ship not exceeding 5,000 units of tonnage;
(b) for a ship with tonnage in excess thereof, for each additional unit of tonnage, 420 units of account in addition to the amount mentioned in subparagraph (a);

provided, however, that this aggregate amount shall not in any event exceed 59.7 million units of account.”

212 Op cit. fn 128 Pg 18.
213 Op cit. fn 63 Pg 220.
214 Op cit. fn 136 Pg 27.
215 Op cit. fn 128 Pg 41.
216 Op cit. fn 141 Pg 123.
Both the NEMA and NWA emergency provisions lack clarity as to exactly what kind of environmental harm will trigger liability. Since not every change to the quality or quantity of natural resources should be qualified as damage and give rise to liability, it would be useful for the well-functioning of the liability regime to identify threshold criteria below which the responsible party will not be liable.\textsuperscript{217}

In this regard, some factors can be identified as starting points for purposes of proving that a measurable adverse change has been caused to natural resources and services, such as quality standards and emission norms; in addition, the situation existing after the occurrence of an incident should, in every case be compared to that prevailing before such incident.\textsuperscript{218} It is therefore recommended that provision be made in both the NEMA and NWA in line with the foregoing, to give some indication of the kind of environmental harm that will trigger liability so that the responsible authorities are able to say with reasonable certainty, when a site is ‘polluted’ and to establish what the level of impact should be on human health or on ecosystems.

Under Section 30 (3) of the NEMA, there is no way of ensuring full disclosure or verification of information required to be provided by the responsible person in his/her report to the specified authorities and to persons whose health might be affected by the incident, following the occurrence of an incident. Neither is there a way of ensuring that the responsible person informs the said authorities and persons “forthwith after the knowledge of the incident”.

In view of the importance of timely communication and full disclosure of information relating emergency incidents, which has been illustrated by the Chernobyl nuclear disaster,\textsuperscript{219} it is recommended that provision be made for verification of information provided by the responsible person and for ensuring that this information reaches the intended authorities and persons as required by this provision. One possible way of achieving this, particularly in relation to the persons who are likely to affected, would be to specify the means of communicating the report such as the radio, television, the local newspaper, etc.

\textsuperscript{217} Op cit. fn 128 Pg 47.
\textsuperscript{218} Ibid.
\textsuperscript{219} See chapter II.
In addition, a time limit for making the report should be specified and a particular authority should be designated to see to these matters.

With regard to the requirement under Section 30 (5) of the NEMA, for the responsible person to submit available information to the specified authorities to enable an initial evaluation of the incident, it is recommended that provision be made for some form of auditing mechanism or an independent evaluation system, to be put in place to ensure that the most comprehensive and genuine picture of the incident is obtained from the responsible person.

It is recommended further, that the obligation for the responsible person to furnish information relating to technology be linked to the provisions of the Public Access to Information Act (PAIA) in order to assist in a case where the responsible person attempts to hide behind the need to protect technology.

Whilst noting the legislative intention to protect the environment from future damage, in Section 30 (5) of the NEMA, this objective could be better served by for instance, requiring potential polluters to submit their plans for preparedness for emergency incidents, as part of the licensing requirements, where this is applicable.

Finally in regard to Section 30 (3) and (5), it is recommended that specific mention be made of the consequences of non-compliance with the requirements of these particular provisions by the responsible person, just as has been done in the case where the responsible person fails to undertake the measures in accordance with directives given in accordance with Section 30 (8) of the NEMA.

The provisions for clean-ups and remediation in both the NEMA and NWA are the biggest culprit of raising unanswered questions and leaving numerous issues unresolved. In some cases, they are also ambiguous and vague, thereby opening themselves to different interpretations. The following recommendations are made in this regard:
(a) The use of the words, “as soon as reasonably practicable in Section 30 (4) of the NEMA be replaced by some definite time frame in relation to the commencement of clean-ups and remediation.

(b) To resolve the various pertinent issues, which arise in relation to the responsible person’s obligation to undertake measures to clean-up and to remedy the effects of an incident, it is recommended that some regulations and guidelines be worked out specifying standards in respect of these matters; identifying procedures for assessing damage to the environment; establishing threshold for undertaking clean-up remediation; identifying a verification process; indicating which impacts would require these measures; designating a particular relevant authority to oversee these processes; and to provide for other related matters.

(c) Provision should be made to take care of situations where clean-up and remediation may not be practical, such as the payment of monetary compensation by the responsible person.

(d) Provision should also be made for the establishment of specific funds for undertaking the required clean-up and remediation, where there is non-compliance or partial compliance to directives given by a relevant authority. Examples of this kind of arrangement include Germany, where specific funds exist for contaminated land remediation, in France for airport noise compensation, and in the Netherlands for air pollution amongst oil companies for clean-ups of contamination at old petrol stations.220 Another example is the American Comprehensive Environmental Response, Compensation and liability Act of 1980. This statute established the ‘superfund’ with tax dollars, which were to be replenished by costs recovered from liable parties and were specifically meant for paying for clean-ups whenever it became necessary. The Environmental Protection Agency (EPA) was designated to control the Superfund and was given broad powers to investigate contamination, select appropriate remedial action, and either order liable parties to undertake clean-ups or do the work itself and recover costs from the liable parties.221

220Op cit. fn 128 Pg 36.
221Op cit. fn 188 Pg 183.
In terms of compensation, both the NEMA and the NWA emergency provisions emphasise the need for clean-up and remediation by the responsible person, which is an indication that this is the preferred form of compensating damage to the environment. However, the two sets of provisions do not make any distinction between damage to the environment per se and environmental impairment; they are worded in very general terms, without any detail or particularity.

Because it is possible for an emergency incident to give rise to either the impairment of the environment, or damage to the environment per se, or even a combination of both, it is recommended that provision be made to address these situations. This is another instance that would justify some guidelines and regulations to adequately provide for the different situations that may arise as above stated in relation to the issue of compensation.

Compensation for personal injury, property damage or loss of property is not at all mentioned in the NEMA or the NWA and the conclusion made in this regard is that this has been left to the traditional civil liability remedies such as those provided by the law of delict, nuisance law, or the application of other relevant statutes, for instance, the Occupational Safety and Health Act.

In view of the difficulties that plaintiffs will encounter in pursuing their claims under the traditional common law remedies, and in particular, the fact that common law is not very useful for claiming damages in respect of environmental damage, it is recommended that compensation for personal injury, property damage or loss of property be specifically provided for within the emergency provisions. Examples of national laws, which deal the traditional type of damage such as personal injury, or property damage, are the German Environmental Liability Act of 1990 and the Danish Compensation for Environmental Damage Act of 1994.222

222Op cit. fn 128 Pg 16.
In relation to the financial problems that may be faced by plaintiffs in pursing their claims, the possibility of establishing a legal aid fund, from which persons who have suffered damage to their interests may have all, or part of their costs paid to the extent that they could not afford to pay those costs themselves should be considered.\textsuperscript{223}

As in the case of personal injury, property loss and property damage, there is no provision for compensating economic loss in both the NEMA and NWA emergency provisions. In view of the hardship that may be suffered by people whose businesses or livelihood substantially depend on the activities affected by the damage to the environment, it is recommended that some exceptions be made in relation certain categories of business such as commercial fishing. This has been done in pollution damage cases in some American courts.\textsuperscript{224}

The relevant authority’s rights and duties under the NEMA are susceptible to inefficiency because of the language in which they are couched and the manner in which they have been structured. It is therefore recommended as follows:

(a) The taking of action by the relevant authority should be streamlined and the ‘hierarchy’ that has been created should be done away with. It may be useful in this regard, to designate a lead authority for different situations.

(b) The composition of the relevant authorities under the NEMA should be reviewed to ensure a multi-disciplinary structure, to achieve a more comprehensive response to an emergency incident.

(c) The wide discretion that a relevant authority appears to have under the NEMA, in relation to taking measures should be replaced by an obligation to act, in the event that the responsible person fails to comply or complies inadequately with a directive to undertake clean-up procedures, or to remedy the effects of an incident.

\textsuperscript{223} Op cit. fn 141 Pg 115.
\textsuperscript{224} Thomas J Schoenbaum “Environmental Damages: The Emerging Law In The United States” Pg 167-168 (Quoting Union Oil Company V Oppen. 501 F.2d 558) in Op cit. fn 12.
(d) The term “reasonable costs” should be given more meaning by for instance, giving an indication of what kind of costs are meant to be recoverable. The rule in the *Commonwealth of Puerto Rico v The S.S Zoe Colocotroni*\textsuperscript{225} goes some way towards serving as guide, in as far as it requires that the restoration or rehabilitation of the environment to its pre-existing condition should be without grossly disproportionate expenditures. However, an even more specific classification of costs would be ideal.

(e) The preparation of the report by a relevant authority, in relation to taking measures for cleaning up and remediying the effects of an incident should be given a time frame within which it must be done.

(f) Provision should be made for a special procedure for claiming the costs incurred by a relevant authority in respect of clean-up procedures and remediation.

(g) In view of the fact that relevant authorities act on behalf of government, in its capacity as custodian holding the environment in trust for the people, some provision for public participation especially by those members who suffer particular loss or damage as a result of legislative non-compliance, should be considered to ensure that the public interest in the preservation of the environment is not compromised by government inactivity through negligence, political pressure or fiscal restraints.\textsuperscript{226}

The Intervention Convention Act gives the State (South Africa) power to intervene on the high seas if necessary, to prevent, mitigate, or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequences. However, the precise measures that can be taken are not specified and neither is the manner in which they can be taken.

\textsuperscript{225} 628 F.2d (1\textsuperscript{st} Cir. 1980) at 675 (Ibid.)

\textsuperscript{226} Op cit. fn 147 Pg 118.
It is therefore recommended that some regulations be worked out to provide for the practical implementation of the Act and other matters specified by Section 3 (1) of the Act.

The overall conclusion after a detailed analysis of the above emergency provisions is that a basic structure has been laid down. However, in view of the many questions and issues that have been left unanswered or unresolved, it has to be concluded that the emergency provisions, particularly those in the NEMA and the NWA, are not adequate or efficient enough for responding to environmental emergency incidents, as well as addressing the legal and other related issues, which arise from such incidents, such as liability and compensation for damage to the environment, property and persons. The Intervention Convention Act is more comprehensive and is advantaged by the fact that it is a reproduction of an international Convention. Therefore, much more needs to be done to make the established legal framework more adequate and efficient for the intended purpose.
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