INSURANCE FOR ENVIRONMENTAL DAMAGE:
A SOUTH AFRICAN PERSPECTIVE

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**Erlise Kruger**

12588075

Study supervisors:
Prof. L.J. Kotzé
and
Prof. L. Stander
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List of Abbreviations

CERCLA

*Comprehensive Environmental Response Compensation and Liability Act*

CGL policies

Comprehensive General Liability policies

DEAT

Department of Environmental Affairs and Tourism

DG

Director-General of DEAT

ECA

*Environment Conservation Act*

EDI policy

Environmental Dutch Insurance policy

EIL policy

Environmental Impairment Liability policy

EMI

Environmental Management Inspectorate

EMIs

Environmental Management Inspectors

EMP

Environmental Management Programme

MBI

Market-based instrument

MPRDA

*Mineral and Petroleum Resources Development Act 28 of 2002*

NEMA

*National Environmental Management Act 107 of 1998*

NWA

*National Water Act 36 of 1998*
OSL policy
  Owner's Spill Liability policy
PARLL policies
  Pollution and Remediation Legal Liability policies
PLIP
  Personal Liability Insurance Policies
PLL policies
  Pollution Legal Liability policies
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Bibliography
1 Introduction

This dissertation attempts to answer the question of what options are open to a polluter to insure him/herself against the environmental damage caused by his/her activities.

Currently, there is no express general obligation in South African law to compel a risk-carrying party to insure him/herself against any environmental damages that he/she may cause. A problem that may arise is that a polluter can escape liability if the polluter has insufficient funds to pay for such damages or if the polluter uses small subsidiaries to perform environmentally damaging activities on his/her behalf.\(^1\) This may mean that the costs of environmental damages are passed on to the taxpayer and the government. In effect, sustainability principles may be undermined, since such actions are contrary to the purpose of these principles.\(^2\) Mandatory financial security, in the form of insurance, may be vital to implement and reinforce these principles and, more generally, to provide compensation for environmental damage.

This study aims to

- determine the application of environmental law principles to mandatory insurance (these principles include the ‘polluter pays’ principle, the precautionary principle and the preventive principle and the polluter’s duty to take reasonable measures arising from his/her duty of care);
- suggest possible solutions to the problem where environmental damages cannot be compensated for because of the polluter’s lack of financial resources; and
- contribute to the formulation of a possible insurance mechanism to deal with the situation in the event of environmental pollution.

\(^1\) A subsidiary is a business organisation that has a separate and independent legal personality from that of its ‘holding company’ or ‘parent company’ in the country where it is incorporated. See par. 5 below for a discussion of the use of subsidiaries to escape liability for environmental damage. In this regard, see further Schmitthoff Export Trade 612-617.

\(^2\) See the discussion in par. 3.1 below.
The Constitution of the Republic of South Africa 108 of 1996, various legislative measures and environmental law principles are analysed to ascertain whether they contemplate insurance for environmental damage. The question of whether there is a need to procure environmental protection through insurance is also investigated. In this regard, the discussion of the principles of environmental law serves as a basis to suggest insurance as a possible solution to the problem that arises where a polluter cannot compensate for environmental damages.

This study also endeavours to contribute to the formulation of a possible insurance mechanism to address environmental damage. This is done by investigating whether insurance for environmental damage is possible and, if it is possible, whether such insurance would afford adequate coverage. The study ascertains whether insuring against environmental damage and/or degradation is in line with the essentialia of a traditional insurance contract. The challenges that traditional insurance contracts in the South African law and practice would have to meet when faced with affording coverage for environmental damage and/or degradation are also analysed to determine whether a specific “environmental policy” should rather be formulated.

Examples of insurance policies for environmental damage found in the international arena are briefly discussed to show where, in all probability, South African insurance law with regard to pollution is headed and why specific policies must be formulated to provide adequately for environmental liability coverage.3 Furthermore, in order to contribute to a possible insurance framework for environmental insurance, different forms of specifically designed insurance policies for environmental exposures that are found in other jurisdictions are

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3 It should, however, be noted that this study does not purport to constitute a comparative survey as such a survey does not fall within the ambit of this dissertation. The insurance policies encountered in other jurisdictions are only discussed briefly to show where, in all probability, South African insurance coverage for environmental exposures is headed.
briefly set out. These jurisdictions include the United States of America (USA), and the United Kingdom (UK), and specific reference is also made to the Netherlands, France, Italy and Spain.

2 Constitutional provisions

Constitutional provisions are relevant to the topic under review, as they serve primarily as a theoretical foundation for the interpretation of environmental law principles in the light of insurance. The Constitutional requirement of sustainability is also relevant when an attempt is made to suggest possible solutions to the problem that arises where a polluter cannot compensate for the environmental damage he/she has caused, because of the obligation conferred on the government to promulgate supplementary legislation and/or other measures if the aim of sustainability is not achieved.

The environmental clause of section 24 of the Constitution states the following:

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

4 It should be noted that this dissertation does not purport to be a comparative study, as a comprehensive discussion of the various different insurance policies available internationally would exceed the scope of this dissertation.

5 References to any environmental insurance policies found in these jurisdictions merely serve as an indication that such policies do indeed exist and that they could be used as models in the development of South African insurance law which is designed specifically to provide for insurance for environmental damage. See par. 8.2 for a discussion pertaining to specific insurance policies and the jurisdictions they are found in.

6 The National Environmental Management Act 107 of 1998 (hereafter NEMA) must be interpreted in the spirit of the Constitution. The question is whether the principles underlying NEMA and other statutes can be interpreted as requiring insurance for environmental damage. In this regard, see Bareki NO and another v Gencor Ltd (2006) 2 All SA 392 (T).

7 A full discussion of 'other measures' falls beyond the scope of this dissertation.

This environmental clause is contained in the Bill of Rights. Although the Bill of Rights traditionally has vertical application, indirect horizontal application is achieved in that all legislation must conform to the Bill of Rights and all legislation must be interpreted to give effect to the basic values contained in the Bill of Rights.\(^9\) Indirect horizontal application is also achieved through the interpretation clause, which provides that the interpretation of any law and the application and development of the common law and customary law must be done to conform with and further the spirit, purport and objectives of the Bill of Rights.\(^10\) The implication of such an indirect horizontal application may entail that legal rules that incorporate open-ended standards and principles must be interpreted and applied to reflect the basic values of the Bill of Rights.\(^11\) In the context of NEMA, the duty of care principle and the polluter pays principle are examples of open-ended standards and principles; and the Bill of Rights may therefore have indirect horizontal application where liability for environmental damage is concerned.\(^12\)

Section 24(b) of the Constitution\(^13\) affords a high level of protection to the environment by imposing a positive duty on the state to protect the environment through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation and secure sustainable development.\(^14\) The Constitution thus also confers the power upon the state to provide for reasonable legislative and other measures for addressing

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\(^9\) Havenga 1993 SA Merc LJ 190.

\(^10\) Section 35(3) of the Constitution of the Republic of South Africa, 1996 provides the following: “In the interpretation of any law and the application and development of the common law and customary law, a court shall have due regard to the spirit, purport and objects of this chapter.” In this regard, in Bareki NO and another v Gencor Ltd (2006) 2 All SA 392 (T) the court held that there is a constitutional obligation to promote the spirit, purport and objects of the Bill of Rights when executing its judicial functions and, more specifically, when interpreting any legislation, and when developing the common law, or customary law. In this regard, see Kotze and Du Plessis 2007 to appear in Stell LR 15.

\(^11\) Havenga 1993 SA Merc LJ 190.

\(^12\) This is also demonstrated in par. 3.1 and par. 3.2 below.


\(^14\) S 1 of NEMA defines sustainable development as “the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations”. In this regard, see Soltau 1999 SAJELP 33. Currie and De Waal Bill of Rights Handbook 527.
environmental damage. NEMA and a number of other statutes were promulgated within the framework of the Constitution to realise this duty.

Sections 231, 232, 233 and 39(1)(b) of the Constitution also state that South Africa has a constitutional obligation to heed international law provisions. In particular, section 233 provides that when it is interpreting any legislation, a court must give preference to any reasonable interpretation of the legislation that is consistent with international law over any alternative interpretation that is inconsistent with international law. International practices pertaining to insurance policies for environmental exposures do not constitute international environmental law, but are merely practices which have not obtained the status of *ius cogens.* Cognisance could, however, be taken of these positions, as the interpretation, implementation and developments of environmental law principles in the light of insurance have been dealt with fairly extensively.

It is evident that the Constitution affords a high level of protection to the environment. To promote the spirit, purport and objects of the Bill of Rights, this

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15 Currie and De Waal *Bill of Rights Handbook* 527. These measures consist of, amongst others, criminal sanctions and permitting regimes as well as all reasonable legislative and other measures. Furthermore, the common law also provides for compensatory rules. In this regard, see Soltau 1999 *SAJELP* 33.

16 Other attempts to fulfil this duty to prevent pollution and ecological degradation and to promote conservation includes the *National Water Act* 36 of 1998 (hereafter NWA), the *Water Services Act* 108 of 1997, the *National Forest Act* 84 of 1998, the *Marine Living Resources Act* 18 of 1998, the *National Protected Areas Act* 57 of 2003, the *Biodiversity Act* 10 of 2004 and the *NEMA Amendment Act* 8 of 2004. Currie and De Waal *Bill of Rights Handbook* 528.

17 Scholtz 2005 *TSAR* 69.

18 S 231 deals with international agreements and the signing, ratification and transformation thereof.

19 S 233 provides that when interpreting any legislation, every court must prefer any reasonable interpretation of the legislation that is consistent with international law, over any alternative interpretation that is inconsistent with international law.

20 S 39(1)(b) of the 1996 Constitution compels adjudicating bodies to consider international law when they are interpreting the Bill of Rights.

21 In this regard, see Bernie and Boyle *International Law and the Environment* 94.

22 International law is also an indispensable part of the South African legal order and is therefore very important when cognisance is taken of the international position pertaining to the interpretation, implementation and development of environmental law principles. The international position pertaining to the interpretation and implementation of environmental law principles are discussed in this study with reference to the required financial security measures. See the discussion in par. 7 and par. 8 below.
high level of protection requires broad interpretation legislation. In such an interpretation the question arises whether NEMA contemplates insurance. This depends, amongst other things, on the question of whether insurance is on par with NEMA’s principles of sustainability.23

3 NEMA

NEMA establishes parameters and guidelines for environmental governance in South Africa and serves as the overarching framework for environmental management legislation. It not only provides for integrated environmental management, but also contains several environmental management principles.24 Furthermore, NEMA requires25 that these principles of environmental law serve as guidelines for any organ of state that is making decisions or exercising its functions and NEMA must serve as a framework when any statutory provisions pertaining to environmental protection are promulgated.26

Section 2 of NEMA contains environmental law principles which should guide government departments in the exercise of any of their functions that affect the environment.27 Although these principles have not yet been fully explored by South African courts, they provide a theoretical foundation and resemble international environmental law principles.28

23 The principles are therefore discussed to determine whether financial security, for example, in the form of insurance, conforms to the theoretical structure and purpose of the principles reflected in NEMA, as well as in legislation other than NEMA. The principles are also discussed to ascertain whether they implore an implied obligation to develop an insurance mechanism.
25 S 2 of NEMA provides for the application of principles such as sustainable development, the ‘polluter pays’, precaution and environmental justice. Currie and De Waal Bill of Rights Handbook 528.
26 These principles must also guide the interpretation, administration and implementation of NEMA and any other law concerned with the protection of the environment. In this regard, see Scholtz 2005 TSAR 69.
27 These principles apply throughout the Republic to the actions of all organs of state that may significantly affect the environment. S 2 of NEMA embodies some of the international environmental principles in national environmental law.
28 S 2(1) of NEMA. The international law may assist in the interpretation and application of these principles. See the discussion below with regard to the international interpretation of the principles with reference to insurance as a form of financial guarantee.
In terms of section 2(1)(e) of NEMA, the 'polluter pays' principle, along with other principles, must be used to guide the interpretation, administration and implementation of the Act and any other law concerned with the protection of the environment. With reference to the interpretation of NEMA, the principles are discussed to determine whether financial security in the form of insurance conforms to NEMA's theoretical structure and purpose. More specifically, because cognisance must be taken of the principles when determining reasonable measures, the principles underlying NEMA are of the utmost importance when determining whether insurance can be regarded as a reasonable measure against environmental damage and/or degradation.

The principles of environmental law are also discussed to ascertain whether NEMA imposes an implied obligation on a polluter to insure him/herself adequately against environmental damage. In the implementation context, the underlying principles of sustainability are discussed to ascertain whether the current legislation realises the constitutional requirement of sustainability, or whether supplementary legislation is required.

3.1 Principles of sustainability

3.1.1 The 'polluter pays' principle

The 'polluter pays' principle entails that those responsible for harming the environment must pay the costs of remedying the pollution, environmental degradation and consequent negative health effects caused by the polluter.
Furthermore, the costs of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must also be paid for by those responsible for harming the environment.\(^{32}\) This principle is reflected in section 2(4)(p) of NEMA,\(^ {33}\) which imposes a statutory obligation on the polluter to compensate for environmental damage and/or degradation.\(^ {34}\)

Internalisation of externalities is the economic facet of the 'polluter pays' principle.\(^ {35}\) When sections 2(4)(p),\(^ {36}\) 2(4)(e),\(^ {37}\) 2(4)(i)\(^ {38}\) and 2(4)(ii)\(^ {39}\) are read together, it requires the internalisation of actual or potential external costs, whether in existing or future projects.\(^ {40}\) Internalisation of externalities entails that consequential or incidental costs\(^ {41}\) incurred by third parties attributable to activities of producers whereby natural resources are adversely affected,\(^ {42}\) must be paid for by the producers responsible for the degradation and not by the

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\(^{32}\) Nanda and Pring qualify the 'polluter pays' principle with reference to the internalisation of externalities. In this regard, see Nanda and Pring *International Environmental Law* 40.

\(^{33}\) Stated above.

\(^{34}\) Although nationally incorporated in law by way of statute, the 'polluter pays' principle is not an internationally accepted rule, but can only be classified as soft law. It is not mentioned in the 1972 Stockholm Declaration, but is accepted with qualification in the Rio Declaration. In this regard, see Nanda and Pring *International Environmental Law* 41. The European Union (EU) directive has, however, incorporated the 'polluter pays' principle in that it requires remediation of significant pollution by the polluter at the polluter's own costs. Severe criticism is, however, given of the EU requirement of "significant pollution" - in this regard, see Wallstrom *Utility Week* 2003 13.

\(^{35}\) In this regard, see Nanda and Pring *International Environmental Law* 40 and Barnard *Environmental Law for All* 104.

\(^{36}\) S 2(4)(p) states: "The costs of remedying pollution, environmental degradation and consequential adverse health effects and of controlling or minimising further pollution, environmental degradation and consequential adverse health effects must be paid for by those responsible for harming the environment."

\(^{37}\) Discussed above.

\(^{38}\) S 2(4)(i) states: "The social, economic and environmental impact of activities; including disadvantages and benefits, must be considered, assessed and evaluated and decisions must be appropriate in the light of such consideration and assessment."

\(^{39}\) S 2(4)(ii) states: "Pollution and degradation of the environment are avoided or; where they cannot be altogether avoided; are minimised and remedied."

\(^{40}\) Barnard *Environmental Law for All* 104.

\(^{41}\) In this regard, see further Barnard *Environmental Law for All* 104. In most cases, the externalities are unintended or incidental in nature. External costs refer to the costs of production, the costs of harm to natural resources, human health, environmental, social and cultural harms. In this regard see Nanda and Pring *International Environmental Law* 40.

\(^{42}\) Barnard defines the resources with reference to "commons" and "common commodities" (such as air and water) that belong to nobody on particular but that can be used by everybody. Barnard *Environmental Law for All* 101.
government or the public. The principle argues that these externalities should be shifted back to the polluter and the external costs should be internalised by including them in the calculation of production costs and thus increasing the cost of the product.

It is evident from the foregoing that externalities should be calculated and that the polluter is liable for the remediation of environmental damage caused by the polluter. The salient question is how polluters will pay for environmental damage. In this regard financial security, for example, in the form of insurance, conforms to the purpose and theory of the 'polluter pays' principle, as premiums paid can serve as the internalisation of external costs. Furthermore, insurance would not only be in line with this principle, but may further it, in that the premiums paid would reflect the risks pertaining to externalities and would thus require the calculation of the external cost-related risks. Insurance would also internalise externalities in that a calculated portion of the premiums paid would be internalised by the inclusion thereof in the product price and would be regarded as part of the production costs, so that the producers and customers are made accountable for paying these costs. Moreover, the 'polluter pays' principle entails that there must be compensation. This may be achieved by means of insurance. In short, it is clear that the 'polluter pays' principle requires, or at the very least, implies insurance.

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43 *In esse*, internalisation of externalities thus entails that the costs generated by the producer, but paid for by someone else, must be shifted back to the producer.

44 Costs that are incurred by innocent third parties and that are attributable to harmful activities.

45 Barnard *Environmental Law for All* 104 and 105. There is currently a shift toward the use of market-based instruments (hereafter MBIs) to address the market failure to value, or accurately value, environmental goods and services, and, as such, address environmental concerns that are being accorded insufficient consideration in everyday market activities. These MBIs consist, amongst other things, of environmentally related taxes, levies and user-charges. Paterson *Market Based Instruments* 41. See also Paterson 2006(3) PER 3. In my opinion, insurance will serve as an MBI, as it is a financial method which procures internalisation of externalities, since premiums paid by the polluter will be reflected in the price of products sold.
3.1.2 The precautionary principle

The precautionary principle is one of the most important general environmental principles to avoid environmental damage and to achieve sustainability. The precautionary principle entails that the lack of scientific certainty must not be used as a reason for postponing cost-effective measures to prevent environmental degradation in instances where a threat of serious or irrevocable damage exists. Such an approach is in line with section 2(4)(a) of NEMA, which requires the application of a risk-averse and cautious approach with consideration of the limits of current knowledge about the consequences of decisions and actions. As insurance can afford coverage against both foreseeable and unforeseeable events, insurance may serve as a measure to implement the precautionary principle in a comprehensive manner in practice, because it may be a preventive and cost-effective measure to compensate for environmental damage.

Although it is clear that the polluter is liable for prevention, remediation and compensation of environmental damage, the question arises whether the polluter incurs liability if the damage is unforeseeable. It should be noted that a comprehensive discussion of the precautionary principle falls beyond the scope of this dissertation. For the purposes of this dissertation, the essence of this principle is discussed to indicate that insurance for environmental damage conforms to the theoretical foundation thereof. It is also discussed to indicate that insurance for environmental damage is possible in cases where there is a lack of full scientific certainty and/or damage is unforeseeable.

The constitutional environmental clause and the principles contained in NEMA are aimed at a high level of protection of the environment and are based on, amongst others, the precautionary principle and the principle that preventative action should be taken. See Hunter Salzman and Zaelke International Environmental Law 587.

Application of the precautionary principle will throw light on issues such as electromagnetic fields and the standards applicable to the use of new chemicals. In this regard, see Hunter Salzman and Zaelke International Environmental Law 587 and Glazewski Environmental Law in South Africa 18.

Section 2(4)(a) (vii) of NEMA states: "...that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions..." and (viii) "that negative impacts on the environment and on people’s environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied." In this regard, see Glazewski Environmental Law in South Africa 18.

See the discussion pertaining to insurance below.
3.1.3 The preventive principle

The preventive principle aims to minimise environmental damage by requiring that action be taken prior to the manifestation of environmental damage or at the earliest possible stage in any activity which does or will cause environmental damage. This principle, as such, may contemplate insurance for environmental damage, as this may constitute an action taken prior to the manifestation of the risk to minimise or rectify the detrimental financial effects of manifestation of environmental damage.

From all of the foregoing it may be deduced that the principles underlying NEMA not only support insurance for environmental damage, but may even imply such insurance.

3.2 Reasonable measures

Chapter 7 of NEMA, which deals with enforcement and compliance, places a duty of care on each citizen to prevent pollution or degradation of the environment. In terms of section 28, reasonable measures must be taken by any person who causes, has caused or may cause pollution. These

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51 A detailed analysis of the preventive principle falls beyond the scope of this dissertation. For the purposes of this dissertation only the essence of this principle is discussed to indicate that it, too, contemplates insurance.
52 Glazewski Environmental Law in South Africa 18.
53 See the discussion pertaining to insurance for environmental damage in par. 7 below.
54 Soltau 1999 SAJELP 8.
55 Reasonable measures include an environmental impact assessment, to cease, modify or control any act, activity or process causing the pollution or degradation, to contain or prevent the movement of pollutants of degradation, to eliminate the source of pollution or degradation and to remedy the effects of pollution or degradation.
56 S 28(1) of NEMA states: "Every person who causes, has caused or may cause pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or so far as such harm to the environment is authorized by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."

In terms of the NWA, persons on whom the duty is imposed include the landowner, the person in possession of the land and any person who has the right to use the land. S 19(1) of the NWA states that in the prevention and remedying the effects of pollution, an "owner of land, a person in
reasonable measures compel a person to prevent pollution from occurring, continuing or recurring and/or to minimise and rectify the effect of the pollution.57

Reasonable measures include, amongst others, the investigation, assessment and evaluation of the impact of activities on the environment, the containment or prevention of the movement of pollutants, the elimination of the sources of pollution and the remediation of the effects of pollution.58 Measures that are deemed reasonable also depend on the type of activity in question.59 Although a list of reasonable measures is provided,60 this list is not exhaustive. Instead, it is aimed at guiding both the authorities and potential polluters to act in accordance with the spirit and purpose of the Act and to take the applicable reasonable measures.

57 Because s 28 is broadly framed, reasonable measures may include mandatory financial security in the form of insurance.

58 Anon 2003 ReSource. S 28(3) states that “the measures required in terms of subsection (1) may include measures to- (a) investigate, assess and evaluate the impact on the environment; (b) inform and educate employees about the environmental risks of their work and the manner in which their tasks must be performed in order to avoid causing significant pollution or degradation of the environment; (c) cease, modify or control any act, activity or process causing the pollution or degradation; (d) contain or prevent the movement of pollutants or the causant of degradation; (e) eliminate any source of the pollution or degradation; or (f) remedy the effects of the pollution or degradation.” The NWA also requires that reasonable measures must be taken by any person who causes, has caused or is likely to cause pollution of water resources. The reasonable measures listed in s 19(2) of the NWA include measures to “(a) cease, modify or control any act or process causing the pollution; (b) comply with any prescribed waste standard or management practice; (c) contain or prevent the movement of pollutants; (d) eliminate any source of the pollution; (e) remedy the effects of the pollution; and (f) remedy the effects of any disturbance to the bed and banks of a watercourse.”

59 Soltau 1999 SAJELP 46. Glazewski Environmental Law in South Africa 150 states: “Although these measures are extensive, they are stated in broad terms.” He is also of the opinion that more specific guidelines must be promulgated to ascertain what reasonable measures would be under particular circumstances.

60 Reasonable measures that must be undertaken include investigations, training, ceasing or modification of activities or process containment and remediation. In this regard, see Kotzé and Bosman Responsibilities, Liabilities and Duties for Remediation and Mine Closure under the MPRDA and NWA 23.
In determining whether reasonable measures have been taken, the concept of negligence plays a central role in court proceedings. In terms of common law, negligence is determined by establishing the foreseeability of harm and whether reasonable steps to prevent such harm have been taken. In determining whether reasonable measures have been taken, cognisance should be taken of, amongst other things, the degree or extent of the risk created by the activity and the gravity of the possible consequences if the risk of harm materialises. In the light of NEMA, reasonable measures are also determined with reference to the provisions and principles of NEMA. The point in time when reasonable measures have to be taken will, for example, be determined with reference to the precautionary principle, which establishes the point in time when risk to the environment justifies taking reasonable measures to avert or minimise the environmental damage. In this regard, financial security in the form, for example, of insurance would assist in determining whether reasonable measures have been taken, in that the calculation of premiums would reflect the reasonable foreseeability of harm to the environment: the more likely it is that the risk will materialise, the higher the premiums paid will be.

The importance of this duty lies in its application to all conduct, whether present or future, which causes pollution or degradation of the environment. The wide scope of application is neither limited to specific activities, nor to specific media;

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61 Soltau 1999 SAJELP 46. The elements of delict must be proven in order to succeed with a claim for environmental liability. Furthermore, to succeed with a claim for environmental damage on delictual cause of action requires proof of the act, wrongfulness, fault and causation. Proving these elements is difficult, as pollution can be caused by more than one person, damage to the environment can manifest in a location other than the place where the pollution occurred, and intent or negligence is difficult to prove. In this regard, see Prozesky-Kuschke 2000 TSAR 498.

62 Soltau 1999 SAJELP 44.

63 Other considerations include the utility of the polluter's conduct and the burden of eliminating the risk of harm. In this regard, see Soltau 1999 SAJELP 46.

64 Soltau 1999 SAJELP 46 refers to criteria set out in Pretoria City Council v De Jager 1997 (2) SA (A). In terms of s 28(5)(c) of NEMA, when considering any measure taken, the DG must take into account the severity of any impact on the environment.

65 In terms of s 28(5)(a) of NEMA, when considering any measure taken, the DG must take into account the principles set out in s 2 of NEMA.

66 Glazewski Environmental Law in South Africa 149, Soltau 1999 SAJELP 43. In Bareki NO and another v Gencor Ltd (2006) 2 All SA 392 (T) it was held that this duty does not apply retrospectively.
and all environmentally damaging activities are subject to the duty to take reasonable measures. The duty to take reasonable measures extends to cases where environmental damage is authorised by law or cannot reasonably be avoided or stopped, and is triggered where a person's activities cause, have caused or threaten to cause significant pollution or degradation of the environment.

Measures that must be taken by the polluter to satisfy his/her duty of care must be interpreted in the light of the aim of section 24 of the Constitution and of NEMA, which contain the protection of human health and well-being, as well as the environment, against any harmful effects caused by pollution. When considering the high level of protection afforded by the Constitution and NEMA, and the principles of environmental policy laid down in them, as well as their objectives, broad application, interpretation and implementation of protection methods are required.

Because section 28 is so broadly framed, there are no ironclad rules as to what will satisfy the duty to take reasonable measures. This duty can therefore also be interpreted as including the provision of financial assurance that the costs

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67 Soltau 1999 SAJELP 43
68 In this regard, pollution is certain. The scope of the manifestation of environmental damages, however, is diverse, as it can, for example, include clean-up costs, rehabilitation of the ecosystem, pure economic loss, and so forth. This raises the question of whether insurance is possible. See the discussion in par. 7.2.1 below.
69 Soltau 1999 SAJELP 43. The term "significant pollution" must be interpreted with reference to the high level of protection afforded to the environment. As such, the level pollution that will be deemed significant will not be particularly high. In this regard, see Glazewski Environmental Law in South Africa 150 for a discussion of "significant pollution".
70 Ironically, however, this broad scope of application causes the duty of care to not apply equally effectively to all environmental liability scenarios and that suggests that more detailed legislation is necessary to reflect, enforce and/or further this principle. Soltau argues that more detailed legislation, for example, along the lines of the Comprehensive Environmental Response Compensation and Liability Act (hereafter CERCLA), are necessary to tackle the problem of cleaning up contaminated land, and that legislation on the ongoing duty to minimise and rectify pollution is to be welcomed. In this regard, see Soltau 1999 SAJELP 34.
71 It should be noted that environmental damage is broader than pollution, as pollution is merely one of the factors that may cause damage.
incurred from any reparation of environmental damages will be paid.\textsuperscript{72} Similarly, as the broadly framed section 28 is aimed at prevention and rectification, such steps could be interpreted as including financial security in the form of insurance, as it may serve the purpose of rectifying environmental damage.

From the foregoing, it is clear that section 28 of NEMA could contemplate insurance as a reasonable method of effecting remediation of and compensation for environmental damage and/or degradation.\textsuperscript{73}

\section*{4 Liability provisions other than NEMA}

To determine the application of environmental law principles to insurance, it must be ascertained whether other statutory provisions could also contemplate insurance as a solution to the problem that arises where environmental damages cannot be compensated for financial or other reasons.\textsuperscript{74} In this regard, the \textit{Mineral and Petroleum Resources Development Act}\textsuperscript{75} (hereafter the MPRDA) currently requires various forms of financial security. This Act may serve as a framework within which environmental law can develop to provide for an insurance mechanism to address environmental pollution.

\begin{itemize}
\item \textsuperscript{72} I submit that the duty of care could theoretically include the duty to give financial security to minimise and/or rectify pollution or degradation of the environment.
\item \textsuperscript{73} In this regard, insurance may constitute a reasonable measure, as it serves as an assurance that the effects of environmental degradation will be remedied in that, amongst other things, clean-up costs will be paid for. Insurance may constitute a reasonable measure, as the reparation of liability claims will be spread monthly through the premiums paid.
\item \textsuperscript{74} It should be noted that other statutes such as the NWA could also contemplate insurance. This is because reasonable measures that may be taken under the duty of care principle, as incorporated in section 28 of NEMA, and the duty to compensate if such reasonable measures are not taken, is also reflected in section 19 of the NWA. The NWA also reflects the 'polluter pays' principle, in that the relevant authority may recover the costs of remedying environmental damage from the polluter if these costs are borne by the government. The \textit{Environment Conservation Act} 73 of 1989 is another example of an Act which encompasses both the 'polluter pays' principle and the duty of care principle under s 31A, in that the relevant authority may direct a polluter to take steps to prevent or minimise damage to the environment and/or to direct the polluter to rehabilitate environmental damage. In this regard, see Soltau 1999 \textit{SAJELP} 42.
\item \textsuperscript{75} \textit{Mineral and Petroleum Resources Development Act} 28 of 2002.
\end{itemize}
The provisions of the MPRDA require financial security for the remediation of environmental damage or the management of negative environmental impacts. Such financial security is required from an applicant for a mining right or permit and is a prerequisite for the approval of a mining right or permit. Financial provision is defined as insurance, a bank guarantee, a trust fund or cash that must be provided as a prerequisite for approval of the application. After approval, the availability of sufficient funds for rehabilitation must, amongst other things, be guaranteed; and such liabilities, as well as contributions to the relevant financial provision, must be assessed annually. This financial security obligation exists until activities cease in terms of a closure certificate. Reimbursement, if applicable takes place after rehabilitation costs have been deducted. Arguing in the context of insurance against environmental damage, a similar provision could be implemented whereby an insurance certificate is required as part of an environmental impact assessment and as a prerequisite for the approval of the activity in question.

From the above, it is clear that financial security in the form of insurance conforms to the theoretical structure of the principles underlying NEMA, as the Act could contemplate insurance as one method of remediation of environmental damages. The question, however, arises whether there is a need for such financial security.

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76 S 41 and s 1 of the MPRDA.
77 Remediation refers to "The improvement of contaminated land areas or degraded river ecosystems to a situation where new sequential land use or river ecosystem has been established." In this regard, see Bosman and Kotze Responsibilities, Liabilities and Duties for Remediation and Mine Closure under the MPRDA and NWA 24.
78 In this regard, see Bosman and Kotze Responsibilities, Liabilities and Duties for Remediation and Mine Closure under the MPRDA and NWA 24.
79 Approval of the Environmental Management Programme (hereafter EMP).
80 Bosman and Kotze Responsibilities, Liabilities and Duties for Remediation and Mine Closure under the MPRDA and NWA 24
81 Reimbursement may be applicable if the security provision takes the form of a trust fund or cash.
82 In this regard, see Bosman and Kotze Responsibilities, Liabilities and Duties for Remediation and Mine Closure under the MPRDA and NWA 24.
83 Financial security may be found in insurance, but may only be applicable to mining. Insurance as a financial security method may, however, be expanded to other sectors.
5 The need for financial security: an example

In practice, there is the problem that a polluter can escape liability, for example, if the polluter's funds are insufficient or if the entity uses small subsidiaries to perform environmentally damaging activities. A subsidiary is a business organisation that has a separate and independent legal personality from that of its 'holding company' or 'parent company' in a country where it is incorporated.84 This corporate structure is used as a corporate screen to put the companies' assets beyond the reach of claimants.85 If such a corporate screen is not lifted, the danger arises that the environment may not be effectively protected by the legislation affecting the polluters concerned, as the costs of environmental damages may be passed on to the government and, in turn, the taxpayer. If, however, financial security in the form of insurance is required, this issue could be resolved, as the payment of premiums will be mandatory and the subsidiary will in any event incur liability to pay the premiums for insurance coverage for environmental exposures.86 As such, mandatory financial security in the form of insurance may thus be vital to implement and reinforce the 'polluter pays' principle and, more generally, to procure environmental protection through insuring remediation.87

84 As such, a distinction is drawn between a subsidiary company and a branch of the parent company as a branch does not constitute a separate legal entity. Control over the subsidiary company can be vested in the parent company through various means, which include majority shares, participation rights and/or voting rights. Although courts are empowered to "lift the corporate screen" and hold the parent company liable for environmental damage, it must first be proved that the subsidiary has acted as agent for the parent company or was merely a sham or facade. In this regard, see Schmitthoff Export Trade 612-617.

85 The Thor Chemicals' mercury poisoning saga is a classical example of companies using a corporate structure to escape liability. In that case, Thor Chemicals, a manufacturer of mercury-based chemicals, relocated its operations to South Africa after being threatened with court action in England. When mercury poisoning came to light and claims were instituted against the parent company, Thor Chemicals changed its corporate structure in order to put its assets beyond the reach of future claimants. The matter was settled by means of settlement claims. In this regard, see Meeran 1999 HYPERLINK www.labournet.net/images/cape/campana.htm 5July 2006. Friends of the Earth Europe 2006 HYPERLINK www.foeeurope.org 5July 2006.

86 The payment of premiums may be regarded as a method whereby externalities are internalised. See par. 3.1 above. In this regard, the parent company will incur liability to pay premiums, albeit through the 'subsidiary'.

87 For example, Company A, the parent company, uses Company B as a scapegoat to perform environmentally damaging activities. When environmental damage comes to light, Company B is
Although financial security could resolve this issue and ensure environmental remediation, not all financial securities are equally effective. A guarantee, as required by the MPRDA may, for example, be woefully inadequate in the light of the diversity of environmental damage and magnitude of the damages incurred.\textsuperscript{88} However, financial security in the form of insurance could guarantee more adequate remediation of environmental damage.\textsuperscript{89}

6 Market-based instruments for environmental governance

Currently there is a growing recognition that market-based instruments (hereafter MBIs) constitute reasonable measures for facilitating environmental management and ultimately, sustainable development.\textsuperscript{90} These instruments seek to correct a market failure to value, or accurately value, environmental goods and services, and, as such, they address environmental concerns that are accorded insufficient consideration in everyday market activities.\textsuperscript{91} In this regard, insurance may serve as an MBI, as it constitutes a financial tool to facilitate environmental management and to procure sustainable development through, amongst other things, the internalisation of externalities, ensuring remediation and requiring and assisting in risk assessment.

\textsuperscript{88} A guarantee entails that a specified, limited amount will be paid when a certain event occurs. The inadequacy of guarantees can be explained by the following example: if an oil pipeline bursts, a nuclear plant explodes as a resultant. The scale of damage to the environment, health of the people and economy may be extensive. If a guarantee, for example, provides that compensation up to R1 million can be paid for damage suffered by authorities, companies and citizens, it will be inadequate if the actual costs amount to R20 million, excluding the damage which may still unfold. As a result, the taxpayer is likely to end up footing the bill.

\textsuperscript{89} This would, however, be subject to the limitation of the liability of the insurer that is contractually agreed upon.

\textsuperscript{90} These MBIs consist of, amongst other things, environmentally related taxes, levies and user-charges. Paterson \textit{Market Based Instruments} 41.

\textsuperscript{91} Paterson \textit{Market Based Instruments} 41. See also Paterson 2006(3) PER 4.
From the polluters' point of view, environmental liabilities have become formidable exposures, as the environmental statutory framework and principles afford a high level of protection to the environment. Hence, it is increasingly becoming necessary for polluters to obtain insurance coverage for environmental exposures.92

7 Insurance for environmental damage93

Previous paragraphs have investigated the need for insurance and whether South African environmental law supports the incorporation of insurance in our legal system. In the light of the inference drawn that the principles of sustainability may imply an obligation to obtain insurance coverage, it must be ascertained whether it is in fact possible to insure oneself against environmental damage and/or degradation.94

Insuring against environmental damages poses unique challenges to traditional insurance coverage with regard to the character of the insurable interest of the insured; the risk element, especially with regard to the subject matter of the insurance contract; and the peril insured against. In some instances, damage has already manifested and this study also investigates whether, in these circumstances, coverage can still be procured.95 The premium and payment thereof can also prove to be problematic, as the monthly payment of premiums can be stopped, or the insured can be liquidated. This is problematic, as the insurer will not incur liability in these circumstances and environmental remediation through compensation will not be achieved.

92 Brian 1993 Business Source Premier 63.
93 Reference to the "insured polluter" is to the polluter, as well as to others responsible for the environmental damage and/or degradation. The insured polluter thus refers to the perpetrator who is insured.
94 If the inference pertaining to an implied insurance obligation is, however, not correct, insurance is in any event a feasible method whereby reasonable measures can be procured and could constitute an effective environmental protection method. The discussion pertaining to the essentialia of an insurance contract thus remains relevant.
95 In this regard, the issue of insurance "lost or not lost" is investigated.
Furthermore, environmental liability gives rise to certain problems in the context of insurance that normal liability insurance may not address ipso iure.\textsuperscript{96} Environmental damage can, for example, be caused as result of a gradual process and damage could manifest only years after the environmentally damaging act was committed.\textsuperscript{97} Damage may only become apparent long after the activity which has caused it has ceased. Insurers under a normal liability policy could be held liable for activities carried out by the polluter in the insured period. The question arises, moreover, whether the insurer can be held liable for the activities of previous polluters on the property that is currently insured.\textsuperscript{98} Also, insuring environmental damage requires a careful analysis of the risk and scope of environmental liability with which insurers arguably have little experience.\textsuperscript{99} Uncertainty about the scope of liability is also attributable to developments in case law regarding, amongst other things, causation and the concept of environmental damage.\textsuperscript{100} Additional liabilities may be incurred by the insured as a further result of continuous developments in environmental law and the promulgation of legislation that imposes new liabilities.\textsuperscript{101} The question is whether the obligations of the insurer will be increased and whether the insurer will still incur liability if these developments occur after the insurance contract has been concluded.\textsuperscript{102}

\textsuperscript{96} Bocken Kezel and Bernauw "Report on limitations of liability and compulsory insurance" 30.
\textsuperscript{97} For example, the emission of by-products of industrial processes, the use of chemicals instead of explosives, and so forth. In this regard, the “long tail” liability issue becomes relevant. See par. 7.2.6 below. Prozesky-Kuschke 2000 TSAR 501. See also Kotzé and Du Plessis 2007 to appear in Stell LR 3. See the discussion in par. 7.2.6 below.
\textsuperscript{98} This issue is addressed in par. 7.2.6 below.
\textsuperscript{99} Bocken Kezel and Bernauw "Report on limitations of liability and compulsory insurance" 30.
\textsuperscript{100} In this regard, see par. 7.2.1 below.
\textsuperscript{101} Bocken Kezel and Bernauw "Report on limitations of liability and compulsory insurance" 30. International environmental law is one of the fastest developing bodies of law; and in recent years, there has been remarkable development of environmental law in South Africa in the form of the enactment of wide-ranging legislation. The effect thereof is that additional liabilities are incurred by the perpetrator (i.e. the insured polluter) and, in turn, the insurer. Sands Principles of Environmental Law 25. This issue is addressed in par. 7.2.5 below.
\textsuperscript{102} This issue is addressed in par. 7.2.5 below.
In contrast with the international position, South Africa does not have specific insurance policies that provide exclusively for environmental exposures.\(^{103}\) This means that ordinary insurance policies must be taken out in the interim. In the light of the unique challenges to traditional insurance policies, the question arises whether insuring against environmental damage is possible and, if it is possible, whether environmental exposures are covered sufficiently by taking out an ordinary insurance contract. Both these questions depend on whether insuring against environmental damage conforms to the essentialia of an insurance contract.\(^{104}\) The issues under discussion are the insurable interest, the risk and the premium.\(^{105}\)

7.1 Insurable interest\(^{106}\)

According to Davis,\(^{107}\) a person has an insurable interest if he/she can show that he/she can lose something of appreciable commercial value due to the loss, destruction or damage to the object insured. The concept of an insurable interest entails that a person must have some legally recognised interest in the subject matter insured before he/she can obtain insurance coverage.\(^{108}\) According to Reineke\(^{109}\) the concept of an insurable interest should be interpreted to coincide with loss or damage as generally understood in the law of damages, unless the

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\(^{103}\) See par. 8 below for a discussion of specific insurance policies for environmental damage found internationally. It should, however, be noted that the discussion of different insurance policies found internationally does not purport to constitute a comparative study.

\(^{104}\) As stated above, the essentialia of an insurance contract are also discussed in this study to ascertain whether insurance for environmental damage and/or degradation is possible.

\(^{105}\) It should, however, be noted that due to the limited scope of this dissertation, a full discussion of all of the relevant insurance law principles is not possible. Hence, only the single most important aspects of the general principles of insurance law are focused on.

\(^{106}\) For a full discussion on the insurable interest, see Reinecke et al General Principles 34 and Davis Gordon and Getz on Insurance 91.

\(^{107}\) Davis Gordon and Getz on Insurance 99.

\(^{108}\) Davis Gordon and Getz on Insurance 92 explains that a person will have an insurable interest in the happening of an event if he/she is so situated that the happening of the event on which the insurance money is to become payable would, as a proximate cause, involve the insured in the loss or diminution of any right recognised by law or any legal liability. This interest will be to the extent of the possible loss or liability.

\(^{109}\) Reinecke et al General Principles 39
parties choose to give a more restricted or extensive meaning to the concept.\textsuperscript{110} Such an interest exists if the occurrence of the insured event will lead to a loss or damage which, in turn, will lead to a diminution of the person's estate. There is even be an insurable interest where a person incurs a legal liability.\textsuperscript{111} If an obligation is imposed by statute, and performance of such an obligation will have a negative effect on a person's patrimony, the prerequisites pertaining to an insurable interest are complied with.\textsuperscript{112} In the environmental context an insurable interest does indeed exist, because, as a result of the 'polluter pays', preventative and the precautionary principles, the perpetrator is liable to compensate for the damage and/or degradation he/she has caused.\textsuperscript{113} Also, numerous statutes impose an obligation on the polluter to prevent environmental damage and/or degradation and/or to minimise the effects of environmental damage or degradation by taking reasonable measures. This, in turn, may have a financial impact that will affect the polluter's financial capacity or his/her patrimony and accordingly, will constitute an insurable interest.\textsuperscript{114}

7.2 The risk\textsuperscript{115}

Another challenge posed to traditional insurance coverage pertains to the risk element, especially with regard to the subject matter of the insurance contract and the peril insured against. The risk entails the possibility of damage or detriment due to an uncertain event which may lead to an undesirable alteration

\textsuperscript{110} Reinecke \textit{et al} \textit{General Principles} 38 states that an insurable interest is an economic interest which relates to the risk which a person runs in respect of a thing which, if damaged or destroyed will cause him/her to suffer an economic loss.

\textsuperscript{111} Reinecke \textit{et al} \textit{General Principles} 32.

\textsuperscript{112} S 28 of NEMA and s 19 of the NWA serve as examples of when an obligation is imposed by law and, in turn, when an insurable interest will exist. In this regard, see par. 3 above.

\textsuperscript{113} The legal liability constitutes the basis of the insurable interest. In this regard, see Reinecke \textit{et al} \textit{General Principles} 34. As such, the position complies with the definition accorded to an insurable interest and a potential polluter can insure.

\textsuperscript{114} Simply put, this means that the activities of the polluter result in his/her incurring a legal liability. On these grounds, the polluter has an insurable interest. The fact that the insured is not the owner of the polluting site is irrelevant, as any of abovementioned persons can be held liable and has an insurable interest.

\textsuperscript{115} For a full discussion of the risk, see Reinecke \textit{et al} \textit{General Principles} 261 and Davis Gordon and Getz on Insurance 174.
of the insured's patrimony. The insurer will only be liable to compensate for environmental damage if there is a loss falling within the limits and scope of the policy, in other words, if there is a loss within the definition of the risk as phrased in the policy. The risk can be defined with reference to the subject matter of the contract, or the peril or the circumstances that influence the risk. To determine which of these methods adequately describes the risk of environmental damage and/or degradation, the discussion that follows is aimed at an analysis of the subject matter of the contract, the peril and the circumstances that influence the risk.

7.2.1 The subject matter of an insurance contract

The subject matter of an insurance contract is usually a specific object. In the case of environmental damage, it is not always possible to identify a specific object, due to the diversity of manifestations of environmental damage. Environmental damage can, for example, manifest itself in bodily injury to third parties, damage to property owned by the insured or by third parties, or property that is not capable of private ownership and/or property that does not belong to

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116 The risk represents the burden of potential loss that is transferred to the insurer in consideration of the premium. See Reinecke et al General Principles 187; Davis Gordon and Getz on Insurance 174. The uncertainty does not pertain to any change which is undesirable to the person exposed to the risk as it pertains to an undesirable alteration of the patrimonial circumstances of that person. Reinecke et al General Principles 164, 170.

117 Reinecke et al General Principles 170. In the environmental law context, the risk may, for example, be defined as pollution. Because the polluter is liable for remediation, this leads to an undesirable alteration in his/her patrimony.

118 The relevant insurance contract is an indemnity insurance contract. Indemnity insurance entails a contract between the insurer and the insured in terms of which the insurer indemnifies the insured for patrimonial loss or the damage suffered as the proximate result of the manifestation of the peril insured against, to restore the insured to his/her position quo ante. Indemnity insurance can be divided into property insurance and liability insurance. The differentiation will depend on the nature of the insured interest. While property insurance is concerned with the positive elements of the insured estate, liability insurance is concerned with the negative elements which come into being as part of the insured's patrimony. It should, however, be borne in mind that the insurer will only be liable in accordance with the limits and scope of the cover provided.

119 For example, a motor vehicle or property of the insured. In the case of life insurance, the life insured is deemed the subject matter of the insurance contract. Davis Gordon and Getz on Insurance 175.
Environmental damage could also include clean-up costs, rehabilitation of the ecosystem, pure economic loss, and so forth. By identifying the subject matter of the insurance contract as the environment, the extent to which a polluter can be held liable for environmental damage depends on what environmental damage entails. In turn, environmental damage depends on the definition of the environment. Before insurance coverage can be obtained, or for that matter, before mandatory insurance can be required, the areas of coverage must be clearly defined and assessed. The kind of environmental harm that triggers liability thus depends on the ambit of the definition of the environment. NEMA contains a comprehensive definition of the term "environment". It provides that the environment is "the surroundings within which humans exist and includes the physical, chemical aesthetic and cultural properties and conditions of any part or combination of the land, water, atmosphere of the earth, micro-organisms, plant and animal life and the interrelationship between them". This definition appears to include manmade structures as it includes all damage or loss caused to people or things and is not

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120 Res extra commercium and/or the res universitas.
121 Pure economic loss entails patrimonial (pecuniary) loss suffered by the plaintiff that did not result from physical damage to the person or the property of the plaintiff. As such, pure economic loss can include loss of profit, production losses and clean-up costs for environmental damage. Kotze 2002 SAYIL 174, 177. These losses are not normally compensated for under insurance and must therefore specifically be included in the insurance contract. This is why a specific environmental policy should be developed so that these damages are included.
122 Prozesky-Kuschke 2000 TSAR 494.
123 Economist Intelligence Unit Ltd 2004 Business Europe 5.
124 The definition of the environment must first be determined to ascertain whether the scope of liability, and in turn, the insurable risk, includes liability for damage to manmade objects, cultural and historical heritage. In this regard, see Currie and De Waal Bill of Rights Handbook 525 and Soltau 1999 SAJELP 35.
125 According to S 1 of NEMA, the 'environment' means: "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, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being;"

In this regard, see Scholtz 2005 TSAR 69, BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs 2004 (5) SA 124 (W) 151 as referred to in Currie and De Waal Bill of Rights Handbook 525.
limited to damage to or pollution of only natural resources.\textsuperscript{126} It can also include
the health and well-being of people, especially when read in terms of section 24
of the Constitution.

To identify the environment as the subject of a normal insurance contract may
thus be too vague, as the environment is too broadly defined. It is also likely that
no insurance company will accept such a risk, as the possibility of detriment and,
in turn, liability may be immense. If the insurer is, however, willing to accept the
risk, the premiums will be high.\textsuperscript{127} The subject matter of the risk must therefore
be described with reference to the specific peril that exists.\textsuperscript{128} The question is
whether such a method can be in line with the general principles of insurance
law. Alternatively, the insurance contract can be classified according to the
nature of the event insured against by using specialised insurance contracts that
are specifically designed to afford coverage for environmental damage.\textsuperscript{129}

7.2.2 The peril

As mentioned above, the risk can be described with reference to the specific peril. Therefore, another challenge posed by insuring against environmental

\footnotesize{\textsuperscript{126} Prozesky-Kuschke 2000 TSAR 495.}
\footnotesize{\textsuperscript{127} In Nahan NO v Ocean Accident & Guarantee Corporation Ltd 1959 (1) SA 65 (N) the insurer
knew of the insured’s previous convictions for reckless driving, but still afforded coverage, albeit
at a high premium. The court found that, although the driving had been reckless, the insurer had
taken the contract of insurance with its eyes open on the basis of a calculated risk and,
accordingly, incurred liability. It was further held that it is not against public policy that the insurer
should have to lie in the bed it had made for itself. In this regard, see Davis Gordon and Getz on
Insurance 176.

\textsuperscript{128} The specific peril can also, to my mind, be defined with reference to the specific activity
performed (as the source of the potential loss) and the environmental impacts linked with that
activity. This position could be ascertained by using the new environmental impact assessment
strategies, in combination with EMIs who assess the risks and procure performance of the
environmental impact assessment. Mudslides and sinkholes can, for example, be defined as
specific perils linked to mining activities. It should be noted that the same argument may also
apply to par. 7.2.4 below, as the activities of the polluter can also constitute circumstances that
have an effect on the risk. In this regard, certain policies, for example, state that weapons may
not be manufactured in a wooden construction or under a grass roof. In this regard, see Davis
Gordon and Getz on Insurance 176.

\textsuperscript{129} Reinecke et al General Principles 5. See the discussion below of the specialised insurance
policies available internationally.
damage relates to the scope of the peril covered in traditional insurance contracts. The peril refers to the source of the potential loss.\textsuperscript{130} Even under traditional all-risk policies, the coverage afforded is aimed at coverage of a potential risk, and not of a certainty.\textsuperscript{131} In the environmental law context, many activities of producers entail that environmental damage cannot be avoided and these activities may be permitted by law.\textsuperscript{132} In these circumstances, the polluter is still required to minimise or remedy the effects of environmental pollution. The question thus arises whether insurance would be possible, as the peril is not only certain, but is also caused by the insured polluter’s conduct. In the first instance, the peril is certain and would \textit{prima facie} not be coverable, although a duty exists to avert the risk from materialising or to minimise the effects thereof. In this regard, insurance against events that are certain can be procured by combining the event that is inevitable with an uncertain event.\textsuperscript{133} Although the peril is certain in circumstances where environmental damage is inevitable, the extent of the damage that will be incurred is uncertain and insurance may, as such, be possible, albeit probably at a very high premium.\textsuperscript{134} It may also be uncertain when the risk will materialise.\textsuperscript{135} In general, forms of insurance coverage such as personal life insurance policies exist which afford coverage even though the peril

\textsuperscript{130} The peril can also be referred to as the hazard.

\textsuperscript{131} Davis Gordon and Getz on Insurance 478.

\textsuperscript{132} S 28(1) of NEMA recognises that in certain circumstances harm to the environment is authorised by law or cannot reasonably be avoided or stopped. In these circumstances measures must be taken to minimise and rectify such pollution or degradation of the environment. In activities regulated by the MPRDA, such as mining, fuel and electricity production, damage to the environment is certain and a permit allows for continuation of these activities. In this regard, financial security for the remediation of environmental damage or the management of negative environmental impacts is required.

\textsuperscript{133} Reinecke \textit{et al} General Principles 77. For example, the putrefaction of meat because of an interruption in the electricity supply. Insurance against events that are certain is also possible through the insertion of a contractual clause to that effect, although Reinecke \textit{et al} General Principles 77 submit that such cover is \textit{pro tanto} not insurance. According to Davis Gordon and Getz on Insurance 175, coverage against events that are certain is only possible if such events are contractually included in the insurance contract.

\textsuperscript{134} The scope of the manifestation of environmental damage may, for example, include clean-up costs, costs relating to rehabilitation of the ecosystem, pure economic loss and so forth.

\textsuperscript{135} The damage may become manifest only years after the environmentally damaging act was committed. In this regard, also see par. 7.2.7 below.
is certain, but it is uncertain when the peril will realise.\textsuperscript{136} Arguing in the context of insurance for environmental damage, insurance would thus be possible even if the peril – environmental pollution – is certain, as the extent of environmental damage and/or degradation, as well as the time of materialisation of the risk could constitute an uncertainty.

7.2.3 Circumstances that influence the risk

The risk can be defined not only with reference to the subject matter of the contract, but also in terms of the circumstances that influence the risk.\textsuperscript{137} A life or personal accident insurance may, for example, be defined with reference to the modes or areas of travel or types of occupation.\textsuperscript{138} In an environmental context, the environmentally damaging act committed by the polluter can constitute such a circumstance. The place where the act is committed, the time when the act is committed or the circumstances under which the act is committed can also constitute circumstances that influence the risk. So, for example, when hazardous waste is transported on a wet road in a severe storm, this act poses a greater risk than if the waste is transported on a dry road. Dolomite ground, for example, constitutes a circumstance that influences the risk of sinkholes in mining activities. Improper construction or insufficient drying of slime dumps, for example, constitutes circumstances that influence the risk of mud slides of slime dumps in mining activities.

7.2.4 Materialisation of the risk

The question arises whether the insurer will incur liability if the conduct of the insured polluter causes environmental damage. In general, the conduct of the

\textsuperscript{136} The peril in life insurance policies is the death of the person whose life is insured. In this regard, death is certain, although it is uncertain when it will occur.
\textsuperscript{137} Davis Gordon and Getz on Insurance 176.
\textsuperscript{138} Davis Gordon and Getz on Insurance 176.
insured which causes the risk to materialise must firstly be within the description of the risk insured. Whether the insured will be liable for loss as a result of the conduct of the insured is a matter of construction of the contract as the parties may expressly or by implication agree to a limitation of the risk or an exception to the risk so caused. As risk entails a possibility and not a certainty, human conduct is included as a peril. The fact that the conduct involved is that of the insured and not of a third party does not alter this position.

The legal position pertaining to the liability of the insurer for conduct of the insured differs, depending on whether the conduct was faultless, negligent or intentional. Unless this liability is contractually excluded, the insurer is liable in case of faultless conduct by the insured. Similarly, although the parties are free to contractually exclude the insurer’s liability for negligent conduct, negligence, as well as grossly negligent conduct by the insured, must be covered and the insurer is liable. However, reckless conduct by the insured only renders the insurer liable if it constitutes nothing else than gross negligence.

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139 Reinecke et al General Principles 204.
140 It should be borne in mind that, in the environmental context, the risk is environmental damage and/or degradation. The peril is an external event which causes the manifestation of the risk. This can include unforeseen events such as oil spills, mud slides, seepage of an underground container, and so forth. It can also include events that are certain, of which the consequences are uncertain. The latter would typically include the emission of waste into the atmosphere or into water resources. Human conduct is included as a peril. As such, the acts of the polluter which cause the risk to materialise, i.e. pollution, are included as a peril. In this regard, see Reinecke et al General Principles 204, who states: “...risk as a possibility and therefore an uncertainty, includes human conduct as a peril.”
141 Reinecke et al General Principles 204.
142 The insurer is, for example, be liable under a life policy for loss caused by suicide committed by the insured whilst insane. In this regard, see Reinecke et al General Principles 204 and Davis Gordon and Getz on Insurance 182. If the risk materialises due to involuntary acts of the insured, the insurer incurs liability for loss caused thereby.
143 If it is recklessness in the form of dolus eventualis (a form of intent), the insurer escapes liability. Such conduct is deemed to be the intentional conduct of the insured. If, for example, the
The insurer also incurs liability for the insured's negligent conduct even if it amounts to wrongful or unlawful conduct, as the insured's duties extend no further than to refrain from intentionally causing the materialisation of the risk.\textsuperscript{145} Due to an implied term and/or public policy, intentional misconduct and criminal conduct are excluded from the risk covered.\textsuperscript{146} In the case where the environmentally damaging activities of producers cannot be avoided and are thus permitted by law, such conduct cannot be regarded as unlawful. However, it is still intentional. As such, the conduct of the insured polluter would not hold the insurer liable to compensate for the environmental damage caused in this manner.\textsuperscript{147} It is therefore imperative that an environmental insurance policy should expressly include those intentional acts. Everything depends on the wording of this specific type of insurance contract.\textsuperscript{148} This makes the formulation of a specific environmental policy a matter of urgency.

\textsuperscript{145} Davis Gordon and Getz on Insurance 183, Reinecke \textit{et al} General Principles 206.

\textsuperscript{146} Most insurance contracts contain a tacit term to the effect that the consequences of the insured's own intentional conduct are excluded from the risk. If, for example, the insured polluter intentionally pollutes to acquire the insurance proceeds, the insurer will not incur liability to pay for the environmental damage caused by such an act. Davis Gordon and Getz on Insurance 186, Reinecke \textit{et al} General Principles 206.

\textsuperscript{147} Because the aim of insuring against environmental damage would \textit{in esse} entail the protection of the environment, any contractual exclusion of liability of the insurer for damage caused by the conduct of the insured must not be permitted. Such a prohibition will \textit{not ipso iure} be to the detriment of the insurer, as the insurer is free to require a higher premium on the basis of a calculated risk.

\textsuperscript{148} It is submitted that, as in foreign jurisdictions, insurance companies will also want to include exclusion clauses to restrict their liability. Therefore, the insured should scrutinise his/her insurance policy for such exclusion clauses. The exclusion clause pertaining to the conduct of the insured can be compared to the "polluter's exclusion" clause encountered internationally. It is clear that such South African exclusion clauses will develop into a parallel of the polluter's exclusion clause and give rise to numerous legal issues, as encountered internationally in Comprehensive General Liability policies (hereafter CGL policies). Insurance policies specifically
The insurance law duty to avert the manifestation of the risk or to minimise its effects is in line with the environmental law's preventive principle. However, if the insured fails to comply with the duty to prevent the manifestation of the risk, such a failure will not, ipso iure, lead to the non-liability of the insurer. In these circumstances, the conduct of the insured, as discussed above, is applicable. If, for example, the insured polluter has negligently caused pollution, the insurer still incurs liability, despite the insured's failure to adhere to the duty to avert loss. In all probability, such a failure by the insured to adhere to the duty of loss will in all probability play a role in the amount of compensation that is paid.

7.2.5 Alteration of the risk

Because insurance contracts require a careful analysis of the risk and scope of liability, another challenge posed to insuring environmental damage pertains to uncertainty about the scope of liability. This challenge arises because additional liabilities may be incurred as a result of continuous developments in environmental law and the promulgation of legislation that imposes new liabilities. The question then arises whether the obligations of the insurer will be increased by new legislation and whether the insurer will still incur liability.

At common law, no implied continued obligation exists which requires the insured to disclose circumstances which may affect the alteration of the risk or the

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149 Davis Gordon and Getz on Insurance 190; Reinecke et al General Principles 210. In the environmental context, the insured polluter must, for example, clean water used in industrial processes prior to the emission of such water into a river.

150 In the insurance context, it is submitted that this duty is similar to the duty not to cause the risk intentionally.

151 Bocken Kezel and Bernauw "Report on limitations of liability and compulsory insurance" 30. International environmental law is one of the fastest developing bodies of law and, in recent years, remarkable development of environmental law in South Africa has taken place in the form of the enactment of wide-ranging legislation. The effect hereof entails that additional liabilities are incurred by the perpetrator (i.e. the insured polluter) and, in turn, the insurer. Sands Principles of Environmental Law 25.
premium. The insurer remains liable even after circumstances have occurred which increase the likelihood of loss. If, however, the alteration of the circumstances constitutes a different risk than that defined in the policy, the insurer is not liable.

In the environmental context, legislation imposes both obligations and liability in the event of non-conformity. Legislation thus represents circumstances affecting the risk, the liability of the insured and the premium. New statutes and regulations are increasingly being promulgated and a higher level of protection is afforded to the environment. The higher the level of protection afforded to the environment, the higher the risk of non-conformity with these obligations and, in turn, the higher the premium payable.

Arguing in the context of the present case, new legislation thus represents a circumstance which affects the risk and the premium; and an insured polluter is not required at common law to inform the insurer of the increased risk. If, however, new legislation constitutes a circumstance which results in a different risk than that agreed upon in the insurance policy, this would not be the case. In Bareki NO and another v Gencor Ltd, it was held that the polluter’s duty, under NEMA, to take reasonable measures creates strict liability and may even imply absolute liability which may have no monetary limit. NEMA attaches new consequences for the future to activities which

152 Davis Gordon and Getz on Insurance 177; Reinecke et al General Principles 199.
153 Davis Gordon and Getz on Insurance 178; Reinecke et al General Principles 199.
154 In this regard, see Kotzé and Du Plessis 2007 to appear in Stell LR 1 – 39.
155 Sweet Reeder and Burnell Legislating for Effective Enforcement 1, Britz Feris and Fourie Stepping up Environmental Compliance 2.
156 Bareki NO and another v Gencor Ltd (2006) 2 All SA 392 (T).
158 In terms of s 28(1)
159 At 440H-I. As a result, the court held that retrospective application of to s 28(1) and s 28(2) of NEMA would be unfair and that it is unlikely that the legislature could have intended it. At 442C-D. In this regard, see Kotzé and Du Plessis 2007 to appear in Stell LR 8.
occurred after its commencement. The promulgation of such a statute would thus require disclosure, as it constitutes a circumstance which results in a different risk. However, new regulations and other statutes do not ipso iure constitute such a circumstance. It should be noted that, currently, traditional insurance policies normally include exclusion clauses excluding coverage if alterations of the subject matter, circumstances affecting it or the peril increase the risk, unless the insurer has been given prior written notice.

7.2.6 Insurance "lost or not lost"

Under a normal liability policy, the insurer is held liable for activities carried out by the polluter in the insured period. Damage may, however, only become apparent long after the activity which has caused it has ceased and the polluting company could have ceased to exist at the time of the claim. The question then arises whether the insurer can be held liable for the activities of previous polluters on the property that is currently insured. In insurance law, coverage can be obtained against damage which has already manifested, unknown to the parties to the insurance contract. This can be done by the insertion of a clause "lost or not lost" in the insurance contract. Such a clause constitutes a supposition which operates on a past event. Prior to the conclusion of the contract, the insured must disclose knowledge of any polluting occurrences which have not yet

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160 It does not have retrospective application in that it attaches new consequences for the future to an event that took place before the statute was enacted. At 444G. NEMA became of force on 29 January 1999.
161 See Footnote 148?
162 As stated in par. 7.2.4 above, environmental damage can be caused as a result of a gradual process and damage could manifest only years after the environmentally damaging act has been committed, for example, the emission of by-products of industrial processes, the use of chemicals instead of explosives, and so forth. This gives rise to the "long tail" liability issue. See par. 7.2.6 below. In this regard, see Prozesky-Kuschke 2000 TSAR 501.
163 An investigation of insurance “lost or not lost” is thus important in the environmental context as damage may, for example, become manifest only years after the act has been committed and the insured polluting company may no longer exist at the time when the claim is instituted. In Bareki NO and another v Gencor Ltd (2006) 2 All SA 392 (T), for example, the mining company – Gencor Ltd – discontinued its mining operations between 1981 and 1985. In this regard, see Kotze and Du Plessis 2007 to appear in Stell LR 3.
164 Reinecke et al General Principles 77.
165 It does not constitute a suspensive condition. Reinecke et al General Principles 77.
manifested in loss or damage. As such, it introduces the element of uncertainty into the contract, as it relates to the subjective knowledge of the parties concerning the happening of the event that the party insures itself against.

In environmental damage and/or degradation, three phases can be identified. These are when the polluting act was committed, when the loss manifests itself, and when the claim is made. These phases represent the trigger dates for a claim against the insurer. Accordingly, three types of insurance policies can be identified, and the differentiation between these three types depends on these trigger dates. If the trigger date for a claim against an insurer is the act committed, the insurance policy can be described as an "acts committed" policy. The insurance policy in force at the time of the environmentally damaging act is thus the policy which covers the damage. The so-called "long tail" liability issue is encountered as the insurer incurs liability for damage which becomes manifest only years after the environmentally damaging act was committed. In "loss-occurrence" policies, the insurance policy in force at the time when the loss manifests is the policy that covers the damage. Under "claims made" policies,
the insurance policy in force at the time the claim is made is the policy that covers the damage.\textsuperscript{171} The materialisation of the risk is irrelevant, as the trigger date is the date when the claim is made. The "long tail" liability issue once again becomes relevant as the insurer incurs liability for all environmentally damaging acts.\textsuperscript{172}

Insurance policies "lost or not lost" constitute "loss-occurrence" and "claims made" policies. Although the insured's \textit{bona fides} play a decisive role, it is submitted that insurance policies "lost or not lost" are the ideal type of policy with regard to environmental damage, as the insured is covered, firstly, in respect of a loss which may have occurred unknown to the parties within the express terms of the policy, albeit prior to its execution; and, secondly, in respect of property in which the insured obtained an insurable interest only after the loss had already occurred. However, logic dictates that such a policy would be very expensive, as the risk is much higher than in a normal policy.

7.2.7 \textit{Causation}

Another challenge posed to insuring environmental damage pertains to the concept of causation. The insured is only liable if the loss has been caused by the peril insured against. The maxim \textit{causa proxima non remota} dictates that there must be a direct, actual effective, determining operative, predominant or efficient causal nexus between the peril and the loss.\textsuperscript{173} The cause of the loss

\begin{quote}
environmentally damaging activities committed by someone other than the insured. In this regard, see Prozesky-Kuschke 2000 TSAR 501.
\textsuperscript{171} Prozesky-Kuschke 2000 TSAR 501.
\textsuperscript{172} In \textit{Bareki NO and another v Gencor Ltd} (2006) 2 All SA 392 (T) an asbestos mine and dumps were not rehabilitated and the previous polluters, Gencor Ltd, was absolved from liability because it was held that NEMA does not have retrospective application. Hypothetically, if the said property was currently insured under a "claims made" policy, the insurer would be liable to remediate the environmental damage as it would be irrelevant when the environmentally damaging act was committed or by whom. The ideal situation would, however, have been if the said property was previously insured under an "acts committed" policy, as the insurance policy in force at the time of mining activities would have been the policy which would cover the damage. The polluters would indirectly have been held liable by means of their premium payments.
\textsuperscript{173} Davis \textit{Gordon and Getz on Insurance} 181; Reinecke \textit{et al General Principles} 200.
\end{quote}
need not, however, be the latest in time, nor the sole or exclusive cause.\footnote{The cause of loss can be one of several co-operating causes. In this regard, see Reinecke \textit{et al.} \textit{General Principles} 202 and Davis Gordon and Getz on \textit{Insurance} 181.} However, the nexus between the peril and the loss is only indicative, as the extent of the causal link for which the insurer incurs liability also depends on the intention of the parties to the insurance contract.\footnote{The extent to which a causal link must exist before the insurer incurs liability refers to the question whether the insurer is liable for loss arising incidentally out of the peril, or whether loss must directly have been caused by the peril. Davis Gordon and Getz on \textit{Insurance} 181; Reinecke \textit{et al.} \textit{General Principles} 200.} As such, the interpretation of the insurance contract is also decisive with regard to the extent of the nexus which must exist.\footnote{Contractual terms like "in consequence of" and "occasioned by" followed by a particular peril is construed to entail that any loss arising incidentally out of the peril is included and loss need not directly have been caused by that peril. Phrases like "originating from" are, however, construed to mean that the peril must be the proximate cause of the loss. Phrases like "which peril shall solely and independently of any other cause, cause damage" clearly demand the sole or exclusive cause. Davis Gordon and Getz on \textit{Insurance} 182.}

In environmental liability, the question of causality often proves problematic.\footnote{Prozesky-Kuschke 2000 TSAR. Factual causation is problematic to prove in pollution cases, especially where gradual pollution occurs over a long period, or if damage manifests in a place other than that in which the initial pollution was caused, for example, the emission of gases into the atmosphere over a long period by numerous factories, or the emission of waste into rivers by numerous factories.} In liability insurance, the same issue may be encountered, as the insured's liability towards a third party must first be proven before the payment by the insurer will be effected. To circumvent this, it may help to rather effect an ordinary contingency policy instead of a liability insurance contract, if it is possible in the circumstances. The reason for this is the flexible proximate cause test in indemnity insurance contracts that could be employed to resolve this issue.\footnote{For a full discussion of the flexible proximate cause-test see Reinecke \textit{et al.} \textit{General Principles} 202.} This causality issue can also be addressed by extending the range of consequences for which the insurer is liable by the contractual adaptation of the proximate cause test. By inserting phrases such as "occasioned by" or "in consequence of" followed by a particular peril, the insurer incurs liability for loss arising incidentally out of the peril.\footnote{However, this implies that a specific environmental insurance contract should be formulated.} In these circumstances, the insured need
not prove that the peril was the proximate cause of the loss, but merely that it probably contributed in some material respect to the loss. When applying the foregoing considerations to the issue of causality, it is submitted that the flexible proximate cause test or the contractual adaptation of the proximate cause may resolve the legal issues pertaining to proof of causality in pollution cases.

7.3 The premium\(^{180}\)

The premium and payment thereof may prove problematic, as the monthly payment of premiums can be stopped, or the insured polluter may be liquidated. The insurer then escapes liability and environmental remediation through compensation will not be achieved. The question arises whether other rules of premium payment may be employed to resolve this problem.

An agreement to pay the premium is a distinguishing characteristic of an insurance contract.\(^{181}\) Traditionally, the premium is seen as the consideration given by the insured in return for the insurer's undertaking to cover the risk insured against.\(^{182}\) Although the formation of an insurance contract depends on an agreement pertaining to the amount payable, neither the formation of the contract nor the liability of the insured depends on the actual payment of the amount.\(^{183}\) As such, most insurance contracts include a term to this effect.\(^{184}\) Insurance contracts usually stipulate either that a contract of insurance will not

\(^{180}\) For a full discussion of the premium, see Davis Gordon and Getz on Insurance 192; Reinecke et al General Principles 323.

\(^{181}\) This premium primarily takes the form of monetary performance and the amount is certain or ascertainable. Reinecke et al General Principles 245; Davis Gordon and Getz on Insurance 194.\(^{182}\) In this regard, see Birds Modern Insurance 156; Davis Gordon and Getz on Insurance 192. However, Reineke et al submit that the premium should not be construed as counter performance undertaken by the insured, but rather the insured's proportionate share of the total costs of spreading the risks over the community of exposed persons. Reinecke et al General Principles 248; Birds Modern Insurance 156.

\(^{183}\) The insured may not, however, require the insurer to perform the insurer's obligations under the policy without performance of the insured's own obligation pertaining to premium payment. This means that the insured must first effect payment of the insured's own premium before he/she will be entitled to expect the insurer to make payment for materialisation of the risk. In this regard, see Davis Gordon and Getz on Insurance 193.

\(^{184}\) Birds Modern Insurance 156.
come into being or that the liability of the insurer will not attach until a premium has been paid.  

As paying the premium in monthly instalments may prove problematic, other methods of premium payment could be employed to resolve this issue. Payment of the premium can be effected by means of a once-off payment, annual, monthly, quarterly or semesterly payment. The payment of premiums need not only be procured in advance, but can also be effected by means of payment after expiry of the period of insurance. In an “acts committed” insurance policy – where the insurer incurs liability for the risk that manifested whilst insurance coverage was afforded under the policy – the method of premium payment after the insurance period has ceased could, for example, be used successfully. Alternatively, a once-off payment method may prove effective. In the environmental context, there is a risk that the polluting company can cease to exist or become insolvent. This problem can also be resolved by requiring the premium in a once-off payment. The insurance contract then remains valid and the company is still liable to effect payment when the risk materialises.

It is thus clear that the insurer is not liable in terms of the contract if the premiums have not been paid by the insured polluter, as most insurance contracts usually contain a term to this effect. It is submitted that the use of a guarantee may resolve the issues surrounding non-payment of the premium. If payment of the premium is assured by means of a guarantee, this will serve as security that

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185 In the former case, the intention of the parties is that payment of the premium will constitute a formality for the formation of the contract. In the latter case, such a term has the effect of a suspensive condition in terms of which the duty of the insurer is made subject to the payment of the premium. In a continuing contract, the contract usually stipulates that insurance will come to an end ipso facto if the premium is not paid by a certain time. In such a case, the duty of the insured is qualified by a resolutive condition that the ongoing duty will expire automatically if the insured does not effect payment on or before the stipulated date. Reinecke et al General Principles 248; Davis Gordon and Getz on Insurance 239. If, however, credit has been given for the premium, the insurer cannot refuse to pay out where loss has occurred before the premium has been paid out. Davis Gordon and Getz on Insurance 193.

186 As stated above, this was the situation encountered in Bareki NO and another v Gencor Ltd (2006) 2 All SA 392 (T).

187 This issue can also be resolved by requiring the premium in two, three or even four payments.
failure to pay the premium will not lead to the insurer’s escaping liability. The
premium will be paid, albeit after the period for payment thereof has lapsed.\(^\text{188}\)
Although guarantees may be inadequate to compensate for environmental
damage,\(^\text{189}\) they may thus be successfully employed to guarantee the payment of
premiums, as the amount payable for premiums must be certain or ascertainable
and does not necessarily have to be paid in advance. Everything thus depends
on the wording of the policy.\(^\text{190}\)

8 Insurance policies for environmental damage\(^\text{191}\)

It is evident from the foregoing that unique challenges arise when insuring
against environmental liabilities in traditional insurance contracts. However, it is
also evident that insurance for environmental damage is possible, as it falls
within the ambit of general insurance law principles. In this regard, the precise
wording of the policy must be scrutinised.

In order to contribute to the formulation of a possible insurance mechanism that
addresses the challenges posed by environmental exposures, insurance policies
encountered internationally are briefly investigated below. South African
insurance cover for environmental damage is still in its infancy compared to
international practices.\(^\text{192}\) In other jurisdictions several types of insurance

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\(^{188}\) As the guarantee will only pay the amount guaranteed after proof of failure of premium
payment, it will only be paid after expiry of the relevant time for payment of the premium. If
environmental damage occurs during this period, the insurer is still liable.

\(^{189}\) See the discussion in par. 5 above.

\(^{190}\) In this regard, the insurer and insured can negotiate the terms of their insurance contract.

\(^{191}\) In order to contribute to a possible insurance framework for environmental coverage, different
forms of specifically designed insurance policies for environmental exposures are briefly set out.
A full discussion of different insurance policies available internationally, however, falls beyond the
scope of this dissertation. The discussion pertaining to these policies merely serves as an
indication that such policies do indeed exist and could be used as models in the development of
insurance law to provide specifically for environmental coverage.

\(^{192}\) When it is seen in the international context, this South African insurance policy stands at the
beginning of a rollercoaster litigation process, as encountered internationally in the past 20 years
or so. Although consensus has not been reached internationally pertaining to the ambit of the
coverage afforded and exclusions permitted by these policies, the international context is
important both in itself and as a guideline for the interpretation of these types of general indemnity
policies. See the discussion below pertaining to CGL policies, which mirrors the South African
policies can provide coverage for environmental liabilities. In this regard, problems encountered in international policies that mirror the currently available traditional policies of South Africa are briefly discussed to indicate where, in all probability, South African insurance law is headed and why specific policies must be formulated to provide adequately for environmental liability coverage. Furthermore, the solutions provided for these problems and the types of insurance policies available in other jurisdictions may provide a framework for development in this regard. As has already been stated, there is a constitutional obligation to heed international environmental law provisions, and as such, cognisance must be taken of the international position pertaining to the implementation of environmental law principles through the use of financial measures in the form of insurance, amongst other things.

8.1 Comprehensive general liability policies

The Environmental Impairment Liability policy (hereafter EIL policy) and the Environmental Dutch Insurance policy (hereafter EDI policy) are examples of policies which were specifically designed for environmental damage claims. Contrary to the specific ambits of the EIL policy and the EDI policy, the ambit of coverage provided by the Comprehensive General Liability policy (hereafter CGL policy) is so broad in its scope and general in its application that it

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193 Compared to the international position, South Africa only offers limited options to a polluter who wants to insure against environmental damage and/or degradation. See the discussion pertaining to PLIP policies below. Also see Bocken Kezel and Bernauw “Report on limitations of liability and compulsory insurance” 30.
194 The aim is to determine whether the numerous liability insurance policies that exist in the international arena can be applied in the South African context, and, where exclusions to and limitations of insurance coverage exist in an ordinary insurance policy, whether these exclusions and limitations can be used to restrict the insurer’s liability.
195 S 231, s 232, s 233 and s 39(1)(b) of the Constitution, 1996.
196 See the discussion in 8.2 below.
197 Bocken Kezel and Bernauw “Report on Limitations of Liability and compulsory insurance” 26 refer to CGL policies as covering general liability arising from normal business operation.
encompasses environmental damage claims. In a South African personal liability insurance policy (hereafter PLIP) the insurer undertakes to indemnify the insured against liability to a third party arising in contract, delict or under some statute. Consequently, PLIP is so broad in its ambit that it unintentionally affords coverage for environmental exposures as a result of non-compliance with a statutory duty or out of delictual liability. The CGL policy can thus be compared to the South African PLIP policy, in the sense that neither was specifically designed to afford coverage for environmental damage claims – they were merely extended to include environmental coverage.

CGL policies proved problematic, as they have been specially adapted to include numerous exclusion clauses to exclude and/or limit their liability. This has made the success of pollution claims under these policies nearly impossible. Exclusions of liability found in CGL policies include, amongst other things, the owned property exclusion and the sudden and accidental exclusion.

199 According to Prozesky-Kuschke 2000 TSAR 500, miscellaneous indemnity insurance in the form of PLIPs may provide liability cover for environmental damage caused by pollution as it is especially broad in its scope of coverage. Miscellaneous indemnity insurance refers to policies that afford coverage to perils excluded from the usual form of insurance, as well as policies that afford coverage against specific perils associated with particular kinds of property. A normal fire policy, for example, would exclude perils such as earthquakes, typhoons, war, invasion, riot and revolution. In the environmental context, the specific perils include seepage, leakage of containers, gradual pollution and so forth and they are normally excluded as inherent vice. Miscellaneous indemnity insurance that affords coverage to perils excluded from the usual form of insurance may thus be relevant in insuring against environmental damage. However, because the environment cannot strictly be regarded as property, and because the definition of the “environment” may be too vague to identify the subject matter of a normal insurance contract, it is submitted that a liability policy would be more appropriate.
200 The aim of such a general liability insurance policy was never to incur liability for the magnitude that environmental damage claims can entail. As discussed above, the polluter can incur liability on the basis of non-compliance with a statutory duty or of delictual liability. Davis Gordon and Getz on Insurance 282.
201 Prozesky-Kuschke 2000 TSAR 500. Due to the fact that the ambit of insurance policies is so broad, covering virtually every type of liability, exclusion clauses were inserted to escape liability for pollution claims. In this regard, see Bocken Kezel and Bernauw “Report on Limitations of Liability and compulsory insurance” 26.
202 Prozesky-Kuschke 2000 TSAR 499. In some countries pollution liability is totally excluded from CGL policies. The USA, amongst others, limits liability to damages caused by sudden and accidental events. Furthermore, policies almost always include some form of the absolute pollution exclusion. In this regard, see Ellison and Insua 2002 Pollution Engineering 26.
The owned property exclusion precludes coverage for damage to property owned by the insured polluter.\textsuperscript{204} The polluters' exclusion is aimed at excluding coverage for intentional polluting activities by the insured polluter.\textsuperscript{205}

The sudden and accidental polluters' exclusion clause states that the insurance policy does not apply to damage arising out of certain activities, but will apply if the occurrence is sudden and accidental.\textsuperscript{206} Application of such an exclusion clause would have the effect that cases such as the Bhopal Gas Tragedy in India would be excluded from coverage and that the insurer would escape liability.\textsuperscript{207} Some countries interpret the wording "sudden and accidental" to mean that only abrupt events that are temporally quick in time would be covered, and that, for example, gradual pollution or leakage would be excluded.\textsuperscript{208} However, this interpretation is not universally upheld, and, in other jurisdictions, liability policies including this exclusion provide coverage for both gradual and abrupt pollution as long as it was unexpected and unintended.\textsuperscript{209}

Because there is a parallel between the international GCL policy and the South African PI-IP policy, the problems pertaining to the limitation and/or exclusions clauses encountered in the CGL policy must be borne in mind when developing South African insurance law in the context of environmental law.

\textsuperscript{204} Damage to property owned by the insured is coverable under first party property policies.

\textsuperscript{205} Unintentional polluting activities are thus not affected. In this regard, see Ellison and Insua 2002 \textit{Pollution Engineering} 27.

\textsuperscript{206} This exclusion clause usually reads as follows: "...the insurance policy will not apply to the following: bodily injury, or property damage arising out of the discharge, dispersal, release or escape of smoke, vapours, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any water course or body of water, but this exclusion does not apply if such discharge, dispersal, release or escape is sudden and accidental." Ellison and Insua 2002 \textit{Pollution Engineering} 27.

\textsuperscript{207} In this case, the leakage of Menthyl Isocynate (MIC) from the Union Carbide plant in Bhopal, India, resulted in death, injury, disability and disease. Specialised insurance cover, such as EIL policies, which affords coverage to gradual pollution could be used to avoid these circumstances. Minoli and Bell 2002 \textit{Journal of Environmental Assessment Policy and Management} 352.

\textsuperscript{208} In this regard, see Ellison and Insua 2002 \textit{Pollution Engineering} 27.

\textsuperscript{209} In this regard, see Sunbeam Corp \textit{v} Liberty Mutual Insurance Co 781 A 2d 1189 1195 2001, as referred to in Ellison and Insua 2002 \textit{Pollution Engineering} 27. Also see Bocken Kezel and Bernauw "Report on Limitations of Liability and compulsory insurance" 31.
8.2 Specific insurance policies for environmental damage\textsuperscript{210}

It is evident from the above argument that a general form of liability insurance may prove problematic for insuring effectively against environmental exposures. Specific liability policies for environmental exposures are therefore briefly discussed below to indicate that specifically designed policies are available which may provide a framework within which insurance policies in South Africa can develop.

Internationally four types of liability insurance can be identified that could cover environmental damage. These are first party property insurance policies,\textsuperscript{211} public liability policies, professional liability policies and EIL policies.\textsuperscript{212}

EIL policies specifically provide coverage for environmental liabilities. They are often marketed as the best and most dependable insurance policy for environment-related expenses.\textsuperscript{213} Such policies were specifically designed to afford coverage for environmental damage. As such, they are specific in the scope of the liabilities they cover.\textsuperscript{214} Because EIL policies are specific in their ambit, they require technical assessment of the risk, as well as risk management. Amongst other things, EIL policies provide coverage for liability as a result of

\textsuperscript{210} It should again be noted that this dissertation does not purport to be a comparative study, as a comprehensive analysis of different insurance policies available internationally falls beyond the scope of this dissertation. The purpose of this discussion is merely to indicate that specific insurance policies for environmental damage do indeed exist and that these policies could be used as a framework in the development of South African insurance law to adequately provide for environmental exposures.

\textsuperscript{211} As its name suggests, first party insurance policies provide coverage for damage to property owned by the insured. It extends to coverage for environmental damage.

\textsuperscript{212} Prozesky-Kuschke 2000 TSAR 499.

\textsuperscript{213} Ellison and Insua 2002 Pollution Engineering 26. The Association of British insurers are of the opinion that EIL policies will eventually replace personal liability policies (PL policies), and that cover should be removed from PL policies to encourage usage of EIL policies. Minoli and Bell 2002 Journal of Environmental Assessment Policy and Management 352.

\textsuperscript{214} The scope of liability refers to the specific aim and ambit of coverage afforded. These policies aim specifically to afford coverage for liabilities incurred as result of environmental damage. As such, these specific policies can be contrasted with general liability policies, which were not designed for environmental coverage, but afford coverage for a whole spectrum of liabilities, whilst contractually excluding liabilities incurred as a result of certain polluting activities.
sudden and accidental pollution, as well as gradual pollution. The problem discussed above pertaining to sudden and accidental exclusion is thus avoided. Special environmental liability policies found in the USA include Pollution Legal Liability policies (hereafter PLL policies), Owner's Spill Policies (hereafter OSL policies) and Pollution and Remediation Legal Liability policies (hereafter PARLL policies). Although liability coverage for environmental damage is provided by numerous insurance companies, generally, only a limited number of insurers provide such special liability policies. Specialised liability cover for environmental damage is also offered by some insurance pools, such as those as found in France, Spain and Italy.

In the Netherlands, there is the EDI policy, which is specifically designed for environmental damages. This EDI policy provides first party insurance for the benefit of a third party and covers all environmental damages, including clean-up costs and legal defence costs.

It is evident from the foregoing that the currently available general form of liability insurance may, in the future, prove problematic for insuring effectively against all types of environmental exposure. However, in this regard, insurance policies

216 PLL policies provide coverage for third party claims arising from damage to property, bodily injury attributable to on-site or off-site pollution conditions, clean-up costs for unknown pre-existing pollution conditions on-site, as well as clean-up costs off-site. Bocken Kezel and Bernauw "Report on limitations of liability and compulsory insurance" 32.
217 The OSL policy was designed to provide coverage for transportation of hazardous materials.
218 These policies provide coverage against the liability for loss and remediation expenses for covered locations. They also afford coverage for both sudden and gradual pollution occurrences. Bocken Kezel and Bernauw "Report on limitations of liability and compulsory insurance" 32.
219 Insurance companies providing special liability policies in European countries include Royale Belge, Assurance Générales, Winterthur, Skandia and Royal & Sun Alliances. In the USA, specialised insurers include companies such as AIG, ECS Underwriting (XL). In this regard, see Bocken Kezel and Bernauw "Report on Limitations of Liability and compulsory insurance" 32.
220 An insurance pool entails the concept of co-operating insurance companies and consist of insurers and re-insurers. In this regard, see Bocken Kezel and Bernauw "Report on Limitations of Liability and compulsory insurance" 32, for a full discussion of these insurance pools. This concept is not yet employed in South Africa. It should be noted that policies under the French insurance pool operate on the trigger clause of the first manifestation of damage – the so-called "loss-occurrence" policies. The policies in the Italian inquiniamento insurance pool operate on the trigger clause of claims made.
221 Prozesky-Kuschke 2000 TSAR 499.
that specifically provide for environmental exposures exist internationally; and they could be used as models in the development of insurance law specifically to provide for environmental coverage.

9 Evaluation and recommendations

9.1 The application of environmental law principles to insurance

The Constitution, legislation, as well as the principles of sustainability aim to afford a high level of protection to the environment. In practice, however, there is the problem that polluters can escape liability, *inter alia*, because they have insufficient funds or because they use subsidiaries as a screen. It is evident that, although the external duty to compensate flowing from the 'polluter pays' principle is statutorily regulated, the reality of payment is problematic, and that the internalities externalised and sustainability principles are undermined. In this regard financial security in the form of insurance provides a solution to the problem that arises where a polluter cannot compensate for the environmental damages he/she has caused, as it guarantees remediation for environmental damage through compensation. As such, insurance for environmental damage can be vital in implementing and reinforcing these principles. When the foregoing considerations are applied, it is evident that there is a need to procure environmental protection through insurance for environmental damage.

However, there is no expressed general obligation in South African law to compel a risk-carrying party to insure him/herself against environmental damage that he/she may cause. In this regard, NEMA and its principles of sustainability have been analysed above against the backdrop of the Constitution to ascertain whether they contemplate insurance against environmental damage as a reasonable measure and/or impose an implied obligation on the polluter to make such a financial provision.
As has already been stated above, the Constitution affords a high level of protection to the environment which provides for a theoretical foundation for interpretation of the environmental law principles. NEMA, in turn, provides for a broad range of principles that suggest how environmental governance should be implemented in South Africa. When one considers the high level of protection afforded to the environment by these legislative measures and principles, it is clear that a broad application, interpretation and implementation of protection methods are required. In such a broad interpretation, insurance conforms to the theoretical structure of the principles in the respects set out below.

First, it is clear that insurance is in line with the 'polluter pays' principle, as financial security in the form of insurance guarantees the reparation of damage to the environment. Moreover, insurance will make polluters carry the liability for their actions by internalising externalities.

It is also evident that the "reasonable measures" required under section 28 of NEMA imply financial security in the form of insurance, as insurance will, again, serve to guarantee that the costs incurred in rectifying and/or minimising environmental damage will be paid. Insurance could also serve as an MBI to facilitate environmental management and, ultimately, sustainable development.

Furthermore, insurance would assist in determining whether reasonable measures have been taken. The calculation of premiums reflects the reasonable foreseeability of harm to the environment, as the more likely it is that the risk will materialise, the higher the premiums that would be paid will be. As the amount of premiums paid would be proportionate with the risk of environmental damage materialising, insurance is also in line with section 28(5)(c) of NEMA. Insurance would thus reflect the risk of environmental damage by reflecting the gravity of the consequences if the risk were to materialise.
In line with the precautionary principle, insurance would not only be possible, but would serve as assurance that environmental damages will be compensated for in cases where there is a lack of full scientific certainty. Moreover, the preventive principle could be interpreted to imply that insurance as insurance for environmental damage could constitute an action taken prior to the manifestation of the risk to minimise or rectify the detrimental financial effects of any damage.

It is evident that the environmental law principles can be applied to insurance, since NEMA and its principles of sustainability may contemplate insurance as a method to protect the environment. Furthermore, the inference may even be drawn that NEMA not only contemplates financial security against environmental damage, but may even impose an implied obligation to make such a financial provision. However, even if no such implied obligation existed, insurance would in any event still be advantageous.

9.2 Insurance for environmental damage: a possible solution

A possible solution to the problem where environmental damages cannot be compensated for that can be suggested entails the promulgation of supplementary legislation pertaining to mandatory insurance to achieve the constitutional objections. If a financial security provision in the form of mandatory insurance is implemented, corporate structures that use subsidiaries as a screen will become ineffective because the subsidiary will in any event incur liability to pay the premiums for insurance coverage against environmental exposures. The promulgation of such supplementary legislation would also be in line with the constitutional obligation to protect the environment by reasonable legislative means.

Such a mandatory financial provision requiring insurance would also be in line with the current powers vested in the authorities. The power is conferred upon the relevant authorities to order any reasonable measures to prevent pollution
and remedy its effects. This includes the power to direct a potential polluter to take steps to prevent or minimise environmental degradation. From the foregoing it is thus evident that such a provision will stipulate expressly that the current competence of authorities includes the power to require financial security to insure against environmental damage, as is done under the MPRDA.

Apart from abovementioned solutions that insurance may provide, insurance may also prove advantageous as it will be in line with Chapter 5 of NEMA. Chapter 5 requires the application of appropriate environmental management tools in order to ensure the integrated environmental management of activities. From the foregoing comments, it is clear that insurance integrates the principles of environmental management into practice, as it identifies, predicts and evaluates the actual and potential impact of a company's actions on the environment through risk assessment under the insurance policy and insures compensation. As such, insurance can serve as a mode of environmental management that promotes the integration of the principles of environmental management into company practice in a comprehensive manner. The obligation rests on government to identify and employ the modes of environmental management best suited to ensure environmental protection and remediation in accordance with the principles of environmental management set out in section 2 of NEMA, and this obligation is the duty to procure compliance by requiring insurance against environmental damage.

9.3 Challenges posed to insurance against environmental damage

It has been indicated above that insuring against environmental damage poses unique challenges to traditional insurance coverage. The first challenge is the character of the insurable interest of the insured. Second, the risk element may give rise to problems when it is defined with reference to the subject matter of the insurance contract or the peril insured against. Third, the premium and payment thereof may also prove to be problematic, as payment of premiums can be
stopped and remediation through compensation will not be achieved. Despite these challenges, insuring against environmental damage and/or degradation is possible as it is in line with the *essentiale* of an insurance contract in a number of respects (set out below).

An insurable interest exists if the perpetrator is liable in law to compensate for the damage and/or degradation. Furthermore, numerous statutes impose an obligation on the polluter to prevent environmental damage and/or degradation and/or to minimise the effects of environmental damage or degradation by taking reasonable measures. Because this liability has a financial impact which may be detrimental to the polluter's financial capacity or his/her patrimony, a non-exhaustive category of persons will thus have an insurable interest in terms of section 28 of NEMA.

Insuring against environmental damage also satisfies the requirement pertaining to the risk, as environmental damage and/or degradation constitutes a possibility of damage or detriment due to an uncertain event which will lead to an undesirable alteration of the insured's patrimony. Even in circumstances where environmental damage and/or degradation are inevitable, insurance can still be procured by combining the event that is certain with an uncertainty. It may be uncertain when the risk will materialise or what the extent thereof will be. Insurance is thus possible, even if the peril is certain. If the insured polluter causes the materialisation of the risk, the insurer will still incur liability. This will not, however, be the case if the pollution is caused by intentional wilful misconduct or criminal conduct by the insured polluter. Although environmentally damaging activities of producers that cannot be avoided, albeit are permitted by law, cannot be regarded as unlawful, they are still intentional. As such, the conduct of the insured polluter would not hold the insurer liable to compensate for environmental damage so caused. It is therefore imperative that an environmental insurance policy should expressly include those intentional acts.
It has further become clear that if the "environment" is too vague to identify the subject matter of a normal insurance contract, liability insurance may provide the answer, as it will insure any liability to compensate.

The insured polluter is not required under common law to inform the insurer after conclusion of the insurance contract of new legislation that is promulgated or new regulations that are enacted. The insurer will incur liability even if his/her obligations have increased. If, however, the alteration of the circumstances – namely new legislation – constitutes a different risk than that defined in the policy, the insurer will not be liable.

Through the insertion of a "lost or not lost" clause in the insurance contract, coverage can be obtained against damage which has already manifested, unknown to the parties to the insurance contract. As stated before, this is the ideal type of policy for environmental damage, although the insured's bona fides will play a decisive role. In the parallel "loss-occurrence" or "claims made" policies, the insurer can also be held liable for the activities of previous polluters on the property that is currently insured. Conversely, the previous insurers under a normal "acts committed" policy could be held liable for activities carried out by the polluter in the insured period in circumstances where damage only becomes apparent long after the activity which has caused it has ceased.

In general, the maxim causa proxima non remota dictates the level of causation that must be present before the insurer will incur liability. However, the parties are free to include a clause to the effect that the insured need not prove that the peril was the proximate cause of the loss, but merely that it probably contributed in some material respect to the loss. It is submitted that this approach may resolve the legal issues pertaining to proof of causality in pollution cases. This, however, implies that a specific environmental insurance contract should be formulated. Because of the flexible proximate cause test in indemnity insurance, an ordinary contingency policy may also be employed to circumvent the
problems pertaining to causality that may arise in a liability policy. By contractually extending the range of consequences for which the insurer will be liable, the causality issue may also be addressed and the insurer will incur liability for loss arising incidentally out of the peril.

The premium and payment thereof can prove problematic, as there is a risk that the polluter can stop paying the premiums. However, requiring insurance would still be beneficial, as insurers would be liable to compensate for polluting activities carried out during the existence of the insurance contract if an "acts committed" policy affords coverage. Alternatively, the insurer may require that the premium be paid in advance, in a lump sum or in two or more payments. Payment can also be assured by means of a guarantee. This will serve as security that failure to pay the premium will not lead to the insurer's escaping liability.

9.4 Insurance framework for environmental pollution

It is evident that South African insurance law is, in all probability, headed in the same direction as the problematic CGL policies where numerous exclusion clauses have made successful claims nearly impossible. Because the aim of insuring against environmental damage would in esse entail the protection of the environment, it is recommended that the liability exclusion clauses encountered in CGL policies must either be prohibited – or at least severely limited – when formulating a framework for environmental coverage. It should be noted that such a prohibition of exclusion clauses will not ipso iure be to the detriment of the insurer, as he/she is free to require a higher premium on the basis of a calculated risk.

In the light of the challenges posed to traditional insurance policies, the currently available general form of liability insurance may prove to be problematic in an attempt to insure a company effectively against environmental exposures. In this
regard specialised insurance policies that exist internationally could be used as models in the development of insurance law, as they specifically provide coverage for environmental exposures. It must be borne in mind that, because pure economic losses are not normally compensated for under insurance, it must specifically be included in an environmental insurance policy.

Specific policies under an insurance framework for environmental coverage must thus be formulated. In this regard, different forms of specifically designed insurance policies for environmental exposures encountered in other jurisdictions may prove useful. The provisions of the MPRDA can also be used as a guideline for promulgating the necessary legislation pertaining to mandatory financial measures.
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