Raad
voor de leefomgeving
en infrastructuur

Oranjebuitensingel 6
NL 2511 VE Den Haag

Postbus 20906
NL 2500 EX Den Haag

t. (+31)70 456 20 70
f. (+31)70 456 20 71

info@rli.nl
www.rli.nl

The State Secretary for Infrastructure and the Environment
Ms W.J. Mansveld
Postbus 20901
NL-2500 EX THE HAGUE

Date:	2 June 2014	**Contact person:**	F.W. de Haan
Our ref.	RLI-2014/553	**Telephone:**	+31 6 4615 2496
Cc:	-	**Email:**	f.w.dehaan@rli.nl
		Appendices	1

Subject: Advisory letter on recovering the costs of environmental damage: financial indemnity to be provided by high-risk companies

Dear State Secretary,

You have requested the Council for Environment and Infrastructure (Rli) to investigate the possibilities of requiring high-risk companies[1] to provide some form of financial indemnity against the costs of remedying environmental damage which occurs or comes to light upon the termination of their business activities. The Council has also examined various options, including (mandatory) insurance. At your request[2], we attach the advisory letter which summarises the main issues and considerations. We trust that its contents will enable you to inform the House of Representatives accordingly.

---

[1] In this context, the term 'high-risk' refers to the specific group of companies formally designated as such further to the provisions of the Major Accidents (Risks) Decree (*Besluit risico's zware ongevallen*, BRZO), and those classified as Category 4 under the Intergovernmental Panel on Climate Change (IPCC) emissions inventory guidelines. There are approximately six hundred such companies in the Netherlands. Ministry of Housing, Spatial Planning and the Environment (1999). Decree of 27 May 1999 establishing the Major Accidents (Risks) Decree (BRZO) 1999 and amending various other decrees to permit full incorporation of European Directive EC 96/82 of 9 December 1996 on the control of major-accident hazards involving dangerous substances; Government Gazette No. 234, The Hague. Ministry of Housing, Spatial Planning and the Environment (2008). Environmental Law (General Provisions) Act (WABO) of 6 November 2008 establishing rules with regard to a licensing and permit system for activities which have a (potential) adverse impact on the physical environment and with regard to enforcing regulations pertaining to the physical environment; Government Gazette No. 496, The Hague.

[2] Letter dated 31 March 2014 (ref. Rli-2014/369) confirming receipt of your request to investigate matters of financial indemnity upon termination of business activities by high-risk companies.

Your request was prompted by the recent parliamentary debate on external safety (Committee Meeting of 12 December 2013[3], Report of Committee Meeting of 17 December 2013[4], and the motion tabled by member Van Tongeren[5], which was duly adopted)[6].

The current request for advice was also prompted by the Council's advisory report of June 2013, which concerns external safety at high-risk 'BRZO' companies[7]. In that report, the Council recommended that safety supervision and enforcement arrangements should be improved at these companies. However, given that safety is primarily the direct responsibility of companies themselves, the Council also suggested ways in which they could be encouraged to achieve the desired level of safety awareness and management. The report proposed an initial exploration of arrangements whereby these companies would be required to take out mandatory insurance to cover their financial liability for any environmental damage, possibly with differentiated premiums according to the level of risk associated with their activities.

When assessing the role and value of financial indemnity for BRZO and IPCC Category 4 companies (a relatively small group), the Council took two potential effects into consideration:

1. The degree to which any indemnity requirement would facilitate the recovery of costs incurred in remedying environmental damage, thus avoiding unwarranted claims on public funds
2. The degree to which financial indemnity would encourage efforts to prevent environmental incidents occurring at all, i.e. its deterrent effect

The main recommendations of the current document are as follows.

- *Identify and describe situations in which the costs of repairing environmental damage would ordinarily fall to the public sector (central government, provincial and local authorities, water management authorities).*
  The risk of serious environmental damage is relatively low in the Netherlands, due in part to effective legislation. Nevertheless, experience has shown that, although the *risk* of environmental damage may be low, the actual environmental *effects* – the adverse impact of an incident – can be significant, as can the costs of dismantling, demolishing and decontaminating a site which has been used for high-risk commercial or industrial activities. In many cases, it is no longer possible to recover such costs from the company responsible in accordance with the

---

3 House of Representatives (2014). Committee Meeting (AO) of 17 December 2013 on external safety and enforcement arrangements, as reported in Parliamentary Proceedings 2013-2014, No. 37, item 33.

4 House of Representatives (2014). Policy memorandum on Disaster Prevention and Management; Report of Committee Meeting (VAO) in Parliamentary Proceedings 2013-2014, 26 956, No. 194.

5 House of Representatives (2013). Amended motion tabled by member Van Tongeren to supersede the earlier version (No. 185), as reported in Parliamentary Proceedings 2013-2014, 26 956, No. 192.

6 The Minister of Economic Affairs has recently informed the House about points of convergence with the promised exploration of financial indemnity arrangements under the provisions of the Nuclear Energy Act (KEW) which apply to companies handling radioactive substances or equipment, further to the motion tabled by members Verhoeven and Lucas. House of Representatives (2013). Industrial policy. Motion tabled by members Verhoeven and Lucas. Parliamentary Proceedings 2012-2103, 29 826, No. 48. House of Representatives (2014). Letter on industrial policy submitted to the House by the Minister of Economic Affairs on 4 February 2014. Parliamentary Proceedings 2013-2014, 29 826, No. 58.

7 Council for Environment and Infrastructure (2013). *Veiligheid bij Brzo-bedrijven: verantwoordelijkheid en daadkracht.* The Hague.

principle of 'the polluter pays'. This is particularly true of the relatively small group of companies (numbering only a few hundred) whose activities present a particularly high level of risk.

- *Establish firm conditions for financial indemnity arrangements.*
  If political and societal opinion holds that the costs of repairing environmental damage should not fall (wholly) to the public purse, the obvious course of action is to determine whether some form of mandatory financial indemnity should be included within environmental legislation, i.e. as a condition of an environmental or operating permit. If so, the arrangements must be such as to (A) limit the total amount of unrecoverable costs to the greatest extent possible, and (B) avoid any erosion of the current incentives for companies to apply adequate preventive measures. Ideally, the arrangements should reinforce those incentives to result in an even higher level of safety awareness and risk management. In addition, the system should (C) take the (international) competitive position of companies into consideration, whereby it is aligned with developments in international (European) legislation and associated instruments. Finally, it will be necessary to ensure that (D) the administrative costs involved in developing and implementing the system are proportional.

- *It is the indemnity which must be made mandatory, not the instrument which provides that indemnity. Ensure that appropriate conditions are in place.*
  In practice, insurance cover is only one of many possible ways in which a company can provide financial indemnity. It will not be the most appropriate choice in every case. Alternatives include a guarantee provided by the parent company, group, or bank, and mutual guarantee funds to which companies in a given sector or industry contribute. Further spreading of risks can be achieved through reinsurance. It is a matter of arriving at an equitable division of (financial) responsibility, whereby a high-risk company will be able to find solutions by working alongside the market. The government can then restrict its own involvement to establishing a number of conditions, such as the minimum amount of the indemnity based on defined risk categories, ensuring that any exclusion clauses are in keeping with the letter and spirit of the law governing liability, and arrangements whereby the costs of, say, site decontamination can be claimed directly from the receivers of a company which goes into liquidation.

- *Accept a maximum limit on liability cover; devote attention to exclusions.*
  The Council notes that any form of indemnity cover may be subject to exclusion clauses which limit the amount payable by the insurance company or guarantor. For example, the conditions of an insurance policy may expressly exclude loss or damage caused by deliberate action ('commission') or negligence ('omission'). Any such restrictions should be taken into account when assessing the company's permit application.
  The amount of compensation to be paid will inevitably be subject to an upper limit in order to make payment possible. Where the costs of remedying environmental damage exceed this amount and the company itself is not in a position to pay, the difference is unrecoverable. The additional costs then fall to the party which has incurred the damage or which is responsible for its repair, such as the legal owner of the site or the water management authority.

- *Use the opportunities and entitlements conferred by current legislation.*
  If the government opts to introduce a system of financial indemnity, it will be most appropriate and convenient to do so by means of a General Order in Council ('AMVB'). The possibility of this course of action is established by Article 4.1 of the Environmental Law (General Provisions) Act (WABO), which integrates and underpins various environmental and planning regulations. Here, the basic principle should be that financial indemnity plays a clear role in the assessment of permit applications for high-risk activities. The permit itself can impose certain ongoing conditions. If there is no prospect of recovering the costs of any environmental damage, the permit will be withheld. It seems possible to devise a system which allows the authorities responsible for issuing permits significant discretion, within the framework established by the requirements and conditions set out in our second recommendation, above. This discretion will extend to whether formal financial indemnity is to be required at all, the instrument to be applied, and the amount concerned. It is important that the relevant authorities are in a position to quantify the indemnity requirement accurately when assessing the permit application. A guideline is likely to be useful in this regard. The applicant can be required to enumerate and explicate the environmental risks of its activities.

- *Explore ways to improve horizontal supervision.*
  Following the initial decision-making phase, it becomes necessary to monitor companies' ongoing compliance with the conditions of the permit, to include the requirement for financial indemnity. In the Council's view, this is not only a task for government and the regulatory authorities but also one for the market itself: 'horizontal supervision'.

Concluding remarks

In essence, the issue under consideration is one of equity and natural justice. Is it fair, equitable and acceptable that society should have to pay to remedy environmental damage caused by a private-sector company? Whether the issue is one which requires government intervention in the form of binding legislation is something which parliament and society must decide by means of the usual democratic processes.

The Appendix examines the above recommendations in greater detail, providing the relevant context.

We trust that this advisory letter answers your requirements at this time.

Yours sincerely,

The Council for the Environment and Infrastructure,

Henry M. Meijdam

Chair

Ron Hillebrand

General Secretary

Brief account of current issues

Legislation is creating greater direct responsibility
The Netherlands' environmental legislation, like that of Europe itself, increasingly applies the principle of 'the polluter pays', whereby the party responsible for causing environmental damage is expected to pay the full costs of restoring the prior situation. (This will often, but not necessarily, involve a soil decontamination process.) In the case of companies whose activities present a high risk of major environment impact, with costs above a certain limit, the definition of liability has shifted to one of 'risk liability'. The burden of proof has been reversed: a company which has conducted an activity leading to environmental damage must show good reason why it should *not* be liable for the resultant costs[8]. This means that both risk and responsibility are placed firmly at the door of the companies themselves. This development is also reflected by the permit issuance procedures and environmental provisions, which already include a greater number of performance requirements. They are prescriptive rather than proscriptive in that they establish certain minimum quality standards, but leave the manner in which those standards are to be attained largely to the discretion of the companies themselves.

In a previous advisory report, the Council called for a more balanced division of responsibilities between the public and private sectors. Companies should be encouraged and incentivised to raise their safety level and to engage in the ongoing development of their safety culture and risk management practice[9]. Within this context, it is not appropriate to simply blame environmental incidents on inadequate supervision or poor enforcement. Rather, each incident must be examined individually to determine whether the company concerned did indeed accept and act upon its own responsibility.

Practical limitations
The reversal of the burden of proof, whereby it becomes easier to establish legal liability, will in itself serve to speed up the process of recovering the costs of environmental damage. Furthermore, the prospect of being held liable in future and being presented with a very large bill for recovery costs does tend to focus the mind and is an incentive to implement (better) preventive measures. However, recent incidents – such as those involving Chemiepack, Thermphos, and Odfjell – illustrate that current legislation does not always guarantee that the costs will be recovered from the party responsible in keeping with the principle of 'the polluter pays'. In each of these cases, the public sector was burdened with a significant proportion of the costs. Where a company is forced into bankruptcy or insolvency, other local businesses and taxpayers may find themselves out of pocket because the costs are unrecoverable. Even financial reserves which have been set aside for a specific purpose are deemed to be part of the bankrupt company's general assets. They are divided *pro rata* among all creditors, not necessarily those who have suffered losses or must pay the costs of repair. In practice, there are two principal causes of environmental damage which will leave 'society' to bear the financial consequences. The first is a situation in which a major disaster occurs

---

[8] Article 17.16 of the Environmental Management Act (WMB) states that the party who conducts or has conducted the activities must establish that (A) it did so in good faith and has not been negligent, and (B) that the damage has been caused by an activity, emission or event that, at the moment it occurred, was expressly permitted under the terms of extant legislation and/or permits granted to the party concerned, or that said activity, emission or event could not have been deemed harmful on the basis of then current scientific or technical knowledge.

[9] Council for Environment and Infrastructure (2013). *Veiligheid bij Brzo-bedrijven: verantwoordelijkheid en daadkracht*. The Hague.

on a company's own premises, and the second is a situation in which it is impossible to enforce adequate decontamination or dismantling procedures due to incomplete or outdated permit conditions, or because the permit has been transferred to a third party which is unable to meet the (financial) obligations it entails. The textbox below offers examples of each situation.

A disaster on the premises (first situation):
A serious fire breaks out in a chemicals plant. The water used to extinguish the blaze becomes contaminated and leaches into the local groundwater and surface water. The company operating the plant goes bankrupt as a result of the fire. The government is therefore unable to recover the decontamination costs.

Decontamination or dismantling of plant (second situation):
A) An environmental permit issued when a plant was built in 1992 establishes conditions for the safe demolition and dismantling of the plant upon termination of business activities, together with various 'after-care' arrangements. At that time, the possible consequences of the business activities and their cessation were – it turns out – seriously underestimated, and insufficient guarantees of the site's restoration to its original condition were put in place. In order to protect the environment, the government must now implement additional measures over and above those demanded by the permit. The costs of doing so cannot be recovered from the company concerned.
B) The life cycle of a company or process installation is finite; there comes a time at which it is no longer (financially) viable for the original owner to continue operations. The installations may then be sold to other, often far smaller, companies. The costs of dismantling and decontamination become the responsibility of the new owners. As small companies, however, those owners simply cannot afford such major expenditure.

Financial indemnity past and present
In the advisory report cited above, the Council calls for improvement in the safety arrangements and practices of the highest-risk companies in the Netherlands (of which there are a few hundred) and for better supervision and enforcement of those arrangements. At present, shortcomings and irregularities are observed with some frequency and, even worse, there have been incidents with major consequences for society at large. The Council's findings with regard to recent incidents (such as those involving Chemiepack, Thermphos, and Odfjell) are at odds with the arguments put forward in 2009 to support the repeal of the Environmental Management (Financial Indemnity) Decree (*Besluit financiële zekerheid milieubeheer*). For example, it was stated that the risk of public-sector authorities actually having to pay the costs of repairing environmental damage was small. Those costs were previously covered under the arrangements put in place by the Decree. At this time, the Decree had been in force for six years, its provisions forming a condition of any permit issued further to the Environmental Management Act (WMB). It was argued that, as far as could be ascertained, there had been no cases of environmental damage for which any claim had been made during that period[10]. There is now some support in political circles for the reintroduction of the Decree, or some similar arrangement to provide financial indemnity against the costs of remedying environmental damage. The Province of Groningen is firmly in favour of such a move, for the reasons set out in the textbox below.

[10] Ministry of Housing, Spatial Planning and the Environment (2009). Decree of 29 September 2009 revoking the Environmental Management (Financial Indemnity) Decree and amending various other legislative instruments within the Ministry's policy domain. Government Gazette No. 406, The Hague.

In June 2013 (and again in March 2014), the Province of Groningen submitted a formal request for the Environmental Management (Financial Indemnity) Decree to be reintroduced[11]. It did so having been required to pay significant costs following the bankruptcy of a soil decontamination company. In its request, the Province states that its experience confirms that indemnity arrangements have a major preventive or deterrent effect. Since the repeal of the Decree in 2009, the Province has sought alternative means to limit the financial risks which result from non-compliance with permit conditions. However, no satisfactory alternative has been found and it may be concluded that none exists[12].

Financial indemnity: examples in other European Union member states and in specific sectors
In 2009, the Netherlands took a conscious decision to dispense with indemnity arrangements as part of the (environmental) permit procedures. Nevertheless, examples of (mandatory) indemnity can be seen at the European level and within several individual member states. In this context, we cite the new Offshore Oil and Gas Safety Directive (2013/30/EU) as well as the existing (voluntary) agreements between offshore companies operating in the waters off north-western Europe. Further examples include:

- Mandatory provisions further to the Dutch Nuclear Energy Act (KEW), including the Decree on the Transport of Nuclear Fuels, Ores and Radioactive Substances (*Besluit vervoer splijtstoffen, ertsen en radioactieve stoffen*), the Decree on the Detection of Radioactive Scrap Metal (*Besluit detectie radioactief besmet schroot*), and the Radiation Protection Decree (*Besluit stralingsbescherming*)
- Article 39f of the Soil Quality Protection Act (WBB), requiring financial indemnity to form part of any soil decontamination project plan or post-crisis plan
- Article 55b of the Soil Quality Protection Act (WBB), requiring financial indemnity for soil decontamination to be provided at the time of the transfer of land ownership or leasehold
- Article 3.2.3 of the Fireworks Decree (*Vuurwerkbesluit*) and Article 2.24 of the Environmental Management (Activities) Decree (*Activiteitenbesluit milieubeheer*), requiring financial indemnity to cover liability further to the storage and processing of pyrotechnic materials intended for professional use, and the underground storage of liquid fuels or spent fuel oil
- The entitlement of the relevant (licensing) authorities to impose financial indemnity requirements on any party wishing to dispose of waste in or on a landfill site
- Various provisions of the Mining Act and underlying regulations

The ongoing evaluation of the European Environmental Liability Directive (2004/35/EC) devotes specific attention to its effectiveness in remedying environmental damage, and to the use of mandatory financial indemnity requirements, an option which the Directive provides. The European Commission's report is expected in September 2014. As yet, there is no harmonised pan-European system of mandatory financial indemnity. However, several member states (Bulgaria, Portugal, Spain, Greece, Hungary, Slovakia, Romania, and the Czech Republic) have indeed exercised the

[11] Province of Groningen (2013). Motion for reintroduction of financial indemnity: letter from Provincial Executive to central government dated 20 June 2013. MTZ No. 2013-22.868/25.

[12] Province of Groningen (2014). Reintroduction of financial indemnity: letter from Provincial Executive to central government dated 11 March 2014. OM No. 2014-10.276/11/B.3.

aforementioned option[13]. France has a similar arrangement, which has the same effect, in the form of a general regulation applying to large companies which conduct high-risk activities.

A further development at European level is the ongoing debate prompted by the Green Paper on insurance against natural and man-made disasters[14]. The Netherlands has expressed its support for arrangements whereby industrial operators are given greater opportunity to take out adequate insurance covering the exceptional risks that their business activities entail. Such insurance would benefit those parties who suffer loss or damage in future, while it will also be possible to use the premiums to offset a proportion of any external costs associated with the companies' activities[15].

Offshore Oil and Gas Safety Directive

In response to a number of incidents which had a severe adverse impact on the marine environment, including the Deepwater Horizon disaster of April 2010 (in which an explosion caused the sinking of a drilling platform in the Gulf of Mexico), the EU passed a new Directive governing the safety of offshore oil and gas installations. This Directive incorporates the regulations established by the Seveso III Directive[16], aligning the European requirements for Seveso companies and offshore installations. The European Directive also includes regulations whereby companies are required to provide financial indemnity as a condition of their operating permit.

The holder of an operating permit fully accepts liability for all activities and effects; this liability cannot be transferred to any third party. Moreover, the new Directive extends the scope of liability to include all damage to the marine and coastal environment as well as any negative impact to the economy of the coastal regions and any disruption to energy production or provision throughout the European Union.

When assessing a permit application for offshore oil and gas activities, the relevant authority must take all technical and financial risks into account. This entails an examination of the applicant's ability to meet all financial obligations further to a major incident. The Directive allows the applicant's past performance ('financial responsibility history') to be included as an assessment criterion.
The Directive also establishes a requirement for a further analysis to identify instruments which will provide an appropriate response to all possible consequences of a major incident. The European Commission will report the findings of this analysis in 2015.

---

13 BIO Intelligence Service and Stevens & Bolton LLP (2013). Implementation challenges and obstacles of the Environmental Liability Directive (ELD). Final report prepared for the European Commission, DG Environment. Brussels.

14 House of Representatives (2013). EU Green Paper on the insurance of natural and man-made disasters. Appendix 234596 to Parliamentary Document 22 112, No. 1634.

15 House of Representatives (2013). The Netherlands' response to the EU Green Paper on the insurance of natural and man-made disasters. Appendix 234595 to Parliamentary Document 22 112, No. 1634.

16 Seveso III will come into effect on 1 June 2015. European Parliament and the EU Council (2012). Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC. Brussels.

In 1975, offshore companies operating in north-western Europe formed the Offshore Pollution Liability Association (OPOL) which currently has sixteen members. They have entered into a mutual funding agreement to cover the costs of remedying environmental damage, with a limit per incident of EUR 250 million. Membership of OPOL allows companies to satisfy their financial responsibility obligations in case of incidents involving environmental damage. Should any member face insolvency, the others have undertaken to meet its financial obligations in full.

Membership of OPOL is compulsory for any company wishing to operate in the fields of the United Kingdom Continental Shelf, for which permits are issued by the British Department for Energy and Climate Change (DECC). The offshore industry has traditionally been the domain of a few large multinationals. However, there is now increasing diversity in the industry. Several oil and gas fields are nearing the point of depletion, whereupon further exploration and exploitation is economically viable only for smaller, specialist companies. Even they can satisfy the financial responsibility requirements through membership of OPOL. The Dutch government has yet to impose any comparable requirements as a condition of permit issuance.

Concluding remarks

The risk of serious environmental damage is relatively low in the Netherlands, due in part to effective legislation. Nevertheless, experience has shown that, although the *risk* of environmental damage may be small, the actual environmental *effects* – the adverse impact of an incident – can be significant, as can the costs of dismantling, demolishing and decontaminating a site which has been used for high-risk commercial or industrial activities. In many cases, it is no longer possible to recover such costs from the company concerned. An assessment of the possible impact to society at large will support the political and social discussion to determine whether financial indemnity arrangements are desirable.

If it is decided that society (the government and ultimately the taxpayer) should not be responsible for the costs of remedying environmental damage, but that such costs should fall primarily to the company responsible, the most obvious course of action is to examine the possibility of incorporating a financial indemnity requirement (applying to the relatively small group of high-risk companies) into current environmental legislation. It is, however, important to ensure that any such system does not undermine incentives for risk management and the prevention of environmental damage. The following consideration of potential instruments therefore takes this undesirable 'perverse' effect into account.

Insurability of environmental damage

In many cases, the risks further to environmental liability can indeed be insured, as illustrated by several international examples. In the Netherlands, however, this form of financial indemnity has yet to win ground due to several reasons. There is no legal obligation to take out insurance. There is a lack of perceived urgency. The nature and extent of possible environmental damage are uncertain, as is the risk of such damage actually occurring which makes it extremely difficult to establish appropriate premiums. Moreover, insurance companies tend to apply strict exclusion clauses. Lastly, government itself lacks the necessary knowledge and expertise. These issues are considered below.

No legal obligation
With only a few specific exceptions (such as nuclear power plants), the current system includes no legal obligation for a high-risk company to insure itself against the possible costs of remedying environmental damage. Many companies deliberately opt not to do so, partly because premiums can be extremely high.

Lack of perceived urgency
Another reason for the market's limited enthusiasm for insurance against liability risks appears to be a lack of perceived urgency. Insurance companies report that neither the private sector nor the relevant authorities are fully aware of the scope of the legal liability concerned. It turns out that, where the costs of an incident cannot be recovered from the party responsible (perhaps because the company has been declared bankrupt), it is often the public sector – central government, regional authorities, local authorities, and water management authorities – which must pay. Under Dutch law, there is very little to prevent the owners of a bankrupt company from setting up a similar enterprise and continuing their operations as before.

Awareness of the nature and extent of possible environmental damage
Dutch law, like that at the European level, applies a somewhat imprecise interpretation of 'liability for environmental damage'. It is therefore difficult to assess the extent of the damage which is likely to be caused by a future incident or which will come to light when a plant is dismantled at the end of its useful life. Changing insights and opinions with regard to what constitutes environmental damage result in yet greater uncertainty. Current legislation applies both ecocentric and anthropocentric definitions of 'damage', doing so interchangeably[17]. As a result, both the actual costs of remediation and the costs that can reasonably be recovered are difficult to assess. This is particularly true where the situation prior to the environmental damage is unknown, whereupon the intended results of remediation are also unclear.
Alongside the extent of the damage, for the purposes of insurability it is also important to know how many parties are likely to make an insurance claim in the event of an incident. If the number is particularly high, as would be the case following a flood or comparable natural disaster, insurance cover is likely to be difficult or impossible to obtain.

Risk assessment
To calculate the financial risks, not only the potential extent of the damage is relevant but also the likelihood of that damage actually occurring. Due to the very limited number of incidents in the past, statistics offer very little information for actuarial purposes. Calculating the risk becomes somewhat easier if a maximum insured amount is agreed for each of a limited number of categories. The analysis of financial risks can be based on information provided by the permit applicant. In fact, this is already a statutory requirement for high-risk companies, which must commission a Quantitative Risk Assessment (QRA) and submit the resultant report to accompany a permit application.

Setting premiums
When setting premiums, insurance companies will wish to add a 'safety margin' which takes all variables discussed thus far into account. Where uncertainty is high, so are premiums. There can

---

[17] Backes, C.W., Van Dobben, H.F., Robbe, J. & Dekker, H. (2005). *Reikwijdte van de richtlijn milieuaansprakelijkheid.* Utrecht: CELP/NILOS.

only be a viable market for any insurance product when the conditions – the premium being among the most important – are attractive to potential policy-holders.

Where the premium amount is reduced in recognition of precautions having been taken, we can speak of a 'risk-based premium'. However, the risks to be insured are generally further to business activities which have a complex interplay of risk factors. Any risk-based premium must therefore be reassessed on a regular basis. This demands specific expertise on the part of the insurer, and appropriate risk analysis methodologies must be available (as indeed they are). Within such a system, insurance companies take on the role of 'private sector regulator'. The conditions under which they can add value to the system of horizontal supervision warrant further examination.

Exclusion clauses

Existing insurance products relating to environmental damage or environmental liability apply a number of exclusions. Most policies demand that a causal relationship between the incident and the damage is established beyond reasonable doubt. Some exclude any loss or damage to property owned by third parties (which may have been stored on the policy-holder's premises). The requirement for a causal relationship to be shown greatly reduces financial security, particularly when set alongside the risk liability established by law. It seems likely that an insurance product which does not include this exclusion will only come into being through specific cooperation between insurance companies working as an alliance, perhaps in the form of a guarantee fund. A comparison can be made with an existing guarantee fund – the *Waarborgfonds Motorverkeer* (Dutch Motor Traffic Guarantee Fund) – which pays compensation to third-party victims of road traffic accidents where claims cannot be processed in the usual manner, usually because the driver responsible for the accident is unknown or uninsured. Within such an alliance, the usual exclusions do not apply.

Some costs, such as those of removing and disposing of waste, are inevitable. It is known beforehand that they will have to be paid at some time. Accordingly, they will not be covered by environmental damage or environmental liability insurance.

Insufficient knowledge on the part of government

A financial indemnity guarantee in the form of insurance, and which is a precondition of permit issuance, calls for knowledge and expertise on the part of the authorities which issue permits and ensure ongoing compliance with their conditions. Officials who assess permit applications must study the terms and conditions of the policy carefully to ascertain that the relevant risks are indeed covered. This requires specific expertise. It is also important to ensure that the company continues to pay the premiums and complies with all other terms and conditions of the policy. The existing regulatory authorities may well be in a better position to acquire the necessary knowledge.

Concluding remarks

Experience suggests that insurance is not always the most appropriate instrument to achieve financial security. It is one of many forms of financial indemnity or guarantee. In the Council's opinion, it would not be prudent for the government to attempt to influence the choice of instrument by means of binding legislation or permit conditions. This is an area in which the market itself is

better placed to devise appropriate solutions and products. The government can restrict its input to establishing assessment criteria: minimum and maximum cover amounts (perhaps based on a set of risk categories), permissible exclusions in line with current legislation governing liability, and direct payment to third parties in the event of the policy-holder being declared bankrupt, similar to the system applied by the Dutch Motor Traffic Guarantee Fund.

In terms of compliance with standing obligations, such as the dismantling of plants and soil decontamination following the termination of business activities, insurance is a less practical and useful option since the relevant costs are inevitable. It was known from the outset that they would eventually have to be paid. Other forms of financial indemnity are therefore more appropriate.

In practice, we see that various methods of providing financial indemnity are already in use: a guarantee provided by the parent company, group, or bank, for example, or a mutual guarantee fund. Some such alternatives are discussed below.

Conditions, requirements, and alternatives

Mandatory insurance against the (financial) consequences of environmental damage is one form of financial indemnity. There are alternatives, four of which are discussed below. The list is not exhaustive. It does however illustrate that there are several options which can be applied, perhaps in combination. Before examining these alternatives in detail, it will be useful to consider a few important conditions and requirements which will form part of any financial indemnity system.

Conditions and requirements

When (re)assessing a system of financial indemnity, four aspects are of paramount importance. First (A), the system must reduce the total amount of unrecoverable costs which must then be paid by society (the government and, ultimately, the taxpayer). Second (B), it must avoid any erosion of the existing incentives for risk management and prevention. Ideally, it should reinforce prevention measures and the desire to restrict the consequences of any incident. Third (C), the system must take the competitive position, both national and international, of companies or sectors into account. Finally (D), the costs to the government of implementing and enforcing the system must be proportionate.

In the following examination of four alternatives to mandatory insurance, each is considered in the context of the conditions and requirements stated above.

Alternative 1: A mutual guarantee fund established by private sector companies or sectors; a pool of companies

Private sector companies are able to establish a mutual fund which can be used to provide financial indemnity. There are two main types of mutual guarantee fund: one to which companies contribute

a predetermined amount or pay a regularly subscription, and one in which companies undertake to make a payment as required, i.e. when an incident actually occurs. Each type has specific advantages and disadvantages[18]. When setting up a guarantee fund, the usual course of action is to establish a separate legal entity, usually in the form of a 'foundation' or non-profit company. Through this foundation, each company can demonstrate to the licensing authorities that the costs of environmental damage will be paid, even if they themselves are unable to do so. The licensing authority must be able to ascertain the financial standing of the foundation, and monitor its financial position over time. For its part, the foundation must have (access to) sufficient funds to meet its obligations towards the authorities. The Offshore Pollution Liability Association (OPOL) offers a good example of a guarantee fund (although it has opted to take the form of a limited company rather than a foundation).

Like insurance, a guarantee fund helps to ensure a reduction in the total amount of unrecoverable costs (A). Should one member of the fund be unable to cover the costs for which it is responsible, the other members will do so on its behalf. In terms of the erosion of incentives (B), it is important to ensure that the members do not take a more casual attitude to risks simply because they know that the financial consequences are covered. One way of avoiding this situation is to apply differentiated contributions according to the level of risk and the risk management efforts of each member (as in the case of insurance premiums), and by ensuring ongoing compliance with the terms and conditions established by the fund's statutes. The competitive position (C) of the companies concerned is something to which attention must be devoted. It is essential to avoid a situation in which participation in a fund erodes that position compared to that of (foreign) competitors which are not subject to the same restrictions and financial obligations. In this alternative, the additional costs to the government (D) are primarily those of acquiring the knowledge required to assess the fund's conditions and the degree of financial security they provide.

There is a difference between a guarantee fund such as OPOL and a pool of companies, such as a so-called 'Protection and Indemnity Club'. The latter generally seeks to cover those risks that cannot be insured, and to do so after the event. For example, a group of shipping companies may form a P&I Club to cover the risk of an oil spill at sea. Its members have a direct interest in avoiding any compensation claims. A guarantee fund which exists solely to provide a guarantee that each member's obligations will be met even in the event of insolvency is therefore more limited than a pool of companies, which is based on a formal agreement whereby risks are spread among its members.

Alternative 2: A guarantee fund established by the public sector (government authorities)

This form of guarantee fund entails one or more public sector authorities coming to the aid of another government level or organisation (e.g. a provincial, local or water management authority) which finds itself facing costs which cannot be recovered under the principle of 'the polluter pays'.

If the public sector guarantee fund is the only instrument applied, it is unlikely that there will be any reduction in the total costs to society (A). Neither will there be any additional incentive for companies to improve, or even maintain, their prevention efforts (B). The competitive position (C) is

---

[18] Faure M., Peeters, M., Philipsen, N. & De Smedt, K. (2009). *Milieuaansprakelijkheid goed geregeld? Een analyse van het geheel aan aansprakelijkheidsregelingen in het Nederlandse milieurecht.* Maastricht: METRO.

likely to remain unaltered. Additional costs to the government (D) will largely be confined to those of establishing and managing the fund.

Alternative 3: A bank guarantee

A bank guarantee is an instrument whereby the guarantor (usually a bank but perhaps another type of financial institution) undertakes to pay a predetermined amount in certain circumstances, such as the insolvency of the guaranteed party.

Application of this instrument will indeed bring about a reduction in non-recoverable costs (A), since the costs of remediation will be paid, at least in part, by the guarantor. Depending on the acceptance conditions applied by the guarantor, which will generally require some form of security in the form of a 'first-claim' lien on assets or the entire amount of the guarantee being held in escrow, the incentives for prevention (B) could be either increased or diminished. The financial conditions will vary from one bank to another. These conditions will also determine whether the competitive position (C) of the companies concerned is adversely affected, and if so, to what extent. Where there is a lien on assets such as plants or real estate, the company's credit facility will be reduced accordingly, since those assets are no longer available to provide security on loans. Moreover, the company will face additional, recurring costs in the form of bank charges. The additional costs to government (D) will be negligible.

Alternative 4: Conditions under private (civil) law

A company is not necessarily the owner of the buildings it occupies or the land on which those buildings stand. It is not unusual for premises to be rented from a private landlord and hence subject to a lease, while the land is likely to be owned by the local authority and subject to a (long) lease on which ground rent is payable. It is possible for conditions to be implemented within either type of lease, including legally binding provisions which stipulate the condition in which the property is to be returned to the owner upon termination of the lease or of the company's business activities.

This instrument does not provide direct financial indemnity as such. Nevertheless, it demonstrates that other means to regulate matters such as soil decontamination and site clearance exist and should be explored, perhaps in combination with the other options outlined above. Provided the lease conditions are adequate and enforceable under private law, there will be a reduction in the amount of unrecoverable costs (A) and greater incentives to implement prevention measures (B). There will be little or no impact to companies' competitive position (C), and absolutely no additional costs for government (D).

Options provided by existing legislation

The former Environmental Management (Financial Indemnity) Decree had its legislative basis in Article 8.15 of the Environmental Management Act (WMB) in force at the time. Today, Article 4.1 of the Environmental Law (General Provisions) Act (WABO) enables situations in which financial indemnity must be provided to be defined by means of a General Order in Council ('AMVB'), a form of 'ministerial decree' which has the same weight as an Act of Parliament but does not require the

usual readings, debate, and parliamentary approval. To date, the government has not exercised this option.

Concluding remarks

If the government decides to (re)introduce a system of financial indemnity, the most straightforward and convenient way of doing so will be by means of a General Order in Council, as provided by Article 4.1 of the Environmental Law (General Provisions) Act (WABO). The implementation of the new Environment and Planning Act (OW) will then establish financial indemnity as a standard condition of any environmental permit. The applicant's ability to provide financial indemnity against any future costs of remedying environmental damage will form a basic principle of the assessment of a permit application. The permit itself can be made subject to certain ongoing conditions. If it is uncertain that the applicant will be able to meet all future obligations, this alone will be grounds to refuse the permit.

It seems possible to devise a system which allows the authorities responsible for issuing permits – often regional agencies – significant discretion, within the framework established by the requirements and conditions set out above. This discretion might extend to whether formal financial indemnity is required at all, the instrument to be applied, and the amount concerned. It is important that the relevant authorities are in a position to assess the indemnity requirement accurately while assessing the permit application itself. A guideline is likely to be useful in this regard[19]. The applicant can be required to enumerate and explicate the environmental risks of its activities.

Even after decisions have been made regarding the financial indemnity requirements, it will be necessary to oversee companies' compliance with those requirements. This is not only a task for the regulatory authorities but one for the market itself in the form of 'horizontal supervision'. The Council recommends further examination of the possibilities and opportunities in this regard.

---

[19] A good example is provided by the Guideline produced by the Ministry of Housing, Spatial Planning and the Environment to accompany the original Environmental Management (Financial Indemnity) Decree. It offers a comparison of the various instruments which can be applied, as well as useful guidance in assessing the financial position of a company.

RESPONSIBILITY AND ACKOWLEDGEMENT

About the Council for the Environment and Infrastructure

The Council for the Environment and Infrastructure (*Raad voor de Leefomgeving en Infrastructuur*, Rli) advises the Dutch government and Parliament on strategic issues concerning the living and working environment. The Council is independent, and offers solicited and unsolicited advice on long-term issues of strategic importance to the Netherlands. Through its integrated approach and strategic advice, the Council strives to provide greater depth and breadth to the political and social debate, and to improve the quality of decision-making processes.

Composition of the Council

Henry Meijdam, Chair
Agnes van Ardenne – van der Hoeven
Marjolein Demmers, MBA
Eelco Dykstra, MD
Léon Frissen
Jan Jaap de Graeff
Prof. Dr Pieter Hooimeijer
Prof. Niels Koeman
Marike van Lier Lels
Prof. Dr Gerrit Meester
Annemieke Nijhof, MBA
Prof. Dr Wouter Vanstiphout

Composition of the advisory committee

Prof. N.S.J. Koeman, Chair

Composition of the project team

F.W. de Haan, project leader
Y.M. Oostendorp
P.E. Schils
B.B.W. Thorborg
C.I.A. de Vries, BC

Experts and reviewers consulted

Expert meeting of 3 April 2014:
L.A.A. Bechtold, VAN
M. Beugel, Dutch Association of Insurers (VVZ)
N.W.M. Bouman, Ministry of Infrastructure and the Environment
Dr E.H.P. Brans, Pels Rijcken & Droogleever Fortuijn N.V.
Dr J.H.G. van den Broek, Confederation of Netherlands Industry and Employers (VNO-NCW); Royal Association MKB-Nederland

J.A. van Esch, Dutch Association of Insurers (VVZ); Achmea
Prof. Dr M. G. Faure LL.M., Maastricht University / Institute for Transnational Legal Research (METRO)
J.J. Feenstra, Port of Rotterdam Authority
Dr H.J.M. Havekes, Dutch Water Authorities (UVW)
J.H. van den Heuvel, DCMR
A. van der Rest, Shell Netherlands B.V.
M.P.T. Rongen, Province of Limburg
J. Roosen, Association of the Dutch Chemical Industry (VNCI)

Further consultations were held with:
G. van Emst, Willis Re Netherlands
J.H.C.M. van Gemert, Ministry of Economic Affairs
J.C. de Groot, Ministry of Economic Affairs
R.T.A. Hillen, Netherlands Oil and Gas Exploration and Production Association (NOGEPA)
R.N. Jansen, Ministry of Economic Affairs
M.J. Kraak, Dutch Water Authorities (UVW)
J.B. van Oosterom, Ministry of Economic Affairs
J.H. Oosters, Schieland en de Krimpenerwaard District Water Board
F. Soeteman, Dutch Association of Insurers (VVZ)
F.W. Stuyt, SCCM

Departmental consultations:
P. Torbijn, Ministry of Infrastructure and the Environment
N.W.M. Bouman, Ministry of Infrastructure and the Environment
P. Pasveer, Ministry of Infrastructure and the Environment
T.C. Welkers, Ministry of Infrastructure and the Environment

External reviewers
Prof. Dr M. G. Faure LL.M., Maastricht University / Institute for Transnational Legal Research (METRO)

Other
Editorial recommendations: Catherine Gudde, Paradigma producties
Translation: DBF Communicatie, Alphen aan den Rijn

Rli publication 2014/05
May 2014