
Financial Accountability for Hazardous Substances

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Prepared by:

Sustainability Council, PO Box 24304, Wellington, www.sustainabilitynz.org
Tel: 64-4-9133-655, Fax: 9133-760, Email: council@sustainabilitynz.org

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Executive Summary

1. Sixteen years after Government first determined to bring together coherent regulations for hazardous substances, effective financial accountability for harm caused by these substances remains limited. While Government has committed to the “polluter pays” principle, the polluter continues not to be held financially accountable under a wide range of circumstances.
2. The Ministry for the Environment (MFE) recently undertook a stocktake of the legislation passed in 1996 to overhaul the regulations resulting from that first review. In April, it presented a “strategy” proposing a series of changes to that legislation – the Hazardous Substances and New Organisms Act. However, this did not recommend changes to plug the current gaps with respect to financial accountability and legislation currently being drafted makes no provision for this.

Past Experience

3. New Zealand has had direct experience that shows all too clearly the problems that can arise if full financial accountability is not in place. MFE estimates that the cost of cleaning up contaminated sites in New Zealand is around \$1 billion. In absence of new Government measures, a great deal of this cost seems set to fall on innocent third parties.
4. A decade ago, MFE proposed new legislation that would make polluters liable retrospectively and would exempt from liability those landowners who had purchased without knowledge of the contamination and had made appropriate efforts to inquire about this. It also proposed creating a fund of some hundreds of millions of dollars for the cleanup of “orphan” sites throughout the country.
5. This package was not put into law and alternative proposals to cover sites nationally have yet to come forward. MFE has instead allocated funding to a few high profile sites on a case by case basis. An overall package is required to remove uncertainty as to what work will be required at each site and who will pay.
6. The decade-long delay has favoured polluters and risks a gradual transfer of responsibility to innocent property owners. Rather than an explicit policy decision to this effect, all that may be required is Government inaction.

Accountability for Future Damage

7. Such past experience underscores the need for full financial accountability for future activities. While Government has made international commitments to the “polluter pays” principle, only to a limited extent has this been followed through into workable provisions. The current emphasis on holding parties liable for not complying with regulations is a necessary step but leaves unanswered the question of who pays if harm still occurs.

8. Full financial accountability incentivises due care and promises an overall gain for society. This will arise to the extent that the discipline of funds at risk leads to better decisions when making and using substances, thereby reducing the damage caused. Society as a whole makes a gain and the polluter pays, rather than innocent parties. Put another way, without financial accountability, hazardous substances are in effect subsidised – disadvantaging less risky options.
9. Three relevant categories of liability are: economic loss, harm to human health, and environmental damage. At present, the parties making choices about whether to use hazardous substances face only a part of the full potential costs that their decisions could impose on others' financial assets or human health. Considerable progress has been made with respect to accountability for environmental damage but here too, reforms are required.
10. The key gaps are:
 - **Economic Loss:** There is no effective liability regime for economic loss.
 - HSNO contains no liability provisions for financial harm to third parties. Civil actions can be taken under common law but, as set out in Government statements, this law is ill-suited and inappropriate.
 - Further, there is no requirement for a party making use of hazardous substances to provide assurance that it can meet a level of claims that might reasonably be expected to result from an accident, let alone unexpected effects.
 - **Human Health:** There is no direct financial incentive to take into account potential impacts on human health. The Accident Compensation Corporation (ACC) provides compensation for a range of classes of personal injuries and once an ACC claim is accepted, any parties responsible for causing harm face no threat of legal action to recover the costs involved. Claims not accepted by ACC may be pursued only under ill-suited common law.
 - **Environmental Damage:** Liability for environmental damage is in principle well covered but the effectiveness of these provisions relies on their being sufficient funds at risk. The current arrangements for this need to be improved.
11. The full costs of hazardous substances are therefore not revealed to potential users and, as a result, these substances are likely to be used more than is optimal for the economic welfare of New Zealand.

Key Reforms

12. The HSNO Act indeed requires attention to improve its general workability - the aspect MFE has focused attention on. Changes directed at this are important and desirable. However, MFE's strategy and proposals to Government for a change of law lack a vital component – measures to ensure financial accountability going forward and also to address historic contamination costs. What is required is a set

of comprehensive liability and financial fitness provisions to address the major gaps in the current regime so that these elements are also “workable”.

13. Companies with a long term stake in the market will recognise the value that such provisions can deliver. They drive improved product evaluation, improved internal processes for monitoring, better customer relationships, and better public profiles.
14. MFE has also pointed out that for a country trading on its environmental image, “Clean-up of orphan sites is a significant step towards ensuring the “clean green” image is matched by the reality of our environment.” This point equally applies to setting incentives for future activities.
15. The following are key reforms required to secure effective financial accountability:

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1. Developers and users of hazardous substances are made strictly liable for:
 - Economic loss caused to third parties; and
 - At least that harm caused to human health that is not covered by ACC.

Such liability would be subject to a limited set of defences but would apply irrespective of whether a consent or permit for the activity had been issued by a regulatory authority.

2. HSNO sets financial assurance requirements to ensure those who make and use hazardous substances have a minimum level of funds available to meet claims. ERMA would enforce these as a condition of obtaining approval to commence an activity.
 3. Liability for clean up of historic contaminated sites is addressed through:
 - Completion of registers of contaminated sites;
 - Definition of standards that set thresholds for cleanup;
 - Devising and legislating for a formula to allocate liabilities;
 - A substantially increased national fund for the clean up of orphan sites, as envisaged in 1995 proposals.
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1. Origins

In 1987 it was recognised that New Zealand lacked consistent and well-formed laws to govern the use of hazardous substances. They were regulated by an ad hoc series of sector specific-statutes with widely varying criteria for assessing what was safe and under what conditions a hazardous substance could be used.¹ It was apparent that significant reform would be required to achieve a consistent and integrated response to the risks posed.

The Ministry for the Environment (MFE) was charged with co-ordinating the relevant government agencies to “formulate an effective overall strategy for the future management of hazardous substances”.² By late 1988, it had reported its recommendations which embraced clear principles and objectives, and set options for structural reform aimed at ending the “fragmented” approach of the time. Its recommendations ultimately led eight years later to the passage of the Hazardous Substances and New Organisms Act (HSNO) in 1996. This established the new regulator, the Environmental Risk Management Authority (ERMA) with a view to it ultimately overseeing the assessment and approval of all hazardous substances.

The new regulator began administering hazardous substances only in July 2001. However, since then MFE reports, “it has become clear that there are a number of teething problems with the Act, including systemic problems that affect the Act’s workability”.³ In response, MFE and ERMA worked with a group of essentially industry stakeholders⁴ with the objective of helping to improve the act’s workability. From this emerged what has been titled the “Hazardous Substance Strategy” and proposals to amend HSNO to implement its conclusions.⁵

The title commonly used by officials for this reform programme, “Macropatch”, is a far better description of the content and purpose of the reforms. Rather than a first principles “strategy” such as the 1988 document, it is simply a description of a series of proposed patches to the existing act. There is very limited problem definition, analysis, or options evaluation in the Macropatch documentation.

It should be clearly stated at this point that there is clear value in a great many of the patches. They will, as is the declared intention, make the Act more workable - an

¹ Pesticides, animal remedies, toxic substances, explosives and radioactive materials were each subject to different assessment criteria and under at least three different government departments. *Pollution and Hazardous Substances Management*, Final report of the Inter-agency Co-ordination Committee, Ministry for the Environment, November 1988, p20.

² Ibid, p 34 – Point four of the terms of reference.

³ *Hazardous Substance Strategy: Proposals to Amend the Hazardous Substances and New Organisms Act 1996 – Specialist and Technical Issues*, Volume Two, MFE, Aril 2004, p2.

⁴ The group included: Ross Hore, BASF Chemicals; Wayne Koedyk, EKA Chemicals; Tony Haggerty, ERMA; John Hutchings, Local Government New Zealand; Peter Whitehouse, Business New Zealand; Helen Atkins, Resource Management Law Association; Jack Richardson, AGCARM; and Barry Dyer, Chemical Industry Council.

⁵ *Strategy for Improving the Workability of Hazardous Substances Provisions of the Hazardous Substances and New Organisms Act*, Ministry for the Environment, June 2003 and *Hazardous Substance Strategy: Proposals to Amend the Hazardous Substances and New Organisms Act 1996 – Specialist and Technical Issues*, Volumes One and Two, MFE, April 2004.

important and desirable outcome. However, in undertaking as detailed a stocktake as has been prepared to guide the proposed legislation, it is incumbent on the reviewers to also identify major gaps that have become apparent. In any package of reform, there is a balance to be struck between the prime purpose of regulatory intervention – protection and assurance – and providing for economic development. The principal critique of Macropatch is that in focusing on “workability”, it fails to also patch gaping holes with respect to setting appropriate protections.

HSNO clause 4 states:

"The purpose of this act is to protect the environment and health and safety of people and communities by preventing or managing the adverse effects of hazardous substances and new organisms."

Eight years on from the passage of HSNO, there are two areas that stand out for reform to better provide for HSNO to deliver on this statutory purpose. These are:

1. Establishing full financial accountability for developers and users of hazardous substances;
2. A substantial reworking of the framework and approach used to assess hazardous substances for use.

The second of these revolves around the absence of an assessment framework based on precaution. This issue has been addressed by the Sustainability Council in a number of documents.⁶ It is the issue of financial accountability that is the focus of this paper.⁷ The following section discusses a past experience that supports such reform and the sections thereafter focus on the current arrangements and reform requirements.

⁶ See for example the Sustainability Council’s submission in respect of *Revisions to the ERMA Methodology*, October 2003.

⁷ It too has been frequently addressed in principle by the Sustainability Council but this paper extends the analysis with respect to hazardous substances, including that provided in the Council’s June 2004 submission on the MFE discussion paper.

2. Lesson From History

The importance of having comprehensive financial accountability for hazardous substances has been well demonstrated by past experience in New Zealand. One of the clearest examples is provided by what have become termed “orphan contaminated sites”.

As the name implies, these are sites for which the agent that caused the contamination can not be held accountable for cleanup. This is due to either an absence of adequate law in place that would make the polluter liable or else an absence of sufficient funds to meet clean up costs.⁸ Such sites are primarily those arising from activity prior to 1991 – the date the Resource Management Act was introduced and the law tightened.

MFE defines a contaminated site as:

A site at which hazardous substances occur at concentrations above background levels and where assessment indicates it poses, or is likely to pose, an immediate or long-term hazard to human health and /or the environment.⁹

How many orphan contaminated sites exist is far from clear. MFE stated in 1995 that:

Preliminary studies of the likely extent of potentially contaminated sites indicates that there may be over 8000 potentially contaminated sites in New Zealand. These are made up of the 7200 identified in the 1992 report, approximately 800 timber treatment sites, and a number of agricultural sites such a sheep and cattle dip sites. Of the 8000, approximately 1500 are thought to be high risk sites.¹⁰

Industry sources suggest this number is significantly overstated. However, the absence of a national register - first requested of MFE more than a decade ago – and constraints on access to council records¹¹ means estimates continue to be somewhat speculative.¹²

Consequently the cleanup costs are uncertain but MFE has produced estimates of their scale. Costs were estimated in a 1992 consultant report to be \$600 million and MFE most recently stated in August 2004 that the cost “is estimated to be in the order of a billion dollars”.¹³ Just what proportion of this is “orphaned” will not be known until the sites identified as potentially contaminated are investigated, standards are clear, and the liability framework that will ultimately apply is settled.

⁸ Under current law, there is no effective retrospective liability for the polluter when the damage was caused prior to 1991. (Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 2.2.2)

⁹ The Contaminated Sites Remediation Fund: Guide to Regional Council, Ministry for the Environment, August 2004, p3.

¹⁰ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 1.3.

¹¹ *Secrecy keeps lid on toxic cesspits*, NZ Herald, 24 February 2001.

¹² MFE did not list any specific quantitative estimate of the number of contaminated sites in its latest publication on this issue (see reference immediately below)

¹³ *The Contaminated Sites Remediation Fund: Guide to Regional Council Applicants*, Ministry for the Environment, August 2004, p3, and Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 3.5.

The 1995 Proposals

In 1995, MFE presented a well structured analysis of the options for dealing with these sites and it outlined principles for legislation that would squarely address the issue. A discussion document issued that year first restated the Government's goal of "cleaning up contaminated sites to reduce risk to the environment, people and the economy". The document then stated that:

The Government is committed to ensuring that the management of contaminated sites is addressed in a timely and appropriate manner. It is recognised that any clean-up will not happen overnight. However, **what is certain is that the liabilities of past and present generations cannot continue to be transferred to future generations**. [Emphasis added]¹⁴

With respect to risk to the national economy, MFE noted:

New Zealand's international image, in marketing and selling many of our exports, is highly dependent upon our "clean green" environment. As stated in *Environment 2010 Strategy*: "We should continue to improve environmental quality to underpin this image, especially where these resources are an important part of our economy ...". Clean-up of orphan sites is a significant step towards ensuring the "clean green" image is matched by the reality of our environment.¹⁵

MFE proposed that there be a strict liability regime for historical contaminated sites, such that polluters, owners and occupiers would be liable and could be compelled to clean up subject to a series of defences including:¹⁶

It is proposed that the landowner or occupier or polluter who is:

- not a related party to the polluter of the site;
 - had no knowledge of contamination at the time of acquisition or occupation;
 - undertook appropriate investigations;
- will not be liable.

The Government has agreed in principle that secured lenders should not be liable for the clean-up costs of a contaminated site where they:

- were not responsible for the contamination;
- did not exercise any control or impose requirements which contributed to or caused contamination;
- participated only in financial matters.

Under these proposals, MFE suggested by way of example that clean up costs could be split three ways between: local and central government liabilities, other liable parties, and orphan costs.¹⁷ Of the then estimated \$600 million, under this example

¹⁴ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, Foreword.

¹⁵ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 3.6.2..

¹⁶ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 2.4.2, and 2.5.1.

¹⁷ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 3.5.2.

\$200 million would be provisioned for as orphaned costs to be raised over 10 years by means of levies, rates or taxes.

Such legislation did not follow from the discussion paper, nor at any other time in the past decade, although in late 1999 a commitment was made to introduce it by then Environment Minister Simon Upton just before he left office.¹⁸ While a Contaminated Sites Remediation Fund has been created, only \$1 million a year is currently available¹⁹ for cleanup beyond two high profile sites.²⁰ An overall approach to allocation of liability and arrangements to make available significant funding in line with that proposed in 1995 has yet to be brought forward.

Risk of Transfer of Liability

One effect of this ongoing delay recently gained public attention when a large number of West Auckland property owners were alerted that their properties were formerly market gardens and may still be contaminated with chemicals used prior to the land's conversion to residential use. In mid-November 2004, the Auckland City Council began adding notes to LIM reports to this effect after informing 4872 landowners they must pay for tests to find out if their properties contained dangerous levels of DDT, arsenic, lead and copper.

When this raised strong concern from the community in respect of the effect on property values and who would pay, Government did not focus on the underlying issue of how to allocate liability and facilitate cleanup should tests show harmful contamination was present. While promising assistance with the costs of testing, Environment Minister Marian Hobbs' principal policy response was to state that Auckland City Council was wrong to tag the LIM reports before testing was undertaken. The council had obtained a legal opinion that advised this was a requirement under current law. The Environment Minister's further response was that Government would change the legislation if necessary to support its view that the notes should not be added.²¹

With respect to key measures that would address the underlying problem:

- there has been no proposal for statutory reform to provide a clear mechanism for allocating liability (as had been advocated in 1995);
- there has been no proposal to hold harmless innocent landowners;
- there has been no proposal to significantly increase the funding for clean-up of orphan contaminated sites.

As MFE noted when discussing proposed reforms in 1995:

Some of the issues have potentially big impacts on property values and create significant uncertainty. The roles and responsibilities of the parties would be clarified

¹⁸ *Contaminated Sites Liability Regime: Special Announcement*, Simon Upton, Environet 36, 14 October 1999.

¹⁹ *The Contaminated Sites Remediation Fund: Guide to Regional Council Applicants*, Ministry for the Environment, August 2004

²⁰ Mapua and the Tui mine sites.

²¹ *Law change likely over toxic soil*, NZ Herald, 19 November 2004.

[through the then proposed reforms]. This would allow people to more clearly assess what their liabilities were in situations where contaminated sites required clean-up. Resolution would allow the property market to operate more efficiently by providing certainty.²²

Delay in determining an allocation of liability for historical contaminated sites has favoured polluters. While the toxic substances at issue have not gone away, the parties that originally caused the problem will increasingly be out of reach. The ability to obtain funds from these parties will be progressively restricted as companies are deregistered and/or funds are transferred to other entities or decline for other reasons.

This in turn means that innocent parties are increasingly likely to be faced with clean up costs they had no knowledge of when they purchased properties and would have been immune from under 1995 proposals. Jan Caunter, a lawyer specialising in contaminated-site issues, states:

It would be fair to say that landowners whose land has been identified as either contaminated or potentially contaminated are sitting ducks. They face the prospect of being required to take action deemed necessary to avoid, remedy or mitigate any actual or likely damaging effect on the environment.²³

So rather than just a transfer of liability to future generations, which MFE stated it was “certain” could not continue, delay in bringing forward mechanisms for clearly allocating liability raises the clear potential for a transfer of liability to unfortunate individuals and avoidance by polluters. Even if Government were to absolve those property owners who bought without prior knowledge of contamination being present, as the prospect of securing compensation from polluters fades, this still leaves other innocent parties (in the form of ratepayers and taxpayers) picking up the tab rather than those who caused the damage. (This issue is further discussed in section 4.3 below.)

Orphan contaminated sites are only one example of the effects inadequate financial accountability can produce. However, it demonstrates all too readily the scale of unallocated liabilities that can arise if comprehensive financial accountability is not in place. It also indicates how incentives are set up to not investigate and test for contamination when the liability for clean up costs is unclear, with ongoing damage to health and the environment the clear risk.

With this lesson in mind, the following sections assess the extent of the gap between the current position and arrangements that would provide full financial accountability for the use of hazardous substances.

²² Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, Foreword.

²³ *Contaminated land an issue of liability*, Jan Caunter, NZ Herald, 5 November 2004.

3. Polluter Pays Principle

The MFE document outlining the reforms to HSNO currently proposed (Macropatch) refers in its introduction to a section of Agenda 21, the document published following the United Nations Earth Summit in Rio de Janeiro in 1992. It cites chapter 19 as a key influence in the shaping of the original HSNO Act.²⁴ However, the binding section of that document is the principles set out at the front which form the centrepiece of the Rio Declaration on Environment and Development. The New Zealand Government became a signatory to the Rio Declaration in 1992 and reaffirmed this commitment in 2002.

Principles 13 and 16 of the declaration are:

“13. States shall develop national laws regarding liability and compensation for the victims of pollution and other environmental damage. ...”

“16. National authorities should endeavour to promote the internalisation of environmental cost and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution ...”

These principles underpin three objectives that should guide design of liability law for hazardous substances:

- i. Provide compensation for victims;
- ii. Incentivise operators to take due care;
- iii. Provide correct economic incentives for investment.

Principle 13 targets objective (i), compensation for victims, and this objective is uncontested in the literature.

Principle 16 advances the “polluter pays” principle and through this covers the other two objectives. It relies on financial disciplines incentivising “correct” behaviour. This includes incentivising both due care and an optimal level of investment. It is a market mechanism for assisting simultaneous delivery of objectives (ii) and (iii).

A general principle in the economics literature is that, wherever possible, economic agents should both (a) be able to appropriate at the margin the economic value which they create, and (b) face the full marginal costs of their activities.²⁵

Unless firms face the full marginal social costs of their activities, they will have the incentive to over-expand those activities at the cost of the wider economy. Hazardous substances are then likely to be used more often than is optimal for the economic welfare of New Zealand. The process of “internalising” costs which otherwise would fall on third parties is a necessary precondition if market mechanisms (that is,

²⁴ *Substance Strategy: Proposals to Amend the Hazardous Substances and New Organisms Act 1996 – Specialist and Technical Issues*, Volumes One and Two, MFE, April 2004, p1.

²⁵ For further discussion, see *Who Bears the Risk*, Chen Palmer & Partners and Simon Terry Associates, October 2001, Chapter 4.

voluntary transactions among private parties) are to lead to socially efficient outcomes.

Hazardous substances will in general be just one means to a particular outcome that is being sought. Whether the objective is pest control, hygiene or medical intervention, such substances will be one means to the end. To the extent the full costs of the activity are not internalised, production routes making use of these are being subsidised. They are being given an undue advantage over other potential solutions.

Full Costing of Risks to Promote Better Decision-Making

Claims for damages resulting from use of hazardous substances form part of the full cost of selecting a technology or substance to meet a particular objective. Those full costs will only be known *ex post*. However, when this risk is formally transferred to a third party, the consideration paid to the insurer or broker then represents the best present day estimate of the risk-weighted cost.

By paying for the present day cost of the risk (either through external insurance or self-insurance), the operator is internalising that cost. If the operator does not pay that cost, it does not go away. It sits with taxpayers, ratepayers or the injured party, depending on the circumstances. They implicitly carry a contingent liability on their accounts while developers and users of hazardous substances are effectively subsidised.

The argument has been made that requiring operators to carry the full financial risks of their technology is an “onerous” imposition. However, a strict liability regime can only be onerous in the sense that it requires the operator to carry the full risks of damages claims in a way that is inefficient. Thus the issue is not whether a new regime would be “onerous”, it is about what would properly internalise the costs of production.

If we compare two projects, with one of them a process making use of a hazardous substance and the other using materials that are not considered hazardous, and if both processes face liability regimes that are appropriately designed to ensure compensation for injured parties and to incentivise the taking of due care, then there is no presumption that the resulting investment decisions are “inefficient”.

A February 2002 cabinet paper that advised Government on the framing of the liability sections of the New Organisms and Other Matters Bill advanced the argument that:

“Imposing the more stringent standard of strict (or absolute) liability may deter activities that are socially beneficial and, consequently, stifle innovation and economic growth contrary to government policy.”²⁶

²⁶ Government Response to the Royal Commission on Genetic Modification: Legislative changes for New Organisms – Paper 5: Liability Issues for GM, Cabinet paper, February 2003, p4.

This argument relies on a distorted definition of what is “socially beneficial”. If an economic activity can not itself sustain the full costs which it imposes on society, then it should not be undertaken as there is no net benefit to be obtained in this case. Obviously, if there are benefits as well as costs that are external to the firm, such that overall its activity is socially beneficial, there may be individual cases that merit individual subsidy. However, there should not be a blanket subsidy in this respect. Blanket subsidies, via potential relief of firms from full liability for the costs their activities impose on society, is not supported by reference to any established principles. A subsidy arrangement is inconsistent with New Zealand’s international commitments under the Rio Declaration, and with the standard minimum requirements for economic efficiency in the dynamic as well as the allocative sense.²⁷

This position is supported by the Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites which put forward the principle that:

Prevention of future pollution: the regime should ensure that polluters bear primary liability for remediation of sites they have contaminated, thereby discouraging future contamination.²⁸

MFE notes that:

Eventually clean-up costs will, in some way, fall back on the public, whether it be through rates, taxes, product prices, or company profits. The task is to find the best means to fund those costs.²⁹

Industry representatives correctly point out that if they are made fully financially accountable, then prices for products derived from hazardous substances will need to rise. What is being sought through this is an overall gain for society. This will arise to the extent that the discipline of full financial accountability leads to better decisions when making and using substances, and thus reduces total damage caused. The extra costs falling on users are then more than offset by reduced costs to taxpayers and ratepayers. Society as a whole makes a gain and the polluter pays, rather than innocent parties.

²⁷ That is, a general subsidy would subvert the efficient choice of investment projects by private agents, because the profitability of the process making use of a hazardous substance would be artificially raised relative to the returns available from normal competitive activities; and it would subvert the efficient allocation of society’s scarce resources by diverting them from more socially-profitable activities into the subsidised activity.

This is not to say that Government should never subsidise an activity that is unprofitable in order to allow it to proceed. The argument is simply that if Government wishes to pursue a particular policy of industry assistance, the assistance should be transparent by way of explicit subsidy and Government should be fully accountable for the decision.

²⁸ ANZECC and National Health and Medical Research Council (NHMRC): Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites, January 1992.

²⁹ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, Foreword.

4. Current Liability Requirements and Gaps

There are two baseline components of an effective liability regime.

- Clear statutory provisions that make developers and or users financially accountable for damage that may result from the manufacture or use of a hazardous substance.³⁰ This involves defining who is liable, for what damages, over which timeframes.
- Requirements on developers and users to maintain the ability to meet damages claims.

Liability issues surrounding hazardous substances can be subdivided into three types of claims:

- Economic Loss - including property damage or financial losses.
- Damage to Human Health
- Environmental Damage

The following examines the overall position with respect to each of these classes of risk.

4.1 Economic Loss

As the 1988 strategy document identified, “making the user liable is the first step”³¹. The 1992 MFE report laying out detailed proposals for HSNO spelt out that there was to be liability for “recovery of costs of any damage caused, or any control or repair required”. It further noted that “Recovery of costs for damage caused, or for cleaning up required, needs to have priority over other claims for companies going into receivership”.³²

However, by the time the proposals were translated into the HSNO Bill placed before Parliament in 1995, there were no provisions covering liability for damage. This position appear to have been the result of a series of factors:

- There has been for some time a heavy focus by MFE on contamination of land, rather than a more general focus on loss that could result in other ways as well. In addition, future environmental damage had already been addressed through provisions in the RMA.
- At the time the select committee reviewing the original HSNO Bill was sitting, a discussion paper had been issued by MFE that proposed retrospective liability for

³⁰ This liability will always be subject to a series of legitimate defences, as discussed *Who Bears the Risk*, Chen Palmer & Partners and Simon Terry Associates, October 2001.

³¹ *Pollution and Hazardous Substances Management*, Final report of the Inter-agency Co-ordination Committee, Ministry for the Environment, November 1988, p 19.

³² *Hazardous Substances and New Organisms: Proposal for Law Reform*, Ministry for the Environment, October 1992, p 43.

the clean up of sites contaminated prior to 1991. While its principal purpose was to address pre-1991 contamination, the legislation was also to be forward looking.

- Finally, the general approach to risk assessment under HSNO presumes perfect foresight on the part of the regulator. If the regulator could accurately predict the types of adverse effects and their probability, it was reasoned that controls could then be set to all but avoid harm.³³ Given that thinking, the focus for incentives was setting penalties for individuals making decisions that resulted in any breach of the act.³⁴

The inadequacy of HSNO's general approach of presuming perfect foresight has been well demonstrated by previous failures internationally to adequately predict the scope and scale of adverse effects hazardous substances can produce – effects that were previously not considered or were formally discounted during approval hearings.³⁵ Examples of latent effects that have recently received attention are the impact of asbestos on workers using the material, pesticide contamination of suburban properties that were previously market gardens, and the effects of dioxin on workers in plants manufacturing organochlorines.

Even if such a conceptual approach were thought credible, there remained the question of who would be the residual risk-bearer. That is, should those who cause any harm that may result still be liable? Or would the regulator explicitly take on the liability as a Crown commitment? This question is simply not addressed by HSNO.

While the select committee in 1995 determined to leave any retrospective liability to the proposed separate legislation (and “urged the Government to move expeditiously” in respect of it), this need not have compromised its ability to prescribe future liability for economic loss.³⁶

Inadequacy of Common Law Remedies

In absence of HSNO providing for economic loss, effectively only common law remedies are available to any third party suffering such harm.³⁷ The severe

³³ *MFE3: Written reports on specific matters requested by the HSNO Bill Select Committee*, Ministry for the Environment, 1995, p 6. See also *Hazardous Substances and New Organisms: Proposal for Law Reform*, Ministry for the Environment, October 1992.

³⁴ HSNO sections 109, 115 and 116 set out offences under the act relating to a range of circumstances involved in a failure to comply. It sets fines (not to exceed \$500,000). Section 109 (i) also usefully makes it an offence to “knowingly fail to report any significant new information of any adverse effect” of a hazardous substance. However, these offences are all structured simply as penalties for breaking the law, not damage caused. They are a necessary but not sufficient condition for an effective incentives structure regarding liability.

³⁵ See: *The Precautionary Principle in the 20th Century*, European Environment Agency, March 2002, *Our Stolen Future*, Theo Colborn, Dianne Dumanoski, and John Peterson Myers, Penguin Books, 1996 and *Key Lessons from the Long History of Science and Technology: Knowns and Unknowns, Breakthroughs and Cautions*, Parliamentary Commissioner for the Environment, March 2001.

³⁶ *Hazardous Substances and New Organisms Bill: Report of the Committee on the Bill*, House of Representatives, 1995, p 15.

³⁷ While a number of statutes contain provisions relating to hazardous substance cleanup, those that contain any financial provisions relate solely to clean up costs and do not provide claims by third parties. For example, section 33(8) of the Health Act 1956 states: “(8)All

inadequacies of this route were detailed by Chen Palmer & Partners and Simon Terry Associates in 2001.³⁸ In brief summary, the common law torts that must be relied on involve law ill-suited for this purpose, and make daunting demands in terms of evidence, time and financial resources.

This analysis is not controversial or new. It was explicitly recognised by the Ministry for the Environment when responding to a question from the Parliamentary select committee at the time it was reviewing the HSNO Bill in 1995. The select committee sought advice from the ministry in response to submitters' concerns regarding the absence of provisions governing "chemical trespass" – spray drift from pesticide application. MFE concluded as follows with respect to the law governing such harm:

"It is reasonably sure that anything that is not caught by HSNO or the RMA will be able to be the subject of a common law action. However, there are not many common law actions taken because they are expensive and time consuming and, generally, not good for obtaining quick relief."³⁹

In the MFE discussion paper on retrospective liability produced the same year, this message was stated even more clearly:

"There are considerable drawbacks of cost, timeliness of resolution, and problems of standing which often make common law actions inappropriate. In addition problems of standing for parties to take an action, and the requirements for damage to have been reasonably foreseeable at the time it occurred, will often make common law actions inappropriate. While in theory various common law remedies are available, the common law is an unsuitable remedy for the majority of cases involving the clean-up of contaminated sites."⁴⁰

In the earlier 1988 strategy document, the verdict was similarly clear-cut:

"Tort law liability seems to have failed to manage pollution and hazardous substances in a convincing manner."⁴¹

In absence of the original HSNO Act covering liability for economic damage, or any amendment since, the complete absence of discussion of liability issues in the "strategy" document of 2003 is particularly surprising.⁴² While this document was

expenses incurred by or on behalf of the local authority under this section, together with reasonable costs in respect of the services of the local authority, shall be recoverable from the owner or the occupier of the premises in respect of which they are incurred as a debt due to the local authority, and until paid they shall by virtue of this Act be deemed to be a charge on the land on which the premises are situated." For further information, see Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, Appendix 6.

³⁸ *Who Bears the Risk*, Chen Palmer & Partners and Simon Terry Associates, October 2001.

³⁹ *MFE4: Items requested from the HSNO Bill Select Committee meeting in Auckland on 24 February*, MFE, 1996, p 6.

⁴⁰ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, Appendix 6.

⁴¹ *Pollution and Hazardous Substances Management*, Final report of the Inter-agency Co-ordination Committee, Ministry for the Environment, November 1988, p94.

⁴² *Strategy for Improving the Workability of Hazardous Substances Provisions of the Hazardous Substances and New Organisms Act*, Ministry for the Environment, June 2003.

pitched as a stocktake on the workability of HSNO, it was in essence a review of the overall package. The absence of consideration of liability issues was all the more surprising given that HSNO also regulates new organisms and the issue of liability under HSNO for damage resulting from the use of these had been closely studied earlier that year. Further, in the Cabinet paper that ultimately recommended very limited but still positive moves in respect of liability for damage from the use of new organisms, officials noted:

If these options are adopted, longer-term consideration could be given to whether they should also be implemented in other related legislation such as the Biosecurity, Food and Medicine Acts, or extended to hazardous substances.⁴³

That MFE has not brought forward provisions for liability along with the other proposed reforms listed in its discussion document can not be adequately described as an oversight. It is symptomatic of a lack of appreciation of the importance of financial accountability in fostering good decision-making by developers and users.

Strict Liability Required

The required remedy is that developers and users be made strictly liable under HSNO for economic loss caused to third parties as a result of use of hazardous substances. Such liability should be subject to a narrow set of defences, but should not be limited by the fact that regulatory approvals may have been given.⁴⁴

When the above concerns and proposal was put to the Minister for the Environment by the Sustainability Council, the minister responded that:

I consider that HSNO does meet the ‘full costs’ of hazardous substances by putting in place as comprehensive set of controls to minimise their adverse effects across the lifecycle. ... As such, HSNO focuses on preventing future contaminated sites and health effects.⁴⁵

Attempting to predict all the controls required and focusing on achieving compliance is an important component of a regulatory regime. However, it leaves unanswered the question of who pays if harm still occurs.

⁴³ *Government Response to the Royal Commission on Genetic Modification: Legislative changes for New Organisms – Paper 5: Liability Issues for GM, February 2003*, para 36.

⁴⁴ See *Who Bears the Risk*, Chen Palmer & Partners and Simon Terry Associates, October 2001, p95 for further discussion.

⁴⁵ Letter from Minister for the Environment, Marian Hobbs, to Sustainability Council, 30 November 2004.

4.2 Damage to Human Health

The Accident Compensation Scheme was established in 1974 to cover medical expenses, provide earnings-related compensation and lump sum payments, if required, for permanent injury or loss. It covers defined categories of risk and applies eligibility tests that screen out certain injuries.⁴⁶ These arrangements raise two structural problems:

1. They remove direct financial incentives on developers and users of hazardous substances to guard against those effects covered by ACC.
2. Claimants must rely on the common law when seeking compensation for injury not covered by ACC.

With respect to the first, restitution for victims is only one of the objectives of a liability regime. It should also incentivise due care to prevent injury. However, once a claim is accepted by ACC, section 394 of the Accident Insurance Act 1998 prohibits a private action being brought for damages in respect of personal injuries or death.

The 1988 MFE strategy document noted that:

If a Bhopal incident was to occur in New Zealand the industry at fault would not be liable to meet any of the costs for damages. Consequently, it may be argued that there is no incentive to manage pollution and hazardous substances extra cautiously.⁴⁷

In response, the 1988 strategy raised the idea that alongside the ACC scheme, those causing harm could remain liable.

The Accident Compensation scheme has the benefit of immediate compensation payouts to complainants, without delayed and expensive litigation. However, under this scheme, offenders have no fear of suit for damages. There is the possibility that the joint use of tort liability with regulation in hazardous substances policy may provide comprehensive cover in preventing personal injury and recompense for damage caused.⁴⁸

This idea was ultimately not supported in the strategy for two reasons:

- The availability of tort law had in the past shown very little effect on behaviour; and
- There were unresolved issues such as whether victims should be forced to choose between private legal action and accepting ACC compensation.

⁴⁶ There are a number of issues to be addressed with respect to coverage but that is beyond the scope of this paper which focuses on high level accountability strictures. The categories and the limitations imposed are discussed in general in *Liability issues involved, or likely to be involved now or in the future, in relation to the use, in New Zealand, of genetically modified organisms and products*, Stephen Todd, Professor of Law, University of Canterbury, 2001, p 9-15.

⁴⁷ Environmental harm is now covered by the RMA. Source: *Pollution and Hazardous Substances Management*, Final report of the Inter-agency Co-ordination Committee, Ministry for the Environment, November 1988, p 92.

⁴⁸ *Pollution and Hazardous Substances Management*, Final report of the Inter-agency Co-ordination Committee, Ministry for the Environment, November 1988, p93.

While ACC ultimately recovers its payouts through premiums to industry, and these are recovered roughly in relation to the classes of use from which claims arise, this has the effect of unduly taxing firms that take the greatest care, while socialising within the class those actions that lead to personal injury due to any lack of care.

There is a serious incentives gap under the current arrangements that has been neglected for too long and needs to be addressed.

The second structural problem is that claimants must rely on the common law when seeking compensation for injury not covered by ACC. This relies on proving negligence and, as discussed above, such common law remedies are ill-suited, particularly with respect to the requirement for foreseeability of adverse health effects not well understood at the time of an activity. As University of Canterbury law professor Stephen Todd notes:

There may in any particular case be difficulty in proving that there was a foreseeable risk of injury of the kind that was suffered, that the defendant being sued was negligent and that the negligence caused the harm. In applying the reasonable foreseeability test, the questions arise as to who must be able to foresee the risk and how foreseeable the risk needs to be.⁴⁹

The minimum response required is that a strict liability standard be set for injury not covered by ACC. To the extent that the coverage of ACC is redefined to include all potential effects of hazardous substance use, then the problem would again become one of ensuring developers and users still face appropriate financial incentives.

4.3 Environmental Damage

Liability for environmental damage is provided for under the Resource Management Act (RMA). It clearly provides for damage arising after 1991, while damage occurring pre-1991 needs to be viewed separately. Section 314 provides for the use of enforcement orders that carry quite wide powers. These are described by MFE as follows:

An enforcement order may be sought to require the person to remedy any adverse effect caused by the contamination and require the person to restore the environment to the state it was before the adverse effect occurred. Any person can apply to the [Environment Court] for an enforcement order. ...

Civil liability is established by the [Environment Court] making an enforcement against a liable party. Local authorities can establish liability simply by serving an abatement notice. These provisions can be used to require a polluter, owner or occupier to clean-up a site where contamination is creating an actual or potential adverse effect on the environment. ...

⁴⁹ *Liability issues involved, or likely to be involved now or in the future, in relation to the use, in New Zealand, of genetically modified, organisms and products*, Stephen Todd, Professor of Law, University of Canterbury, 2001, p 9.

The RM Act contains no hierarchy regarding the potential liability of the polluter, land owner and/or occupier for the clean-up of a site. The decision about which of these parties will be liable in an enforcement action rests principally with the party taking the enforcement action. Any person can seek an enforcement order but actions against owners or occupiers can only be brought by local authorities. To use these provisions against a polluter, the party seeking the order needs to prove that the polluter was the person or organisation who was, directly or indirectly, responsible for the pollution and that there is an adverse effect.⁵⁰

An important exception to this general approach is that an enforcement order can not be made where the activity was permitted by the local authority under a consent. RMA section 319 (2) states:

“ ... the Environment Court must not make an enforcement order ... against a person if—

- (a) that person is acting in accordance with—
 - (i) a rule in a plan; or
 - (ii) a resource consent; or
 - (iii) a designation; and
- (b) the adverse effects in respect of which the order is sought were expressly recognised by the person who approved the plan, or granted the resource consent, or approved the designation, at the time of the approval or granting, as the case may be.”

Thus there is no liability under the RMA if adverse effects were declared and provided for at the time the consent was issued. Affected third parties and /or ratepayers will tend to pick up these costs and there will not be financial incentives for the agent to mitigate these if they are ongoing and new techniques are developed to better manage them. A further section of the Act may nonetheless provide a remedy. Under section 319(3)(a) the Environment Court may make an enforcement order if:

- (a) the Court considers it appropriate after having regard to the time that has elapsed and any change in circumstances since the approval or granting, as the case may be.

While in principle there are strong powers to order cleanups for damage caused from 1991 onwards, the effectiveness of these provisions is crucially dependent on the availability of funding. Section 314 notices will only act as a discipline if the agent that could cause harm has sufficient funds at risk that can be drawn on. If a \$100 shell company is used as the commercial structure for a venture, an enforcement order would not provide the proper financial incentive to act with due care.

As MFE notes, under the RMA “liability can almost always be assigned to somebody and be enforced”.⁵¹ However, the follow-on consequence the ministry also observes is that this “has the potential to produce very unfair allocations of liability and costs.” Thus, if the \$100 company rented its land and buildings, it could well end up being the property owner that shouldered the clean up costs. However, even these other potentially liable parties may well have insufficient funds to pay if a major clean up exercise is required.

⁵⁰ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, Appendix 4.

⁵¹ See in particular RMA section 314 (1)(da), as set out below.

The required solution is that agents making or using hazardous substances meet minimum financial assurance tests. The RMA does give local authorities the power to require bonds at the time a consent is issued. However, as is further discussed in the following section, bonds are not always the best instrument and it is unrealistic to expect all significant risks will be covered under current arrangements.

Historical Environmental Liability

With respect to environmental damage caused prior to 1991, in addition to the problem of the polluter potentially not having the funds (assuming the entity still exists), there was no effective law in place at the time. Any legal action therefore depends on the ability to use RMA provisions, either retrospectively or to at least address pre-1991 contamination. When asked for advice on the ability to use its enforcement provisions retrospectively, Crown Law concluded a 1995 opinion as follows:⁵²

On balance, given the fact that no express provision is made for retrospective application, ... the court is more likely to be reluctant to apply the legislation retrospectively, although the alternative position is certainly arguable. In particular, ... [it would be surprising] ... if a court refused to make an order under s.314(1)(da) merely because the cause predates the Act's coming into force.⁵³

The section 314 (1)(da) referred to in the opinion focuses simply on the existence of an adverse effect (rather than who was responsible for it) and provides for the power to:

(da) Require a person to do something that, in the opinion of the [Environment Court], is necessary in order to avoid, remedy, or mitigate any actual or likely adverse effect on the environment relating to any land of which the person is the owner or occupier.

A precedent setting Environment Court decision two years after the Crown Law opinion concurred with this view on both key points. It did not support the retrospective use of the RMA enforcement provisions. However, it stated that this was not necessary to enforce a cleanup under section 314 (1)(da) and reasoned as follows:

It is clear that the RMA is designed to protect the public against future pollution and other environmental damage ... It can achieve that by authorising action under section 314(1)(da) against the current occupier. That is certainly efficient; and not necessarily unfair because, as in fact happened in this case, the potential liability of the current owner can be reflected by a reduction in the purchase price it paid for the land ...⁵⁴

⁵² MFE is not aware of a more recent opinion having been sought in the last four years. Personal communication, Maralyn Bramley, 1 December 2004.

⁵³ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, Appendix 3.

⁵⁴ *Voullaire v Jones*, Decision No: C124/97, Judge J R Jackson, March 1997, p 15.

In another section of the decision, it is further stated that the party may be quite innocent and still be liable:

Paragraph(da) suggests that a court may make an order against an innocent owner even though they have no knowledge of or in no way caused adverse environmental effects. We infer that there is no need for the RMA to be retrospective since a “clean-up” order may be made against an innocent current owner even if they had no part in causing the adverse effects.⁵⁵

This strongly suggests that while the owner or occupier is exposed today to an enforcement order, the polluter is not vulnerable unless and until legislation of the form contemplated in 1995 is enacted so as to provide retrospective coverage. Support for retrospective application is argued on the grounds that:

... the presumption [against retrospective application] does not apply ... where the new prejudicial consequences act primarily as protection for the public against future risks rather than as punishment for a prior event.⁵⁶

When proposing this remedy in 1995, MFE advocated retrospective powers on the following basis:

Creating an explicit liability framework that is retrospective will ensure that there is an effective, fair and unambiguous regime for determining liability (legal and financial) for the clean-up of all contaminated sites.

Implementing this proposal will require retrospective legislation. Because of the often long time period between the polluting event and recognition of the adverse effect, contaminated sites legislation is generally retrospective. This allows for action to be taken on sites irrespective of when the pollution event occurred. Retrospective application of law, although controversial in other applications, is common internationally in contaminated site legislation. For example, most Australian states have pollution control or specific contaminated sites legislation that enables a regulatory authority to require a clean-up irrespective of the date of site contamination.⁵⁷

At the time of the approval of the proposed legislative measures by Cabinet in late 1999, then Environment Minister Simon Upton advanced the case for the overall package of reforms as follows.

Today’s announcement on liability for historic contaminated sites concludes a debate that has been around the traps as long as I’ve been minister. It has not been an easy one to settle since every policy option involves potential unfairness.

A strict caveat emptor approach would sheet home total liability to the current landowner regardless of their complicity in the contamination. In theory they might have an action against the vendor from whom they bought the property but the cost and complexity of relying on this solution can be prohibitively expensive and very uncertain. The upshot in many cases will be ruin of the landowner – and the

⁵⁵ *Voullaire v Jones*, Decision No: C124/97, Judge J R Jackson, March 1997, p 11.

⁵⁶ *Retrospective Liability for Environmental Contamination*, D Saxe, Canadian Bar Review, Vol 71, 1992, p 942.

⁵⁷ *Financial Liability for Contaminated Site Remediation: A Position Paper*, ANZECC, 1994.

socialisation of the cost of clean up as an orphan site. If the original polluter is still around, it seems hard to justify that ratepayers and taxpayers should pick up the bills.

On the other hand it can be argued with real force that if the activity that led to the pollution was legal at the time, then it's quite unfair to go after that party years later. The risk of future pollution is one of the risks purchasers should have to bear. This is fine where the problem is minor but almost certain to precipitate an orphan site where the problem is beyond the resources of the owner.

In allowing enforcement action to be taken against the owner and/or the polluter (depending on the circumstances and the existence of an innocent landowner defence) we have opted for a solution that will minimise the socialisation of risk through orphan sites. **It also ensures that the Crown (as one of the biggest polluters of old when it used to run half the economy) will face its responsibilities.**⁵⁸ [Emphasis added]

⁵⁸ *Contaminated Sites Liability Regime*, Simon Upton, Environet 36, 14 October 1999.

5. Financial Assurance Requirements

Financial Assurance Requirements (FARs) are regulations designed to ensure funds are available for compensation and cleanup in a required form, and to a required level, before approval for an activity is granted.

Alberini and Austin found in an econometric study that firms operating in states of the US that set strict liability standards were smaller and less capitalised, indicating that:

firms have developed behavioral responses to avoid liability, when they are strictly liable for releases of hazardous chemicals into the environment. In states with strict liability, greater spill severity and frequency are associated with smaller production units (our proxy for firms with fewer assets), whereas this association is not present in states following negligence-based liability. It is possible that in a strict liability regime, firms deliberately select their corporate structures and asset levels to avoid liability, or that small firms have tended to specialise in riskier processes.⁵⁹

In absence of effective restrictions, firms have a clear incentive to evade the intent of strict liability, by undercapitalising relative to their liability obligations. There are two basic forms of FARs to counter this: self-insurance and third party cover.

Self-insurance makes the shareholders of the party undertaking the activity (the operator) the primary bearers of loss and can be achieved in two ways:

- The most common is a surety bond, paid out of the operator's own capital. This is suitable for short term requirements, where there is relative certainty about the maximum coverage required, and where the demand is small relative to the firm's equity.
- Self-insurance can also be put in place through the operator entering into a contract with the regulator involving undertakings as to the operator's ongoing financial fitness to meet any future claims.

The other category, third party financial cover, may be fulfilled by way of traditional insurance or other risk transfer mechanisms. Different hazardous substances and their use will carry varying levels of risk and different financial cover packages will be appropriate.⁶⁰

With respect to environmental damage, the RMA section 108A affords broad grounds for requiring bonds of applicants seeking consents, and provides in particular that a bond may:

- Be set to cover any “conditions the consent authority considers appropriate” (108A(1))

⁵⁹ *Accidents Waiting to Happen: Liability Policy and Toxic Pollution Releases*, Anna Alberini and David Austin, Discussion Paper 99-29, Resources for the Future, March 1999, p.22.

⁶⁰ For a more detailed discussion of FARs and options for structuring these, see *Insurability, Financial Fitness and GM Organisms*, Sustainability Council, September 2003.

- “continue after the expiry of the resource consent to secure the ongoing performance of conditions relating to long-term effects” (108A(1))
- “provide that the liability of the holder of the resource consent be not limited to the amount of the bond” (108A(2)(c))
- “require the holder of the resource consent to provide such security as the consent authority thinks fit for the performance of any condition of the bond” (108A(2)(e))
- “require the holder of the resource consent to provide a guarantor” (108A(2)(f))

Section 108A(3) also recognises that environmental effects may only become apparent long after the activity has ceased.

If a consent authority considers that an adverse effect may continue or arise at any time after the expiration of a resource consent granted by it, the consent authority may require that a bond continue for a specified period that the consent authority thinks fit.

There are, however, a number of limitations on the effectiveness of these powers in practice.

Bonds are not always the best instrument to ensure the financial fitness of the operator. They are for a fixed amount and those setting the level may not correctly anticipate the scale of the claims that ultimately comes forward. Further, even though bonds can be used to provide for long term latent effects, it should not be presumed that councils will be equipped to make assessments that would lead to appropriate bond conditions being applied – in particular, the scope of effects and the period of cover.

Naturally, bonds taken under the RMA cover only environmental damage so that there is still no protection for those suffering other forms of loss. Along with strict liability for economic loss being established under HSNO, requirements for settings FARs for economic loss should also be defined in this statute and applied by ERMA as a condition of gaining approval.

Further, if ERMA is to administer FARs for economic loss, then it would be efficient if ERMA also set those for environmental damage, and for harm to human health once statutory liability is in place. Local government should, however, retain the right to top up environmental FARs as local government represents the ultimate risk bearers and should not lose its ability to cover these responsibilities through ERMA taking general responsibility. For serious risks that could ultimately lead to calls on taxpayer funds if the FARs are inadequate, advice from Treasury should guide the form and level of assurances required.

While it is arguable that ERMA already has the power to set FARs under current legislation, an amendment would assist to clarify this and how FRAs would be set.

The most straightforward option would involve ERMA issuing individual permits for the use of hazardous substances, as local authorities do, rather than providing generic approvals for use of a substance under particular conditions. Such an approach automatically provides strong incentives for accountability at all levels of use.

If the approval holder is ultimately liable for damage claims arising directly from a particular substance and proposed programme, it will only make arrangements to license, franchise or otherwise distribute its commercial product to other parties under conditions that take account of its ultimate liability. There will be strong commercial incentives to ensure that any agent with which it contracts exercises due care, and also that such franchised users of the technology accept liability conditions consistent with their role in the distribution chain.

Further, any insurer (and reinsurer) standing behind the applicant will have incentives to maintain supervision over these subcontracting arrangements in order to protect their position. Thus this model quite naturally generates the appropriate cascade of contract and accountability arrangements without ERMA needing to interfere with or track each of these dealings.

6. Conclusions

The Ministry for the Environment's mission is to:

Treasure and nurture our environment with protection for ecosystems so that New Zealand maintains a clean, green environment and rebuilds our reputation as a world leader in environmental issues.⁶¹

The 1992 Rio Declaration set an international benchmark through its promotion of the “polluter pays” principle. While Government has committed to this principle through the Rio Declaration and the Basel Convention, the polluter continues not to be held financially accountable under a wide range of circumstances. Sixteen years after Government first determined to bring together coherent regulations for hazardous substances, true financial accountability for harm caused by these substances remains limited.

In addition to not being a world leader in setting financial accountability requirements going forward, New Zealand has yet to set an adequate framework for facilitating cleanup of past damage. MFE has previously recognised that this is not just a “leadership” issue, but is strongly tied to the health of the New Zealand economy – in addition to its impacts on environmental and human health:

New Zealand's international image, in marketing and selling many of our exports, is highly dependent upon our “clean green” environment. As stated in *Environment 2010 Strategy*: “We should continue to improve environmental quality to underpin this image, especially where these resources are an important part of our economy ...”. Clean-up of orphan sites is a significant step towards ensuring the “clean green” image is matched by the reality of our environment.

Increasingly consumers are interested in the conditions under which produce is grown and harvested. International standards are being developed which focus on the environmental management of industrial processes. For these expectations of good environmental management to be met, contaminated sites, as a concrete example of poor historical management will need to be cleaned-up.⁶²

MFE has also explicitly recognised:

- The importance of “Government provid[ing] a clear framework within which the community can carry out its business, certain of its role and responsibilities in this area”;
- The inadequacies of common law for deterring polluters from causing economic loss to third parties, and for those parties to obtain compensation; and
- The scale of unallocated liabilities that can result from inadequate financial accountability in the past.

⁶¹ Estimates, The Treasury, p 577, 2004.

⁶² Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 3.6.2

In respect of past liabilities, Government has also acknowledged that:

Site contamination has, in some cases resulted from the use of chemicals required, and at times promoted by Government agencies. The Government therefore, shares some historical responsibility as a regulator to ensure that the problems of past use of some chemicals are cleaned-up.⁶³

Yet, MFE's recent stocktake of the legislation governing hazardous substances did not report on the inadequacies of the current liability provisions with respect to past or future damage.⁶⁴ This leaves a serious gap in the proposals to Government for revision of HSNO and a lack of regulatory credibility.

It also sets up a poor business environment for companies with a long term stake in the market for hazardous substances as effective rules governing liability and compensation drive: improved product option evaluation, improved internal processes for monitoring, better customer relationships, and better public profiles. Analysis of the performance of listed companies has shown a positive relationship between good environmental standards and overall financial performance.

The following are key reforms required to secure effective financial accountability. These provisions could be incorporated in the amendments to HSNO that are proposed but have yet to be introduced to Parliament. Even within the current limited goal of improving "workability", these amendments have a clear place.

1. Developers and users of hazardous substances are made strictly liable for:
 - Economic loss caused to third parties; and
 - At least that harm caused to human health that is not covered by ACC.

Such liability would be subject to a limited set of defences but would apply irrespective of whether a consent or permit for the activity had been issued by a regulatory authority.

2. HSNO sets financial assurance requirements to ensure those who make and use hazardous substances have a minimum level of funds available to meet claims. ERMA would enforce these as a condition of obtaining approval to commence an activity.
 4. Liability for clean up of historic contaminated sites is addressed through:
 - Completion of registers of contaminated sites;
 - Definition of standards that set thresholds for cleanup;
 - Devising and legislating for a formula to allocate liabilities;
 - A substantially increased national fund for the clean up of orphan sites, as envisaged in 1995 proposals.
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⁶³ Discussion document on proposals for law reform relating to contaminated sites, Ministry for the Environment, 1995, section 3.6.2

⁶⁴ With respect to future damage, MFE has not programmed any further work on liability for hazardous substances. Personal Communication, Sue Ruston, MFE, November 15 2004.

