2. TOWARDS A PESTICIDES RISK REDUCTION POLICY FOR NEW ZEALAND

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The purpose of this report is to put forward possible submissions to the Ministry for the Environment on the above public discussion paper (separately circulated). The closing date for submissions is 21 June 2002.

CONTEXT

The Minister for the Environment, Hon Marion Hobbs, in the *Foreword* to the paper makes the point that there are significant concerns in the community about the use of pesticides. She also makes the point that if we are to reduce risks to people and the environment all parties need to work together. The portion of the Executive Summary set out below explains the context of the discussion paper and what is sought in comments on the matters.

The primary focus of this discussion paper is on the environmental risks associated with pesticide use in New Zealand. Because these risks cannot always be addressed in isolation, there is a secondary focus on the food safety, human health, trade and occupational health and safety aspects of pesticide. While there are important issues related to deregistered pesticides, (such as PCP) or chemical contaminants in some pesticides (such as dioxins) they are outside the scope of this paper. These issues are being dealt with through other government initiatives and processes.

In summary, the key propositions put forward for discussion in this document are:

- *The Government considers that the major planks of New Zealand's framework for managing the environmental risks of pesticide use are robust and that major reform should not be considered at this stage. This framework consists of the Hazardous Substances and New Organisms Act 1996 (HSNO Act), the Resource Management Act 1991 (RMA) and the Environmental Risk Management Authority (the ERMA). The framework is outlined in Chapter 3.*
- *Risks can be identified and considered within four distinct pesticide 'use-environments'. These are the primary production environment, natural and semi-natural environments, the built environment, and domestic environments. Chapter 4 asks you to consider risk management in each of these environments, to identify any areas of risk that have been overlooked, and to suggest ways that risks could be better managed.*
- *The Ministry sees similar issues overlapping a number of different use-environments. Three cross-cutting themes are: a need for improved education/knowledge on the part of pesticide users; a need for improved weed and pest control methods, improved pesticides and improved use of pesticides; and a need for better information and more research. Chapter 5 invites you to comment on these themes, or any other themes that you have identified. Please focus on what you think needs to be done, by whom and why.*
- *In Chapter 6 we set out four 'off the hook' national-level policy instruments that could achieve risk reduction. These are: environmental user charges (ie, pesticide taxes); transferable permits that would put quotas on (selected) pesticides; risk reduction targets; and funding for more reassessments of individual pesticides (by the ERMA). We are particularly interested in your views on information the Government should take into account in its consideration of these policy instruments.*

It is noted that the term pesticide is not used consistently by the general public, scientists, and government regulators. For the purposes of this discussion paper the Ministry has determined that *'pesticides'* include the following substances:

- *herbicides (to kill weeds)*
- *insecticides (to kill insects)*
- *fungicides (to control fungus disease)*
- *plant and insect regulators (to synchronise the development of pest populations and alter the growth of plants)*
- *rodenticides and other vermin control agents (to kill rats and other vertebrate pests)*
- *acaricides (to kill spiders and mites)*
- *fumigants that kill borer in houses, or sterilise soil, or treat imported goods*
- *non-agricultural pesticides or 'biocides' (eg, timber treatment chemicals, and compounds used in industry to prevent algal growth in pipes).*

RELEVANT CURRENT POLICY

Currently pesticide risks are managed through largely the provisions of the Hazardous Substances and New Organisms Act 1996 and through the Environmental Risk Management Authority established under that Act. The latter body undertakes approvals of new pesticides or reassessing pesticides already legally present in the country. The process is to determine an acceptable level of control and residual risk, not zero risk. At 2 July 2001 there were about 1500 pesticides registered under the Pesticides Act 1979 and these are being transferred to the new legislation which is expected to be completed by July 2003.

The reassessment under the HSNO Act is a two-step process. First, the Authority must agree that there are grounds for reassessment and secondly, once grounds have been established, any person may make an application for the reassessment of the substance. This is processed like any normal application under the HSNO Act. The 'grounds' process simply clears the way for a full application to possibly be made. It is a very simple process, which is mainly intended to ensure that a full application is justified.

If there is a subsequent application for reassessment, it will be notified to the public and open for submission for six weeks. At this stage there is no timeframe for receiving the reassessment application itself. The provision for reassessment is one of the most interesting and powerful provisions of the HSNO Act. It provides a mechanism to re-examine the risks, costs and benefits of any hazardous substance or new organism and to review the controls, which regulate the substance or organism. It also means that our ability to manage the risks of hazardous substances and new organisms in containment will be able to reflect changing circumstances and knowledge. It also provides an avenue for the community rather than the supplier of a substance, to take the initiative in raising concerns and having them dealt with. However, a reassessment will not necessarily lead to changes in controls. There could be instances where the conclusion is that the existing controls are still the most appropriate.

Other legislation which applies to pesticides includes the Agricultural Compounds and Veterinary Medicines Act 1997 relating to pesticides used in the direct management of plants and animals. The Food Act 1981 and Food Regulations 1984 cover the maximum residue limits allowable in food at the time of harvest. The Health and Safety in Employment Act 1992 deals with the safety of workers who could be exposed to pesticides.

ISSUES FOR CONSIDERATION

The Discussion Paper includes a number of questions that the authors suggest should lead the submission.

Section 3.7 (Page 17)

The Government's view is that the present legislation and institutional arrangements must be given a chance to settle in, and that there is thus no strong case for considering major legislative reform at this stage. 6 What do you think? Do you see areas of legislation that need to be changed, or a need for new government institutions? What is your experience of the current system as presented in this chapter? How does it work in practice? Where are the gaps?

It is generally agreed that the current system needs a "chance to settle in" and believe that it is not the legislation that needs to change, but the practice of applying pesticides. Even with strong legislation, it is unlikely that significant changes will occur unless users are provided with alternatives and good information on how to reduce useage, optimise timing of applications etc. This can have economic benefits (reduced chemical costs) as well as environmental benefits (less frequent and more targeted applications). Education and readily available information and research results are all important in achieving reduced and more efficient use of pesticides.

One of the gaps that appears to be seen is in the monitoring of the impact of pesticides. The gaps in information seem to be in effects on non-target species, the cumulative effects of on-going use, and combined effects of different pesticides. Increased monitoring needs to be a key aspect of a risk reduction policy.

To the extent that the precautionary principle provides a useful general approach on pesticide risk issues, and that there is an expression of it in Section 7 of the HSNO Act – When should it be applied? What types of precautionary actions are warranted, and at what price?

The precautionary principle should be applied when deciding whether a pesticide is suitable for general use or what conditions should be applied to its use. Once released, even with conditions, opportunities to monitor and/or restrict useage are limited. It is therefore necessary to be as certain as is possible that the pesticide is "safe" for general useage prior to it being approved.

Many European OECD countries, including Denmark, have pesticide (risk) reduction programmes running in parallel to pesticide registration processes. These provide an additional layer of risk reduction activity and aim to improve outcomes in areas of risk that have been identified by the country concerned (different countries have identified different areas of risk). New Zealand does not currently have a comparable initiative, though has recently participated in an OECD-convened risk reduction steering group meeting in Paris. Do you have any comments on the Danish programme briefly outlined in this chapter? [page 16]

We could support the five bullet pointed principles, particularly the first as education and more efficient application has multiple benefits. Buffer zones and protection of "sensitive" areas are also sensible approaches but decisions need to be made in light of the (eco)toxicity of the chemicals and the benefits from their use.

What are the areas of risk you think need to be addressed in any New Zealand risk reduction strategy?

In the New Zealand situation we believe there is a risk of over reaction to pesticide use of any kind. There is a need for better public education on such issues and on the advantages, disadvantages, alternatives and cost implications of pesticide use. There is a risk that the message that "all pesticides are bad" will become entrenched without an informed debate.

Section 4.2.5 (page 26)

How would you rate progress with risk management in natural and semi-natural environments on a 0 to 10 scale? To the extent that you have not answered either '0' or '10', please identify the reasons why and suggest ways that you think risk reduction could be best achieved. What risks do you think should have highest priority for the government's consideration and how should these be addressed?

Many of the pesticides used in natural and semi-natural environments are employed to reduce threats to biodiversity. It is important to consider the range of tools available, the relative risks and benefits, and the most efficient method of doing the work, when considering whether pesticides are appropriate or not. In some cases a rapid result is critical if a species is to be saved or a disease, such as TB, is to be contained. While some of the approaches may not be sustainable in the long-term, they may be the only effective short-term option. Risk reduction can often be achieved by proper management of a pest control programme, including targeted application, providing information to the public and excluding non-target species from the area if possible.

We would rate the risk to biodiversity as the highest priority.

Sections 4.3.5 and 4.4 (Pages 29 to 32)

How would you rate progress with risk management in the built environments on a 0 to 10 scale? To the extent that you have not answered either '0' or '10', please identify the reasons why and suggest ways that you think risk reduction could be best achieved. What risks do you think should have highest priority for the Government's consideration and how should these be addressed?

How can central government best assist local government in developing approaches to risk reduction in our built environment?

The risks I would rate highest include involuntary exposure and occupational exposure.

Central government can help assist local government by providing national guidelines and information on best practice, to help achieve national consistency.

Awareness and information programmes can help to reduce the risk of children inadvertently having access to chemicals around the home, and can provide people with information about the harmful effects of prolonged or toxic level exposure when using pesticides.

Section 5.1.1 (p.33)

Awareness can be raised through advertising programmes such as “Quake Safe” and through using industry groups and organisations to spread the message. Targeted media releases through industry specific media, such as magazines and newssheets, can also be used. Funding may be available from pesticide producers and user groups. Levies may also be considered.

Section 5.2.1 (p.34)

We believe that the government (ERMA) should approve pesticides which it believes are appropriate for general use, provide information on the risks, best practice and alternatives and then let individuals make informed decisions.

Section 5.3.1 (p.35)

We believe that research on susceptibility to adverse effects from pesticides should not be limited to any particular gender or ethnic group.

Section 6.1 (p.37)

We don’t believe there is much point in introducing environmental user charges for pesticides until you have implemented education programmes to increase awareness of methods for voluntarily reducing the risks from using pesticides.

Section 6.3 (p.38)

The approach promoted by Watts (1998) would appear to be a useful way of assessing risk.

We believe that the appropriate endpoint is risk reduction rather than the abolition of pesticides.

Recommendation: That a submission based on the foregoing report be sent to the Ministry for the Environment.