ABSTRACT

With the passage of the Hazardous Substances and New Organisms Act in 1996, New Zealand established a single body to decide on the importation, manufacture and development of hazardous substances and new organisms. The Purpose of the Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms. Examples of hazardous substances include toxic substances, explosives, pesticides and herbicides. New organisms include plants, animals and micro-organisms, and genetically modified organisms not already present in New Zealand.

Keywords: HSNO, hazardous substances, new organisms, environmental risk

INTRODUCTION

With the passage of the Hazardous Substances and New Organisms (HSNO) Act in August 1996, New Zealand established a single body to decide on the introduction, development, and manufacture of all hazardous substances and new organisms. This Environmental Risk Management Authority (ERMA) will take over some of the decision making functions of the Toxic Substances Board, the Pesticides Board, the Ministry of Agriculture, the Explosives and Dangerous Goods Inspectorate of the Department of Labour, the ACNGT (Advisory Committee On Novel Genetic Techniques) and the IAG (Interim Assessment Group for the field trialing of genetically modified organisms). A key feature of this new approach is that ERMA will act as a single independent decision-making body.

In the new regulatory environment established by the HSNO Act, the principal responsibility for identifying risks, hazards, costs and benefits associated with an application will lie with the applicant. Any organisation or individual who wishes to import or manufacture a hazardous substance, or to import, develop, field test or release any new organism, must either obtain an approval from ERMA, or operate in accordance with the transitional arrangements outlined in Parts XI to XVI of the HSNO Act. These transitional arrangements terminate in the year 2000. Specifically prohibited new organisms are listed in Schedule 2 of the Act. The only noted exception to the HSNO Act is that most parts of it do not apply to hazardous substances under the control of the Minister of Defence and contained in any weapons system.

THE HAZARDOUS SUBSTANCES AND NEW ORGANISMS ACT

The Purpose of the new HSNO Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms.

The HSNO Act replaces and consolidates legislation for the regulation of hazardous substances currently controlled under the Explosives Act 1957, the Dangerous Goods Act 1974, the Toxic Substances Act 1979, a significant part of the Pesticides Act 1979, and some of the Animal Remedies Act 1967. It replaces controls on the importation of new organisms currently covered by those parts of the Plants Act 1970 and the Animals
Act 1967 retained as transitional provisions under the Biosecurity Act (1993). In addition it provides for legislative control of the development of genetically modified organisms (GMOs). GMO developments are at present managed through voluntary committees advising the Minister for the Environment. At the end of the transition period, regulations under these acts will be replaced by regulations under the HSNO Act. As already noted these transitional arrangements will be in place until the year 2000.

There are strong links between the Resource Management Act 1991 (RM) and the HSNO Act. The purpose of the RM Act is “to promote the sustainable management of natural and physical resources”. The RM Act includes a responsibility to manage the effects of hazardous substances and new organisms.

The RM Act signalled that controls on hazardous substances and new organisms would be undertaken through a body established as the Hazards Control Commission. Later, new, separate legislation was developed to specifically address the risks associated with hazardous substances and new organisms, improve the efficiency of current assessments of control, and provide consistency in the way high risk situations would be addressed.

Both the RM Act and the HSNO Act define ‘environment’ in the same way. This definition includes the natural, social and cultural environment. This encompassing view of the environment is reinforced in the purpose of the HSNO Act (Section 4) which is “to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms”.

Both acts place a strong emphasis on public participation in environmental decision making, and the empowerment of Maori by the requirement to take account of the principles of the Treaty of Waitangi, as well as direct provision for recognition and regard for Maori and Maori culture.

In presenting the HSNO Bill to the House for its second reading, the Minister for the Environment noted that the purpose statement does not specify the degree of risk awareness that is to be adopted. In his view Section 5 gives equal weight to environmental and economic principles. Section 5 states that in order to achieve the purpose of the Act “All persons exercising functions, powers, and duties” under the Act shall “recognise and provide for...

a. The safeguarding of the life-supporting capacity of air, water, soil, and ecosystems;
b. The maintenance and enhancement of the capacity of people and communities to provide for their own economic, social and cultural well-being and for the reasonably foreseeable needs of future generations.”

To address the matter of specifying and dealing consistently with the acceptance of risk, Section 9 was inserted in the Act. Section 9 discusses the requirement for ERMA to develop a methodology which will include an assessment of monetary and non-monetary costs and benefits. ERMA will apply this methodology consistently when making decisions. The methodology has been published as a discussion paper. Public comments will be taken account of before the methodology is presented to Parliament to be entered as an Order in Council.

THE ENVIRONMENTAL RISK MANAGEMENT AUTHORITY

ERMA has been established under Section 14 of the HSNO Act, to make decisions on the importation, development and manufacture of hazardous substances and new organisms. It may grant or decline approvals, place conditions upon approvals, and monitor these conditions. Although ERMA must take account of Government policy on the control of hazardous substances and new organisms (Section 17), such policy direction may not be given with respect to Part V of the Act (assessments). Accordingly, ERMA’s evaluation process is independent of the Government. That is, the Government cannot enforce policy directions that will affect the process ERMA uses to make decisions to approve or decline hazardous substances or new organisms.

ERMA is an expert body whose task is to consider applications seeking the approval of hazardous substances and new organisms and to impose controls on them. ERMA may have between six to eight members and in late 1996 the Minister for the Environment, appointed eight members to ERMA. The selection process was aimed
towards achieving a balance of knowledge and experience in areas where ERMA is likely
to receive applications under the HSNO Act.

The Ministry for the Environment is preparing regulations under the HSNO Act. Under Section 74 these regulations will specify thresholds for hazardous substances above which a substance will be considered to be hazardous. The regulations will also set categories, based on the properties of the substances, that can be used to classify different levels of hazard potential. Regulations under Sections 75 and 76 will provide a framework or toolbox which ERMA will use during the assessment process to set requirements for the management of hazardous substances. Regulations under Section 140(1)(g) will specify conditions for facilities containing hazardous substances used for small scale chemistry that do not require approval.

For new organisms the regulations under Section 140(1)(g) will allow for exclusions from the definition of a genetically modified organism for organisms resulting from certain techniques that are not considered to pose any risk. The regulations will guide many of the judgements made by ERMA. They are being developed on the basis of public comments and best international practise.

**DECISION-MAKING**

ERMA’s responsibilities under the HSNO Act require that it establish a staffing structure that has the capability to process applications, maintain registers and data bases, and provide information and assistance to applicants. ERMA staff will be able to provide advice to applicants prior to applications being lodged.

ERMA is committed to involving the community and stakeholders in its decision-making, through the public consultation process. Under Section 53 of the HSNO Act, the following applications for ERMA are required to be publicly notified:

- Applications to import or manufacture any hazardous substance for general release;
- Applications to import any new organism for release, or to release any new organism from containment;
- Applications to field test a genetically modified organism (GMO);
- Applications to import, release or use a hazardous substance or new organism in an emergency.

If ERMA considers that considerable public interest is likely it may also choose to publicly notify any application to develop a GMO in containment (Section 53 (2)). Any person may make a written submission on any publicly notified application, and may also choose whether they wish to be heard. If a request is made to be heard then ERMA is obliged to schedule a public hearing (Section 60). In that regard, ERMA has the same powers that are conferred on a Commission of Inquiry by the Commissions of Inquiry Act 1908, and its members have the same immunities and privileges possessed by a District Court Judge (Section 61).

In reaching a decision ERMA is required to take into account:

- The sustainability of all native and valued introduced flora and fauna;
- The intrinsic value of ecosystems;
- Public Health;
- The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, valued flora and fauna, and other taonga;
- The economic and related benefits to be derived from the use of a particular hazardous substances and new organism; and
- New Zealand’s international obligations.

In making decisions, ERMA may choose to consider equity issues, such as who receives the benefit and who bears the costs and faces the consequence of the risk.

ERMA may also monitor and review the extent to which the Act reduces adverse effects on people or the environment from hazardous substances and new organisms, and promote public awareness of any adverse effects. The Minister may direct ERMA to carry out functions to meet international requirements.

A further function of ERMA includes the power to enquire into incidents or emergencies involving hazardous substances and new organisms.

Under Section 19, ERMA has the power to delegate any functions, powers or duties
except the fixing of charges, its own decision-making authority, and the power of
deleagtion itself. An exception is made for decision-making authority that allows ERMA
to delegate the power to conduct rapid assessments under Sections 35 and 42 of the Act.
These may be delegated to the service responsible for border protection and institutional
biosafety committees respectively. ERMA may also delegate the power to hear and
decide applications to subcommittees consisting of Authority members and other
specialists considered appropriate for the particular application.

ERMA is conscious of its responsibility to ensure that applicants are fully aware of
their obligations to provide full and appropriate information to ERMA. As part of
deciding whether to approve or decline an application, ERMA will evaluate this
information. In making its decision, ERMA will evaluate the risks associated with the
entire life-cycle or an organism or substance. It is inevitable that there will be uncertainty
associated with applications, and ERMA will address this uncertainty by fine-tuning its
requirements for information, and by consulting with scientific and technical experts,
agency representatives, iwi and the public at large before taking decisions.

ACKNOWLEDGEMENTS

The assistance of Janet Gough (Lincoln Ventures) in the drafting of this paper, and
of Joanna Orwin (Manaaki Whenua) in its editing is warmly appreciated.