

Outcomes of Consultation: Submissions
from Interested Persons

Section contents

3.	Analysis of submissions from Interested Persons	28
3.10	Liability issues	173
	Introduction	173
	Establishment of liability	174
	Nature of the effects of genetic modification	174
	Differing approaches to liability	175
	Government responsibility	175
	Government liability if genetic modification is not allowed	176
	“Polluter-pays” approach to liability	176
	Liability of beneficiaries	177
	European decision on liability	177
	Types of liability	178
	Sources of liability	178
	Categories of liability	179
	Practical examples	179
	Regulatory framework for liability	181
	Necessity for specific liability provisions	181
	Existing regulatory framework for liability	181
	Adequacy of existing regulatory framework	182
	Inadequacy of existing regulatory framework	183
	Recommended changes to liability regulation	184
	Liability insurance	184
	Availability of liability insurance	184
	New Zealand’s position on liability insurance	185
	International approaches to liability insurance	185

3.10 Liability issues

Introduction

The Warrant under item (e) called for information on:

the liability issues involved, or likely to be involved now or in the future, in relation to the use, in New Zealand, of genetic modification, genetically modified organisms, and products

The issue of liability arises in relation to genetic modification as a result of questions of liability regarding any adverse, or unintended effects from the use of genetic modification technology.

Thirty-three submitters made substantive comment on the issue of liability. Of these 33 submitters, the highest number were from the economic/productive sector (15 submitters), followed by the environmental sector (seven submitters) and the health sector (three submitters). Only two submissions were received from groups with a cultural or ethical focus. The remaining six submitters were from other sectors, such as governance.

The 33 submitters were from various types of organisations, with the most notable being industry associations or networks (six submitters), followed by research organisations (five submitters), advocacy networks (five submitters), private companies (four submitters), consumer groups (four submitters), Maori groups (four submitters) and the remaining submitters comprising government, organic and “other” organisations. No religious organisations made substantive comment on the issue of liability.

Of the 33 submitters offering comment on liability, the stance on genetic modification was polarised, with a higher proportion taking a ‘strongly for’ stance (15 submitters) compared with those who were ‘strongly against’ (eight submitters). The remaining submitters were almost evenly distributed between the ‘tending to be for’, ‘neutral’, or ‘tending to be against’ stances on genetic modification.

The key themes on liability that were identified by submitters included:

- establishment of liability
- types of liability

- regulatory framework for liability
- liability insurance.

Each of these themes is discussed below.

Establishment of liability

Submitters presented a range of views on how to establish liability and identify liable parties. Comments on this theme covered these aspects:

- nature of the effects of genetic modification
- differing approaches to liability
- government responsibility
- government liability if genetic modification is not allowed
- “polluter-pays” approach to liability
- liability of beneficiaries
- European decision on liability.

Nature of the effects of genetic modification

Submitters commented on the nature of the effects of genetic modification activities that could pose problems in establishing liability. The principal difficulties identified were that:

- effects might be identified only in the longer term
- effects might be diffuse
- the extent of the effects might be difficult to establish.

Twelve submitters commented on the difficulties in establishing liability where the impacts are diffuse or where the effects might take a long time to become evident. Bio Dynamic Farming and Gardening Association in New Zealand [IP61] commented that the law should provide for long periods of liability, such as 30 years after the event. Parliamentary Commissioner for the Environment [IP70] made the point that liability frameworks should be “ongoing in perpetuity” as effects of genetic modification might become evident only in the long term. Greenpeace New Zealand [IP82] and Safe Food Campaign [IP86] also commented that liability that may eventuate from genetic modification could be hard to trace and to attribute because of time delays.

Landcare Research [IP12] noted: “... risks and liabilities for use of GM products to control wild populations of pests will be widely distributed in space ... Possums, for example, occupy more than 95% of New Zealand.”

Bio Dynamic Farming and Gardening Association [IP61] commented on the wide-ranging effects possible if genetically modified organisms were released into the environment, when costs might be incurred by “innocent bystanders”, such as those “whose health is damaged such as by allergens” and those “whose livelihood is damaged by contamination”, such as organic, biodynamic and other farmers, as well as “the public generally, where eradication or environmental degradation is caused”.

In addition, Safe Food Campaign [IP86] thought it was unlikely that any harm that might eventuate from genetically modified foods or genetically modified organisms could be traced back to the producer because of the complexity of the task. Friends of the Earth (New Zealand) [IP78] raised the issue that liability might be “incalculable” and stated:

It is possible that the nature and scale of the harm which could be caused by GM products may be such that no amount of financial compensation or punitive action will undo the damage.

Differing approaches to liability

Environmental Risk Management Authority (ERMA) [IP76] outlined two philosophical approaches to liability, one where the state relieved people of the liability of unexpected results (“socialisation of risk”) and the other where the operator must accept liability.

Nelson GE Free Awareness Group [IP100] was of the opinion that “at present we have a situation in New Zealand where liability is neither assumed by the company, or regulatory agency” and that the public was left to “pick up the bill” in the event of any problems arising from genetic modification field trials. Public Questions Committee (Methodist, Presbyterian, Churches of Christ, Quaker) [IP93] commented that, where there was no certainty as to who would accept liability for consequences, “importation of any products or processes that involve risks” should be prohibited.

Government responsibility

Interchurch Commission on Genetic Engineering [IP49] noted that government bodies that approved the use of genetically modified products, as well as those that manufactured them, would be legally and financially responsible for “any adverse effects, to individuals or to the environment, which result”. Pacific Institute of Resource Management [IP84] also noted that the “state should be originally responsible and made liable for all activities carried out by private entrepreneurs” and made comparisons with nuclear conventions where the state “bears ultimate responsibility if the operator is unable to make full payment”.

Landcare Research [IP12] commented that the “liabilities associated with GM products for pest control should fall on government as the primary user”. However, Eubios Ethics Institute [IP96] noted that unless government regulatory authorities were found to be negligent for a known risk they should be exempt from liability.

ERMA [IP76] noted that “if the Government wishes to be proactive in encouraging innovation, then ... it may well decide to bear ... a large part of the risk”.

Government liability if genetic modification is not allowed

Several submitters raised the issue that Government might be exposed to some level of liability if it decided not to allow genetic modification. New Zealand Life Sciences Network [IP24] and Federated Farmers of New Zealand [IP34] commented that there would be some liability on Government “should it decide to stop what has hitherto been a legitimate commercial pursuit”.

New Zealand Organisation for Rare Diseases [IP98] and New Zealand National Commission for UNESCO [IP90] noted that Government could face liability issues from the lack of use of beneficial genetic modification technology in the health arena. Both of these submitters gave the example of the “significant claim” against Government where it failed to introduce hepatitis C screening when first internationally available. Auckland Healthcare Services [IP91] stated that if the use of genetic modification technology was restricted in medical science then “healthcare professionals are likely to find themselves in breach of a number of consumer rights under the Code of Health and Disability Services Consumers’ Rights”, such as rights to services that optimise quality of life and allow informed choices.

“Polluter-pays” approach to liability

The philosophical approach to liability that the operator should bear responsibility (also known as the “polluter-pays” approach) was presented by a range of submitters. Thirteen submitters noted that there were difficulties in making the polluter pay where there is contamination.

Meat Industry Association of New Zealand [IP32] commented that the “producer of a product always remains liable for the failure of that product to be fit for purpose” and did not think that would change with gene technology. Nelson GE Free Awareness Group [IP100] concurred with this view, noting that “the onus should rest on all companies to prove the safety of their products”. Eubios Ethics Institute [IP96] noted that the ethically responsible approach to liability is that the polluter pays.

The increasing emphasis in environmental legislation to impose a “polluter-pays” regime was highlighted in the submission by Carter Holt Harvey/Fletcher Challenge Forests [IP17] which also noted that experience with this approach to contaminated sites had proved the difficulty of identifying the liable party. Friends of the Earth [IP78] commented that in the short term liability should rest with corporations that produce genetically modified products. Golden Bay Organic Employment and Education Trust [IP104] was of the opinion that “the biotechnology industry should be held 100 percent accountable for any harm caused to people, the soil, the air, the water, ...” and that the use of genetic modification should end until liability was fully established. Maori Congress [IP103] summed up the polluter-pays position on liability with its comment that:

The worst case scenario is that we could be faced with the privatisation of our genetic heritage — the corporate enclosure of our genetic commons — without the protection and knowledge that the polluter-biopiracy agent must be liable.

Sustainable Futures Trust [IP51] noted that “we should not create a culture of non-responsibility” with respect to genetic modification. Federation of Maori Authorities [IP69] commented that liability for release of harmful organisms/genetic material lay in the hands of the applicants responsible for the project. Bio Dynamic Farming and Gardening Association [IP61] agreed that those who released genetically modified organisms or intentionally used them should be held liable for the effects, but noted that “this is insufficient protection, because it is likely to be impossible to recall a genetically modified organism once it is released”.

Liability of beneficiaries

Several submitters, such as Green Party of Aotearoa/New Zealand [IP83] and Pacific Institute of Resource Management [IP84], stated that those who benefited from genetic modification should be prepared to reimburse costs to those harmed. Maori Congress [IP103] noted that:

Should scientists wish to enjoy the benefits of their ‘discoveries’ and to reap the riches that intellectual property right patents may bring, they must also be prepared to deposit sufficient security to pay liability should their research cause health or environmental damage.

European decision on liability

Several submitters provided comment on a recent European decision where producers of genetically modified plants were absolved from liability.

Parliamentary Commissioner for the Environment [IP70] and Sustainable Futures Trust [IP51] cited a recent decision of the European Parliament that ruled by 287 votes to 202 **against** legislation that producers of genetically modified plants should be held legally responsible if the food products of these plants turned out to be harmful to humans or the environment. Although this legislation was voted down, Green Party [IP83] noted that the legislation “was intended to safeguard organic farmers, as well as giving Europeans the power to sue GM companies and force them to pay damages if they harmed health, the environment or livelihoods”.

Types of liability

Submitters described different sources of liability arising in relation to genetic modification, as well as different categories of liability. They also provided some practical examples of differing types of liability.

Sources of liability

Submitters suggested that sources of liability might include situations where work involving genetic modification was not conducted in line with procedures, where there was a lack of monitoring or a breach of regulations. Other sources of liability noted by submitters included circumstances where the outcomes of genetic modification applications were foreseeable, as well as situations where outcomes were unexpected. New Zealand Dairy Board [IP67] identified two different types of “harm” from genetic modification: one where the “harm” might be reasonably foreseeable and the other where the “harm” might be entirely unanticipated. ERMA [IP76] commented that dealing with unexpected effects is “problematic” and the issue would be deciding how much risk Government would be willing to bear.

University of Canterbury [IP7] recognised two sources of liability: “those that could result from the conduct [of] GE work; and those that could result from inadequate monitoring of GE work overseas”.

Association of Crown Research Institutes (ACRI) [IP22] noted that “where procedures are not followed” liability might arise, for example “environmental damage through the impacts of wild GM crops (or organisms) or through waste from GM production”. Dairy Board [IP67] commented further that under New Zealand’s existing laws “a person who causes damage (other than personal injury) to others, [has] a liability to compensate the persons suffering that damage, under the law of negligence or nuisance”. In addition, the Board noted that, where statutory controls existed for an activity, liability might arise if such duties were breached.

Both Meat New Zealand [IP31] and New Zealand Game Industry Board [IP33] noted that “while potential liability resides in an escape or an unintentional spread of an organism”, the most significant liability associated with genetic modification might be the potential for “loss” associated with New Zealand’s “key strategic genetic assets” and “depletion of our scientific resource base”.

Categories of liability

AgResearch [IP13] differentiated liability according to legal liability and civil liability, noting that there would be “legal liability for negligently allowing dangerous or harmful organisms or effects to damage people or the environment” and that “if a dangerous or harmful organism was released into the environment, it could give rise to civil liability for nuisance or negligence”. New Zealand Life Sciences Network [IP24] identified two categories of liability, the first involving “compensation for reduction or cessation of existing rights to research and develop GM products” and the other comprising “civil liability for consequences of [a] major incident involving GMOs”.

AgResearch [IP13] and New Zealand Biotechnology Association [IP47] both identified the potential for loss of public standing or professional credibility as a form of liability in addition to legal liability and civil liability. Organic Product Exporters Group (OPEG) [IP53] provided a practical example of this form of liability noting that if organic products were “contaminated” by genetically modified elements then this would result in “loss of the organic certification for the product” and would lead to “a loss in the reputation of the company and the company’s brand value”, as well as having a “negative impact on the whole New Zealand organic sector’s market reputation”.

Practical examples

Submitters provided practical examples of situations where liability issues might arise in relation to genetic modification. Environment and Conservation Organisations of New Zealand [IP102] listed some of the current known liability issues as:

- Starlink corn
- contaminated seeds in Europe
- Monsanto prosecuting farmers for saving seed
- BSE crisis in England.

Federated Farmers of New Zealand [IP34] noted that “liability may arise from an event which has a health, safety or environmental impact, ... [it] may also arise

from cross-pollination ... [or it] may become an issue when immediate steps are not taken to adjust the regulatory regime in the event of new knowledge”.

Meat Industry Association of New Zealand [IP32] commented that it faced potential liability issues whenever it sold products and that liability issues “will remain for any products that are based on gene technology”. The Association also highlighted the need for New Zealand to consider the liability implications of “imported disease and pests and the risk of a ‘gm disaster’”.

ACRI [IP22] and Nelson GE Free Awareness Group [IP100] noted that liability might arise from the use of genetically modified products in the health arena. The latter commented: “The liability issues arising from medical uses of genetic engineering are immense and extremely varied.” Haemophilia Foundation of New Zealand [IP48] raised the issue that “past errors associated with HIV and HCV” must not be “repeated with genetic technology in medicine” and suggested that a service advisory group that contained people with clinical problems likely to be impacted by genetic technologies should be set up to advise Government and Ministry of Health.

Several submitters made comment on cross-boundary contamination issues with respect to liability. Nga Wahine Tiaki o te Ao [IP64] stated that there was a “need to be wary ... of cross contamination and infection of organic, clean crops and species”. Golden Bay Organic Employment and Education Trust [IP104] commented that in the United States “genetic drift” was “one of the GM hot potatoes that nobody wants” and that “there are no existing regulations to deal with it”. BIO-GRO New Zealand [IP58] also identified cross-boundary contamination in its submission as a potentially serious liability issue. In an accompanying witness brief, BIO-GRO noted:

With corn pollen able to travel up to six miles, it is difficult if not impossible to determine who caused the contamination. Farmers are certainly not in the financial position to sue everyone within six miles of their farm ... Cross pollination contamination opens the door for potential legal problems because a farmer doesn’t know who to go after.

OPEG [IP53] also acknowledged the “potential financial and other losses that would arise from organic products and farms being contaminated by GM elements and the liability issues associated with these events”. In particular, OPEG noted the potential for “loss of the ability to supply and access high value markets and the possible collapse of the organic industry” and commented that “legal avenues for compensation in such events are unclear”.

Regulatory framework for liability

Submitters presented a range of views on regulating for liability in relation to genetic modification. Comments covered these aspects:

- necessity for specific liability provisions
- existing regulatory framework for liability
- adequacy of existing regulatory framework
- inadequacy of existing regulatory framework
- recommended changes to liability regulation.

Necessity for specific liability provisions

Several submitters commented that no specific liability provisions are needed for genetic modification. New Zealand Association of Scientists [IP92] noted that liability should not be different for genetically modified and non-genetically modified products and that “the issue of liability in relation to GM is fuelled by the erroneous belief that GM products and organisms are inherently dangerous”. New Zealand Forest Research Institute [IP2] also commented that genetic modification technology should not result in any organism with a greater magnitude of risk compared with organisms produced by conventional breeding and that there was “no recognised liability for users of forest trees derived from conventional breeding”. Monsanto New Zealand [IP6] concurred that liability for genetically modified organisms “should be the same for GM and non-GM plants”, and stated that “there is no risk to GM plants that is specifically caused merely due to the fact that they are produced through biotechnology”.

Aventis CropScience [IP14] also considered that no specific liability regime was justified for genetically modified organisms and cited the results of a global debate of international expert groups in the framework of Organisation for Economic Co-operation and Development, Food and Agriculture Organization and World Health Organization that concluded “products of modern biotechnology are not more or less dangerous than their traditional counterparts”. New Zealand Biotechnology Association [IP47], Biotenz [IP25] and New Zealand Agritech [IP73] all commented that there was no reason for genetically modified organism technology to be treated differently from other technologies with respect to liability.

Existing regulatory framework for liability

AgResearch [IP13] identified some of the key regulations for liability that were in place under the existing Hazardous Substances and New Organisms (HSNO)

legislation, including:

Section 109 of HSNO makes it an offence to knowingly import, release or possess a new organism without the appropriate approval. It is also an offence to fail to comply with any controls imposed by an approval. The penalty for any such offence is imprisonment for a term not exceeding 3 months or a fine not exceeding \$500,000 ...

It is an offence under section 109 HSNO for a manufacturer, developer or importer of a new organism to knowingly fail to report any significant new information of any adverse effect of that hazardous substance or new organism ... [this carries penalties] ...

... a Court may order the person who committed an offence against section 109 to mitigate or remedy any adverse effects on people or the environment (section 114(5) HSNO). The Court may also order that the new organism be destroyed (section 114(5) HSNO).

Meat New Zealand [IP31] and New Zealand Game Industry Board [IP33] also noted that “the HSNO Act provides for significant penalties”.

Researched Medicines Industry Association of New Zealand [IP55] noted that, in addition to the HSNO legislation, New Zealand “has a variety of statutes, and the law of negligence, under which product liability issues can be pursued”.

Adequacy of existing regulatory framework

Fourteen submitters made comment that the existing liability laws were adequate to deal with genetic modification. Forest Research Institute [IP2] stated that:

New Zealand has a very comprehensive procedure to assess and minimise risk associated with genetic engineering. The HSNO Act specifies procedures for laboratories to follow to minimise risk. Further, the Act provides measures to minimise risk related to contained field trials of genetically engineered organisms.

ACRI [IP22] commented that “provided GM practitioners fulfil the obligations of the HSNO Act and the ERMA requirements, the current liability framework will be effective”. Dairy Board [IP67] concurred that the existing law was adequate to deal with “any reasonably foreseeable harm” from genetic modification and noted “our law does not, and should not, seek to create a risk-free environment”. New Zealand Life Sciences Network [IP24] commented that the existing liability regime which comprised “insurance contracts and law” was “sufficient to address potential risks” of genetic modification. New Zealand Feed Manufacturers Association/Poultry Industry Association of New Zealand/Egg Producers Federation of New Zealand [IP35] considered that there was no liability “with GE products that cannot be handled within New Zealand’s current legislation”, which it identified as involving labelling through the Commerce Commission and Australia New Zealand Food Authority (ANZFA), and safety through ERMA and the HSNO Act.

Inadequacy of existing regulatory framework

Sixteen submitters considered that the current liability law was not adequate with respect to genetic modification. Parliamentary Commissioner for the Environment [IP70] stated: “Liability issues are not resolved in New Zealand and are an important consideration in developing a strategic approach to GM technologies in New Zealand.”

Greenpeace [IP82] and Green Party of Aotearoa/New Zealand [IP83] did not consider New Zealand’s current liability regime to be adequate to deal with genetically modified organisms. Greenpeace commented: “Liability regimes are not equipped to redress the kind of damages wrought by the irreversible release of genetically modified organisms.”

Dairy Board [IP67] considered that New Zealand’s existing laws were not adequate in terms of liability “where damage is not reasonably foreseeable” and stated:

The existing law does not necessarily provide a mechanism for transferring risks which are unforeseeable, from the persons suffering damage if it does occur to the persons obtaining the benefits of the technology.

However, the Board noted further that if laws were modified so as “to impose absolute liability on any person using GM technology for any harm, foreseeable or not”, then the benefits of genetic modification might be lost “for fear of risks which will probably never happen”. Therefore, it suggested that existing laws should not be changed but that appropriate risk management controls for genetic modification be adopted.

Federated Farmers of New Zealand [IP34] put forward a range of measures to control liability from unintended outcomes that did not include changes to the existing regulatory regime. These measures included: “working within legislative guidelines under HSNO”, “adopting industry quality assurance programmes”, “using trained and registered operators where appropriate”, “applying comprehensive communication regimes” and “purchase of commercial insurance”.

Greenpeace [IP82] considered “monitoring and absolute liability regimes will need to be established to address illegal importation of genetically engineered organisms or accidental contamination of imports”. Te Runanga o Ngai Tahu [IP41] also made comment that “the issues of liability prove that monitoring has not been adequately addressed”. Royal Society of New Zealand [IP77] cautioned against stringent legislative regimes noting:

One argument against this sort of intensive regulation and legislation is that it will infringe on the individual liberties of farmers who want to gain a competitive advantage by using GM products. However, given the ‘unknowns’ surrounding GM, it seems only just

that those who are not gaining financially from the products are protected from any possible adverse events.

Physicians and Scientists for Responsible Genetics New Zealand (PSRG) [IP107] noted “ERMA is inadequate to police this industry” and provided examples of transgressions in New Zealand in relation to genetic modification.

Recommended changes to liability regulation

Changes to liability regulation for genetic modification were recommended by several submitters. Pacific Institute of Resource Management [IP84] raised the issue that “liability and compensation clauses should be incorporated in any legislation relating to the use of gene technology as the risk of harm ... is transnational in character and major in degree”. Nelson GE Free Awareness Group [IP100] commented that “the public cannot be fully protected unless [there are] strict rulings covering liability issues” and suggested that “liability funds” such as those implemented in Spain be set up. Canterbury Commercial Organics Group [IP65] stated that:

The Royal Commission ... has a responsibility to establish full liability to companies developing GE technologies for economic and other losses caused by genetic drift and other environmental effects created through genetic engineering.

ERMA [IP76] made the point that there “is merit in having ... a bond to cover the clean-up of adverse effects” and likened this proposal to provisions provided in the Resource Management Act 1991. The need for clarity as to who would meet the costs of unintended effects or accidents was a concern noted by Parliamentary Commissioner for the Environment [IP70].

Liability insurance

Another theme of the submissions was that of liability insurance in relation to genetic modification. Submitters commented on: availability of liability insurance, New Zealand’s position on liability insurance and international approaches to liability insurance.

Availability of liability insurance

Several submitters, principally those from environmental organisations, raised the issue of liability insurance in relation to genetic modification. The key issue raised was that “problems” arising from genetic modification activities might be too great to be covered by liability insurance.

Friends of the Earth [IP78] made comment that there was a “strong possibility that liability insurance will not be available to manufacturers of GM products”. Safe

Food Campaign [IP86] noted further that “scientific uncertainty surrounding [genetic modification] and the threat of serious and irreversible harm ... defies liability concepts of bonds or insurance”.

Greenpeace [IP82] also raised the issues that “society cannot simply rely on insurance to cover all risks” and that genetically engineered products “could cause such enormous insurance problems” that “insurance companies cannot be relied upon to shoulder the burden”. PSRG [IP107] supported this view and made the point that “hazards” arising from genetic modification may not be able to be quantified and therefore not insured, stating:

No insurance companies will provide indemnity against the eventuality of harm arising from a genetically engineered organism. This is because the potential hazards cannot be assessed let alone quantified.

New Zealand’s position on liability insurance

ERMA [IP76] commented that public liability insurance “to date has been ... at the discretion of the approval holder” and that taking out a bond or public liability insurance could be regarded as an unnecessary compliance cost. Parliamentary Commissioner for the Environment [IP70] noted that “the insurance industry in New Zealand does not yet have an official position on issues involving genetically modified organisms in the environment” but also added comment from an insurance industry spokesperson that “there is a general feeling amongst the industry that the risks involved with GMOs in the environment are just too great for insurance companies to accept”. Nelson GE Free Awareness Group [IP100] also noted “insurance companies have refused to insure genetically engineered crops”.

International approaches to liability insurance

Parliamentary Commissioner for the Environment [IP70] and Greenpeace [IP82] outlined several international approaches to liability insurance.

Greenpeace [IP82] noted the Insurance Council of Australia’s position on insuring genetic modification, which was that “general insurers are reluctant to accept incalculable risks where it is difficult to predict what loss scenarios will arise”. Greenpeace also mentioned the comments of Swiss Re, an “influential” European re-insurance company, which regarded genetic engineering as one of the most “exposed technologies of the future”. Parliamentary Commissioner for the Environment [IP70] made comment on the insurance position in the United States where “the insurance industry has consistently refused to write policies covering liability for harm caused by genetically modified organisms”.