

Liability Issues Associated with GM Crops in Australia

Scope

This paper is a scoping paper on the potential legal risks associated with the commercial release of genetically modified (GM) crops in Australia and possible risk minimisation strategies. The paper focuses on liability for economic loss arising from the unintended presence of GM crops, as this is believed to be the principal issue for those with concerns. Liability for environmental damage (such as loss of biodiversity) and personal injury (eg allergenicity, toxicity) has been excluded as a regulatory system has been implemented to avoid such dangers¹ and thus the risk to those in the agricultural community is minimal.

Part 1 outlines the debate regarding legal liability issues associated with GM crops and the approach currently adopted to these issues overseas and in Australia. Part 2 identifies the key liability risks for specific members of the agricultural community and suggests measures that may be implemented to minimise such risks. Part 3 provides some tentative conclusions. A summary of the acronyms used in this paper, together with definitions for 'GM', 'organic', 'non-GM' and 'GM-free' is provided in Appendix I.

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Australian Government

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David Dalton prepared this paper in consultation with Brian Jones and Britt Maxwell. The paper is intended as a background paper for general information only and on the understanding that the Commonwealth is not providing professional legal advice on a particular matter. The views expressed are not necessarily those of the Commonwealth and should not be taken to indicate a commitment by the Commonwealth to a particular course of action.

While every effort has been made to ensure that the information in the paper is accurate and up to date, you should exercise your own independent skill and judgement before you rely on it. In any important matter, you should seek professional advice relevant to your own circumstances.

¹ The Gene Technology Regulator will not issue a licence to grow a GM crop unless she is satisfied that any risks posed by a GM crop can be managed in such a way as to protect the health and safety of people and the environment. In addition, Food Standards Australia New Zealand (FSANZ) assesses the safety for human consumption of each food produced using gene technology in order to protect the health and safety of people in Australia and New Zealand.

I. Debate on Legal Liabilities Associated with GM Crops

There is debate both overseas and within Australia regarding liability issues associated with GM crops. Some believe that genetically modified organisms (GMOs) pose no unique risks and argue that liability regimes commonly used for other agricultural endeavours should apply. Others maintain that agricultural biotechnology is fundamentally different from other forms of agricultural breeding technology, and argue that special legal liability regimes are required to ensure that those who experience loss arising from GMOs can obtain adequate relief.

1. *The Liability Debate: An International Perspective*

Issues relating to legal liability risks associated with GM crops are under consideration in a number of countries. While a majority of countries (including the United Kingdom, New Zealand, Canada and the United States) continue to rely on existing law to address such risks, several are currently considering legal reform in this area.

- The Law Commission of New Zealand recently reviewed the adequacy of their existing regime² and the NZ Government issued a discussion paper³ on the legislation controlling genetic modification, the *Hazardous Substances and New Organisms Act 1996* (the *HSNO Act*), seeking views on liability issues associated with GMOs. The Government has recently proposed changes to the *HSNO Act* to impose strict civil liability for harm caused by activities that breach the legislation. The proposed amendments would, subject to certain defences, allow people who were harmed by an activity that breached the law to take legal action to seek compensation without the need to prove negligence. The proposed Bill (the 'New Organisms and Other Matters Bill' (2003)) was introduced to Parliament on 29 April 2003. After consideration by the Education and Science Select Committee, the Bill is, at time of writing, being debated in the House of Representatives.
- In 2000 a United Kingdom private member's Bill⁴ proposing strict liability for damage caused by GMOs intensified the liability debate in the United Kingdom. While the Bill was rejected, a sub-group of the UK's Agriculture and Environment Biotechnology Commission (AEBC) is currently exploring issues of liability relating to GMOs. Specifically, they are considering whether the existing liability regime is sufficient, whether it needs revision, and whether there are better ways of addressing potential issues raised.⁵
- The European Commission has recently issued non-binding recommendations on guidelines for the development of national strategies and approaches to ensure the co-existence of GM, conventional and organic crops. The guidelines encourage Member States to examine their civil liability laws when developing national strategies and ensure that farmers, seed suppliers and other operators are fully informed about the liability criteria that apply in their country in the case of damage caused by unintended presence.

² New Zealand Law Commission, *Liability for Loss Resulting from the Development, Supply or Use of Genetically Modified Organisms* (2002).

³ Ministry for the Environment, New Zealand, *Public Discussion Paper: Improving the Operation of the HSNO Act for New Organisms* (2002).

⁴ Genetically Modified Food and Producer Liability Bill 2000 (UK); see David Bainbridge, 'The Risks of Genetically Engineered Crops' (2000) 15 *Sustainability Review*, <<http://www.eeee.net.sd06045.htm>>

⁵ UK Environment Minister Michael Meacher, *Speech on Gene Futures: Debating the Use of GM Crops and Foods in the UK*, Tuesday 11 February 2003 <<http://www.defra.gov.uk/corporate/ministers/speeches/mm030211.htm>> accessed 19 February 2003.

Currently, Austria and Germany appear to be the only major countries to have addressed liability issues relating to GMOs through specific legislation. Both these countries impose strict liability for particular types of loss caused by GMOs.⁶ Under Austrian law, in the event of an accident involving GMOs, the releasing company will be liable for any harm to health, property, or the environment, and must return the property to its “original” state. Companies must also obtain liability insurance sufficient to meet their liabilities. German law imposes liability for injury to property or human health “caused by characteristics of an organism created in a biotechnological process”. German regulations place liability at the “manager” level of the installation, which is likely to expose GM farmers (as installation managers) to liability exposure. German law also makes liability insurance mandatory for GM operators.

There are a number of reasons why the majority of countries have chosen not to implement a special legal liability regime for agricultural biotechnology. The legal regime of a particular country may be judged sufficient in scope and flexibility to adequately address liability issues associated with agricultural biotechnology. If this is the case, then a special regime that imposes strict liability for any and all damages caused by GMOs arguably only serves to create a disincentive to scientific inquiry and to impose extra, unnecessary costs upon a beneficial, emerging technology. In 2001, after reviewing the adequacy of the existing liability regime, the Royal Commission of New Zealand recommended “that for the time being there be no change in the liability system”.⁷ While this conclusion has since prompted further investigation into this area, the Royal Commission explained its recommendation by stating:

The Commission considers it is unnecessary to recommend legislation providing special remedies for third parties, where they may have been affected by the release of a genetically modified organism. As technology advanced with ever-increasing pace throughout the 20th century, the common law (that is, law based on court decisions, as distinct from statute law) showed it was well able to mould new remedies for novel situations. Parliamentary intervention has rarely been needed in this area. From a legal liability perspective we have not been persuaded there is anything radically different in genetic modification as to require new or special remedies.⁸

The Liability Debate in Australia

The international debate regarding liability issues associated with GM crops has been reflected in Australia.

Fearing that the commercial release of GMOs will impinge on the ability to continue organic farming practices, the Organic Federation of Australia (OFA) stated that the right to be “GM-free” is a ‘fundamental right’ that must be preserved as it goes to the heart of the responsibility that farmers have to ensure that their actions do not impact on others.⁹ After seeking advice from a leading class action and plaintiff law firm, the OFA declared that it does not believe that the existing liability regime adequately protects members of the organic agricultural industry. For this

⁶ See Bryan Endres ““GMO:” Genetically Modified Organism or Gigantic Monetary Obligation? The Liability for GMO Damage in the United States and the European Union (2000) 22 *Loyola of Los Angeles International & Comparative Law Review* 453, 474-8.

⁷ Recommendation 12.2, Royal Commission on Genetic Modification, New Zealand, ‘Report of the Royal Commission on Genetic Modification’, Ch 12 *Liability Issues* (2001) 329.

⁸ Royal Commission on Genetic Modification, New Zealand, ‘Report of the Royal Commission on Genetic Modification’, Ch 12 *Liability Issues* (2001) 328.

⁹ Submission No. 54 to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 (Organic Federation of Australia).

reason, the OFA mandated the need for the imposition of strict liability for damage caused by GMOs on the licence holder for the GMO.¹⁰ In addition, the OFA argued a compensation fund should be established paid by levies on the biotechnology industry to provide relief for victims of genetic contamination.¹¹ Alternatively, the OFA suggested that insurance¹² or assurance bonds¹³ should be mandatory.¹⁴

Similarly, the Network of Concerned Farmers has identified a number of potential liability risks and has called for specific legislative protection to ensure that agricultural biotechnology companies are liable for all costs and liabilities arising due to the unintended presence of GMOs.¹⁵

The National Farmers' Federation (NFF) has stated that one of the greatest uncertainties surrounding the commercial uptake of new GM varieties relates to the distribution of liability throughout the supply chain and the willingness of insurance companies to provide coverage for modified crops or enterprises growing such varieties. The NFF believes that clarification of the legal framework and associated insurance issues is vital in providing confidence to farmers considering the adoption of such varieties.¹⁶

The Australian Grain Harvesters Association Inc (AGHA) has also expressed concern regarding liability issues associated with the unintended presence of GMOs.¹⁷

By comparison, representatives of industry that utilised biotechnology relied on the 'rights' argument to support a less stringent regulatory regime. For example, in a submission to the Senate Community Affairs Reference Committee, Florigene Ltd and Nugrain Pty Ltd argued:

The concept of freedom to farm needs to be given appropriate consideration. We pose the rhetorical question; how far do the rights of organic growers extend before they are able to restrict the ability and freedom of adjacent farmers to make their own decisions in respect of growing non-GM and GM crops in a district.¹⁸

The industry tends to argue that GMOs pose no unique risks and maintained that the common law is an adequate mechanism for providing relief.¹⁹ The industry vehemently opposed the imposition of strict liability, the establishment of a compensation fund, or mandatory insurance or assurance

¹⁰ The ACF Gene Ethics Networks similarly argued that strict liability was appropriate: Submission No. 85 to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000.

¹¹ Other parties made similar suggestions: see submissions to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000, No. 22 (Mr Greg Whitten); No. 35 (GE-Free Tasmania), No. 85 (ACF Gene Ethics Network).

¹² Other parties made similar suggestions: see submissions to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 No. 35 (GE-Free Tasmania), No. 85 ACF Gene Ethics Network, No. 119 (Mr and Mrs L Mendoza).

¹³ Other parties made similar suggestions: see submissions to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 No. 34 (Australian Centre for Environmental Law), No. 35 (GE-Free Tasmania), No. 85 (ACF Gene Ethics Network), No. 87 (Mr and Mrs Richard Underwood), No. 93 (Dr Kate Clinch-Jones).

¹⁴ Submission No. 54 to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 (Organic Federation of Australia Inc).

¹⁵ Network of Concerned Farmers, *Law*, <http://www.non-gm-farmers.com/news_details.asp?ID=309>.

¹⁶ National Farmers' Federation, *National Farmers' Federation Biotechnology Position Statement* (2003) <<http://www.nff.org.au/pages/nr03/13.html>> at 10.

¹⁷ Australian Grain Harvesters Association Inc, *Submission to the Gene Technology Grains Committee*, 10 September 2002.

¹⁸ Submission no. 42 to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 (Florigene Ltd and Nugrain Pty Ltd (VIC)).

¹⁹ Submissions to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 No. 59 (Meat and Livestock Australia Ltd (NSW)), No. 90 (Du Pont Technical Centre (NSW)), No. 94 (Monsanto Australia Ltd (Vic)).

bonds,²⁰ arguing, for example, that such responses would be unreasonable and deter innovation and commercial development.²¹

The Australian government has chosen not to implement a special liability regime for damage caused by GMOs. The Office of the Gene Technology Regulator (OGTR) administers the *Gene Technology Act 2000* (Cth), which imposes a licensing regime to regulate specified dealings with GMOs in order to protect the environment and the health and safety of people. The Act does not, however, address the economic ramifications of the commercial production of GM crops and does not provide a remedy for those adversely affected by GMOs.

When drafting the *Gene Technology Act 2000* (Cth) the legislature was conscious of the need to balance the interests of diverse stakeholder groups,²² and recognised the importance of protecting both the biotechnology and organic industries.²³ The option of including civil liability provisions for damage caused by GMOs or establishing a compensation fund to compensate third parties adversely affected by the use of GMOs was considered, but ultimately rejected.²⁴ While it was recognised that specific legislation was needed to regulate the use of GMOs, it was thought that the attached risks could be resolved through the application of the common law and existing legislation.²⁵ The point was made that, in all other cases where the activities of one farmer affect a neighbour, recourse is to existing statute and common law and that GMOs should not be treated any differently.²⁶ The legislature accepted this *horizontal approach* to ensure comparable activities are dealt with equally and in accordance with the consistent application of general principles.²⁷ Both the House of Representatives Standing Committee and the Senate Community Affairs Reference Committee accepted that reliance on the common law is an appropriate arrangement for providing a remedy for victims of genetic contamination.²⁸ As noted above, the decision to rely on common law and existing statutes is consistent with the approaches adopted in the United Kingdom, New Zealand, Canada and the United States.

²⁰ See for example Submission to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 No. 32 (Avcare – National Association for Crop Production and Animal Health).

²¹ Submission to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 No. 59 (Meat and Livestock Australia Ltd (NSW)).

²² Submission no. 77 to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 (Interim of the Gene Technology Regulator, Department of Health and Aged Care), 29, 140.

²³ House of Representative Standing Committee on Primary Industries and Regional Services, *Work in Progress: Proceed with Caution – Primary Producer Access to Gene Technology*, Canberra, 2000 ('House of Representatives Standing Committee Report'), 56.

²⁴ Senate Community Affairs References Committee, *A Cautionary Tale: Fish Don't Lay Tomatoes – Report on the Gene Technology Bill 2000* ('Senate Committee Report'), Canberra, 2000, 149.

²⁵ Submission no. 77 to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 (Interim of the Gene Technology Regulator, Department of Health and Aged Care), 146; this was accepted by the Senate Community Affairs Reference Committee, *ibid*, 151.

²⁶ Senate Community Affairs References Committee, *A Cautionary Tale: Fish Don't Lay Tomatoes – Report on the Gene Technology Bill 2000*, Canberra, 2000, 149. The availability of obtaining redress through other means was one reason why the Commonwealth and all States and Territories objected to imposing strict liability: Submission No. 77 to the Senate Community Affairs Reference Committee, Parliament of Australia, Canberra, October 2000 (Interim Office of the Gene Technology Regulator, Department of Health and Aged Care), 143-4.

²⁷ *Ibid*, 146. Note when drafting the Gene Technology Bill 2000, States, Territories and the Commonwealth were conscious of the need to reflect a position in relation to contamination that is consistent with how contamination is dealt with in other areas (such as spray drift and pure seed): 140.

²⁸ House of Representative Standing Committee on Primary Industries and Regional Services, *Work in Progress: Proceed with Caution – Primary Producer Access to Gene Technology*, Canberra, 2000, 159. Senate Community Affairs References Committee, *A Cautionary Tale: Fish Don't Lay Tomatoes – Report on the Gene Technology Bill 2000* ('Senate Committee Report'), Canberra, 2000, 152.

The Primary Industries Ministerial Council (PIMC), with the exception of Tasmania, believes that the management of the risks posed by gene technology to agricultural production should be primarily handled by industry self-regulation supplemented by government monitoring. This approach appears to be satisfactory, as the commercial growth of GM cotton in Australia since 1996 has not given rise to any legal issues. While PIMC favoured national consistency in the policy approach to GMOs, it recognised that some jurisdictions might wish to introduce supplementary arrangements. The Gene Technology Ministerial Council released a draft policy principle on 2 May 2003 that recognises areas, if any, designated under State law for the purpose of preserving the identity of GM or non-GM crops for marketing purposes. NSW, Tasmania and Western Australia have decided to implement a moratorium on specified GM crops with South Australia and Victoria currently considering a temporary ban. The ACT is likely to adopt a position that is consistent with the NSW approach. For this reason it is likely that the Northern Territory and Queensland will be the only Australian states/territories where GM canola may be grown commercially in the near future.

Finally it should be noted that, given the constitutional powers of the federal government in this area, any special liability regime for damage caused by GMOs would need to be imposed under state and territory legislation unless a cooperative national approach could be agreed upon.²⁹

II. Potential Legal Liability

Those who produce GM products may potentially be held accountable for any loss resulting from the unintended presence of GMOs under the existing legal actions of trespass, nuisance or negligence. The unintended presence of genetically modified organisms (GMOs) in crops intended to be organic, “GM-free” or “non-GM” has the potential to cause economic loss in some circumstances. The National Standard for Organic and Biodynamic Production prohibits the use and presence of any genetically modified organisms (GMOs) in organic farming.³⁰ Similarly, the Australian Competition & Consumer Commission has indicated that “GM-free” crops must not contain any trace of GMOs whatsoever.³¹ In addition, such farmers may have provided contractual warranties regarding the GM status of their crops. Due to such standards and contractual obligations, the unintended presence of GMOs in organic and GM-free crops may result in lost market opportunities or prevent possible premium rates from being obtained.

On the other hand, there may be no economic loss resulting from GM “contamination” of non-GM produce as there is limited evidence of a price premium for “non-GM” crops relative to co-mingled products.³² Claims of economic loss therefore need to be evaluated on a case-by-case basis.

Farmers affected by the unintended presence of GM plant or plant parts in their crops may also face potential liability. For example, such farmers may be held liable under the *Gene Technology Act*

²⁹ For example, the states and territories agreed to adopt a national scheme for the regulation of GMOs, resulting in the *Gene Technology Act 2000* (Cth) and associated state and territory legislation.

³⁰ Organic Produce Export Committee, Australian Quarantine and Inspection Service, ‘National Standard for Organic and Bio-Dynamic Product’ (December 2002), standard 3.1.8(b) and 3.6.3.

³¹ See below, ‘Fair Trading Legislation’.

³² For example, see Max Foster, *GM Canola – What are its Economics under Australian Conditions* (2003) Australian Bureau of Agricultural and Resource Economics <<http://abareonlineshop.com/product.asp?prodid=12526>>.

2000 (Cth) and corresponding state legislation³³ for an unauthorised use of a GM organism. Alternatively, they may be in breach of a seed manufacturer's intellectual property rights. Farmers, manufacturers and retailers may also face liability under fair trading legislation or the Australia New Zealand Food Standards Code if they do not comply with labelling requirements regarding GM content.

The table below identifies the key liability issues for the grains supply chain.

Table One: Key liability issues associated with the unintended presence of GMOs

GM Seed Manufacturers/Suppliers	<ul style="list-style-type: none"> • Breach of Contractual Warranties • Nuisance • Negligence • Fair Trading Legislation
GM Farmers	<ul style="list-style-type: none"> • Breach of contractual warranties • <i>Gene Technology Act 2000</i> (Cth) and corresponding State legislation • Trespass • Nuisance • Negligence
Non-GM, Organic and GM-free Farmers	<ul style="list-style-type: none"> • Infringement of a seed manufacturer's intellectual property rights • <i>Gene Technology Act 2000</i> (Cth) and corresponding State legislation • Breach of contractual warranties • Fair trading legislation (misleading and deceptive conduct re GM status)
Transporters and Harvesters	<ul style="list-style-type: none"> • Breach of contractual warranties • Trespass • Negligence
Bulk Handlers	<ul style="list-style-type: none"> • Breach of contractual warranties • Fair Trading legislation • Negligence
Manufacturers/Retailers	<ul style="list-style-type: none"> • Australia New Zealand Food Standards Code • Fair trading legislation

While not discounting the importance of potential legal liability issues for all members of the agricultural community, this paper focuses on those liability issues associated with farmers (GM, non-GM, organic and GM-free), contract harvesters, local transporters, produce manufacturers and retailers. The potential liability of bulk handlers and GM seed manufacturers/suppliers is outside the scope of this paper, as it is believed they have the resources and expertise to identify their own legal duties.

GM Farmers

Prior to growing GM crops, farmers may be required to sign a Technology Use Agreement (TUA) or similar agreement with the seed supplier. The TUA details terms and conditions that must be met when growing the specified crop, and notifies the grower of the conditions imposed by the Gene Technology Regulator under the *Gene Technology Act 2000* (Cth) and corresponding state

³³ For example, the *Gene Technology Act 2001* (Qld), *Gene Technology Act 2001* (SA) and the *Gene Technology Act 2001* (Vic).

and territory legislation.³⁴ The Gene Technology Regulator may impose conditions relating to: (i) limiting the dissemination or persistence of a GMO or its genetic material in the environment; and (ii) contingency planning in respect of unintended effects of the dealing authorised by the licence. GM farmers will usually be subject to such conditions by virtue of the TUA.

While neither the *Gene Technology Act 2000* nor TUAs impose liability for loss resulting from the unintended presence of GMOs, GM farmers may potentially be held liable for such loss under the common law actions of trespass, nuisance or negligence.

(i) *Trespass*

Trespass to land is a *direct* physical interference by a defendant with a plaintiff's exclusive possession of land.³⁵ For example, when a GM farmer transports seeds on a truck any spillage may amount to a trespass. By contrast, the unintended presence of GMOs occurring through the spread of pollen via the wind, insects or birds would be unlikely to amount to a trespass, as this would not constitute a *direct* interference. A GM farmer will only be held liable for trespass, however, if the trespass is intentional, reckless, or negligent.³⁶

Risk Minimisation Strategies

GM farmers should ensure that they do not intentionally or through carelessness cause the movement of GM seeds from their property onto another. Complying with licence conditions (if any) imposed by the OGTR and appropriate guidelines (such as the GTGC Protocols and requirements under TUAs) would assist GM farmers avoid liability for trespass.

(ii) *Nuisance*

The growth of GM crops may constitute a nuisance to neighbouring farmers if the unintended presence of GMOs either causes actual damage to neighbouring crops or unreasonably interferes with the use and enjoyment of property. To establish that an interference constitutes a nuisance, the plaintiff must show that the interference was unreasonable in light of all the circumstances.³⁷ The court applies a principle of 'give and take' between neighbours to determine whether a nuisance exists.³⁸

It is important to note that courts tend to view interferences causing actual damage more seriously than those that merely interfere with enjoyment. It is unclear whether the unintended presence of GMOs will be viewed as actual damage. If unintended presence resulted in crop failure or reduced the yield of the crop, this would perhaps constitute actual damage but it is not obvious how this could occur. Rather, unintended presence may only prevent the land being used for organic or GM-free farming. This may be viewed as a mere interference with the use and enjoyment of the land. Where actual damage is found to exist, the court is likely to view the interference as unreasonable in light of all the circumstances. By contrast, where unintended presence merely prevents the land being used for organic or GM-free farming, the court may determine that the interference is not unreasonable in light of all the circumstances, as no actual damage has occurred.

³⁴ Section 63 of the *Gene Technology Act 2000* (Cth) makes it a condition of the licence that the licence holder informs any person covered by the licence, to whom a particular condition of a licence applies, of the condition.

³⁵ Francis Trinidad and Peter Cane, *The Law of Torts in Australia* (3rd ed, 1999) 104.

³⁶ Francis Trinidad and Peter Cane, *The Law of Torts in Australia* (3rd ed, 1999) 104.

³⁷ Martin Davies, *Torts* (3rd ed, 1999) 262.

³⁸ *Bamford v Turnley* (1862) 3 B & S 62, per Bramwell B at 83-4; *Kennaway v Thompson* [1981] QB 88 at 94. See also *Bayliss v Lea* [1962] SR (NSW) 521; *Clarey v Principal and Council of the Women's College* (1953) 90 CLR 170.

Risk Minimisation Strategies

GM farmers should take all reasonable precautions to minimise the chance that GM pollen or plants spread to nearby farms. While an activity may be viewed as a nuisance even where all reasonable precautions have been taken, the court is less likely to characterise an interference as unreasonable where all relevant licence conditions and protocol requirements have been complied with. As pointed out by Burrell and Lee, while not formally decisive, the regulatory (and political) acceptance of the GM crop in question³⁹ is likely to be influential when assessing the reasonableness of the interference.⁴⁰ In contrast, where no precautions have been taken, or there is a breach of licence conditions or protocol requirements, the court would be more likely to view the interference as unreasonable.⁴¹

(iii) *Negligence*

If the unintended presence of a GMO causes loss to a third party, a GM farmer may be held liable for negligence if it is demonstrated that the GM farmer owed the third party a duty to take care, there was a breach of that duty, and damage sustained as a result of that breach.

There are a number of circumstances in which a GM farmer may be held to owe nearby farmers a duty to take reasonable care to avoid the unintended spread of GMOs. For example, if the unintended presence of a GMO causes physical damage to a neighbour's crops, such as crop failure or reduced yield, it is likely that the court will find that the GM farmer owed the neighbouring farmer such a duty.⁴² However, if unintended presence does not cause physical damage, the court may choose not to impose a duty of care. This is because, as a general rule, damages are not recoverable for 'pure' economic loss.⁴³ In recent times, however, the court has arguably extended the circumstances in which a duty to avoid pure economic loss is imposed.

In *Perre v Apand*,⁴⁴ Apand supplied seeds suffering bacterial wilt disease to the Sparnons, who were potato growers in South Australia. Legislation prohibited the import of potatoes to Western Australia that had been grown within 20 km of a land infected by bacterial wilt. The appellants (Perre) grew potatoes for export to Western Australia within 20 km of the Sparnons. Due to the outbreak of bacterial wilt on the Sparnons land, the appellants lost their opportunity to export to Western Australia, although their potatoes were not infected. The High Court held unanimously that the Apands owed the Perres a duty to prevent their economic loss.⁴⁵

³⁹ On a site specific basis due to the licensing regime imposed by the *Gene Technology Act 2000* (Cth).

⁴⁰ See Maria Lee and Robert Burrell, 'Liability for the Escape of GM Seeds: Pursuing the "Victim"?' (2002) 65(4) *Modern Law Review* 517, 534: the fact that an injunction is the primary remedy in private nuisance may discourage courts from ruling that the unintended presence of GMOs amounts to a nuisance, as this would effectively override the public authorisation. See also John Fleming *The Law of Torts* (9th ed, 1998), 496.

⁴¹ See, eg, *Painter v Reed* [1930] SASR 295 at 304 per Richards J; *McMahon v Catanzaro* [1961] QWN 22; *Bayliss v Lea* [1961] SR (NSW) 247, 271-2 (Hardie J), affirmed [1962] SR (NSW) 521.

⁴² Where physical damage is foreseeable, the court will prima facie impose a duty of care on the defendant *Perre v Apand Pty Ltd* [1999] HCA 36, per McHugh at 70 (dicta). Indeed in cases involving physical damage the existence of a duty is almost certain: see *Hargrave v Goldman* (1963) 110 CLR 40 per Windeyer J at 63.

⁴³ *Caltex Oil (Australia) Pty Ltd v The Dredge "Willemstad"* (1976) 136 CLR 529, per Gibbs J at 555, Mason J at 585. See for example *French Knit Sales Pty Ltd v N. Gold & Sons Pty Ltd* [1972] 2 NSWLR 132; *Spartan Steel and Alloys Ltd v Martin & Co (Contractors) Ltd* [1973] QB 27.

⁴⁴ [1999] HCA 36.

⁴⁵ See generally Jane Swanton, 'Liability in Negligence for "Pure" Economic Loss' (2000) 14(2) *Commercial Law Quarterly*, 7; Jane Anderson 'Economic Loss: the Latest Word' [2000] *New Zealand Law Journal* 79.

By analogy to *Perre v Apand*, where a GM farmer knows of neighbouring farmers (such as organic and GM-free farmers) who may be adversely affected by the unintended spread of GMOs, he or she arguably owes a duty of care to such farmers. The court is unlikely, however, to impose such a duty where scientific uncertainty over the extent to which pollen or seed may disperse means it is not possible to determine who may potentially be affected by the unintended spread of GMOs from the defendant's land.⁴⁶ Should a duty to take care be held to exist, GM farmers may be held liable for any lost market opportunities experienced by third parties resulting from the breach of this duty.

Even where a duty to take care is imposed, GM farmers will not be held liable for any loss sustained unless there has been a breach of this duty. This will be judged according to the standards of a reasonable person, and may take into account such factors as the magnitude of the risk, the degree of probability of its occurrence, along with the expense, difficulty and inconvenience of taking alleviating action.⁴⁷ The court may also take into account whether the GM farmer has complied with any relevant licence conditions, standards and guidelines. This is likely to include voluntary standards⁴⁸ such as the industry initiated 'Canola Industry Stewardship Protocols'.

Risk Minimisation Strategies

GM farmers should be careful to comply with any relevant licence conditions imposed by the OGTR and any directions of the GM seed supplier included under the TUA. While compliance or non-compliance is not conclusive of the question of negligence, compliance is likely to be highly persuasive. GM farmers should also comply with any relevant standards and guidelines. For example, canola growers should comply with the "Canola Industry Stewardship Protocols".⁴⁹

Non-GM, Organic and GM-free Farmers

(i) Intellectual Property Infringement

Farmers whose crops are affected by the unintended presence of GMOs (eg as a result of pollen flow or co-mingling of supposedly non-GM seed) may be held liable for infringing another party's intellectual property rights. This was highlighted by the recent successful suit brought by Monsanto in Canada⁵⁰ against a conventional farmer, Percy Schmeiser, who replanted seeds "contaminated" by Monsanto's 'Roundup' resistant GM plants without a licence. In that case Monsanto had a patent over the transgenic gene responsible for herbicide resistance, which granted Monsanto a number of exclusive rights over the patented gene. The court held that the harvesting and sale of crops derived from seeds that were known, or ought to be known, to be Roundup tolerant infringed upon Monsanto's exclusive rights.⁵¹

⁴⁶ This is because a duty of care will not be imposed unless it is possible to determine the existence of an 'ascertainable class' of potential plaintiffs: *Perre v Apand* [1999] HCA 36 per Gleeson CJ at 10, 13; Gaudron J at 42; McHugh J at 50, 142-145; Gummow J at 206; Hayne J at 342; Callinan J at 409. See also *Caltex Oil (Australia) Pty Ltd v The Dredge "Willemstad"* (1976) 136 CLR 529 (Gibbs J at 555, Mason J at 593); *Christopher v MV 'Fiji Gas'* (1993) Aust Torts Reps 81-202 (Pincas JA and Thomas J at 61,963 - 61,965).

⁴⁷ *Wyong Shire Council v Shirt* (1980); *Romeo v Conservation Commission of the Northern Territory* (1998).

⁴⁸ For example, in *Anne Christina Benton v Tea Tree Plaza Nominees* (1995) 64 SASR 494, Duggan J gave a voluntary standard legal weight as evidence of what was reasonable in the circumstances.

⁴⁹ Gene Technology Grains Committee, *Canola Industry Stewardship Protocols for Coexistence of Production Systems and Supply Chains*, 20 December 2002, <<http://www.avcare.org.au/documents/Canola%20Industry%20Stewardship%20Protocols.pdf>>

⁵⁰ *Monsanto Canada Inc. & Monsanto Co. v Percy Schmeiser & Schmeiser Enterprises Ltd* (2001) FCT 256, Federal Court of Canada, Trial Division.

⁵¹ (2001) FCT 256 at [146]. The decision is currently under appeal before the Canadian Supreme Court.

Risk Minimisation Strategies

Monsanto Australia and Bayer Crop Science Australia have reportedly indicated that they will only pursue individuals who deliberately or knowingly infringe patent rights.⁵² To avoid liability farmers should not knowingly grow GM crops without first signing a TUA. In the Canadian case involving Percy Schmeiser, Justice Mackay reported that where farmers notified Monsanto of the presence of volunteer GM plants, Monsanto removed the undesired plants at its expense and the affected farmer was not held liable for patent infringement. Thus if a farmer becomes aware of volunteer plants in their fields they should contact the relevant GM seed manufacturer.

(ii) Gene Technology Act 2000 (Cth) and corresponding State and Territory legislation

A farmer affected by unintended presence may be held liable for breaching the *Gene Technology Act 2000* (Cth) and corresponding state and territory legislation if he or she grows or raises a crop in the open environment that is known to the farmer to contain a GMO without first obtaining a licence.⁵³ Such knowledge may arise either directly, through knowledge that a GM plant or plant part had come onto their land, or indirectly, through awareness of certain characteristics such as herbicide or pesticide resistance.⁵⁴

It is impossible to list all possible scenarios where a farmer might be found criminally liable under the legislation in cases where an unintended presence has occurred. However, the OGTR's Non Compliance Protocol (available on the OGTR website www.ogtr.gov.au) includes a list of considerations taken into account by the OGTR before deciding to refer matters to the Director of Public Prosecutions. Among these is whether steps have already been taken to address the issue or event giving rise to the consideration of enforcement, as well as culpability issues.

In circumstances where technically there may have been an offence, but where the unintended presence has occurred through no fault on the part of the farmer affected, the OGTR retains a discretion not to proceed to prosecution if the farmer has taken measures, in consultation with the OGTR, to address or remediate the problem after being made aware of it. Again, whether the OGTR will refer matters to the Director of Public Prosecutions depends on the particular facts and circumstances.

Risk Minimisation Strategies

Where a farmer becomes aware of volunteer GM plants growing on their property, he or she should contact the OGTR in the first instance and then contact the relevant GM seed manufacturer, if known.

(iii) Contractual Warranties

Non-GM, organic and GM-free farmers are likely to have marketed their crop or produce as such, and may have provided vendor declarations regarding the GM status of their crop. Such farmers are under an obligation to meet these contractual warranties.⁵⁵ In addition, where a buyer makes known to the seller the particular purpose for which the goods are required, a condition may be implied that

⁵² Agrifood Awareness Australia, *Background Briefing – ‘GM Seeds of Doubt Tour’*, 7.

⁵³ *Gene Technology Act 2000* (Cth) ss 32, 33.

⁵⁴ Nicole Rogers, ‘Seeds, Weeds and Greed: An Analysis of the Gene Technology Act 2000 (Cth), its Effect on Property Rights, and the Legal and Policy Dimensions of a Constitutional Challenge’, *Macquarie Law Journal*, in press, 4. Note, this conclusion may be reached by analogy to the reasoning expressed in *Monsanto Canada Inc. and Monsanto Company v Percy Schmeiser and Schmeiser Enterprises Ltd* 2001 FCT 256.

⁵⁵ Under state and territory ‘Sale of Goods’ legislation. Eg see *Sale of Goods Act 1923* (NSW) s. 18.

the goods shall be reasonably fit for such purpose in certain circumstances.⁵⁶ Thus, for example, where crops are sold for the purpose of manufacturing GM-free product, there may be an implied condition that the crops are suitable for this purpose. Should the unintended presence of GMOs be in breach of contractual warranties, the relevant farmer may potentially be held liable for breach of contract. In addition, if it is shown that the breach lead to the ‘contamination’ of products further down the supply chain, the farmer may potentially be held liable for all consequential loss. This may include loss sustained if products are recalled or products rejected due to the unintended presence of the GMO.

Risk Minimisation Strategies

Farmers should take steps to avoid the unintended presence of GMOs (eg through compliance with relevant guidelines). They should also take steps to ensure they can verify any claim or contractual obligation. Farmers could test their produce to ensure the presence of any GM material in their produce is within allowable thresholds or product standards. For example, requirements for ‘non-GM’ crops are likely to include tolerance levels for the unintended presence of GMOS.

(iv) Fair Trading Legislation

Both Commonwealth and state legislation prohibit misleading and deceptive conduct in trade or commerce. The Australian Competition & Consumer Commission (ACCC) has stated that a failure to disclose material conditions about GM food may contravene a number of provisions of the *Trade Practices Act 1974* (Cth) that prohibit conduct that is misleading or deceptive.⁵⁷ Similar provisions exist in state fair trading legislation.⁵⁸ Non-GM, Organic and GM-free farmers should take care to ensure that representations regarding the GM status of their produce are not misleading or deceptive.

Risk Minimisation Strategies

A ‘GM free’ claim leaves no room for ambiguity. Such a claim is absolute and indicates that the product does not contain novel DNA and/or novel protein of any percentage. To avoid liability for misleading or deceptive conduct or under Sale of Goods legislation, manufacturers and retailers should exercise caution to ensure that any voluntary claims are accurate. For example, claims that a product is ‘non-GM’ should clearly identify what is meant by this (such as a tolerance of 1% by weight). Farmers must be able to verify any claim made. This may be as simple as a reliable paper trail, or it may be necessary to design an Identity Preservation system to ensure the absence of GM components in a food or ingredient.⁵⁹

⁵⁶ This is likely to be dependent upon whether the buyer relies on the seller’s skill or judgment in determining the suitability of the goods for the intended purpose. Eg see *Sale of Goods Act 1923* (NSW) s. 19.

⁵⁷ Namely ss. 52, 52(a), 53(c), 53(d) or 55 of the *Trade Practices Act 1974* (Cth). Section 52 is very broad and prohibits conduct by a business, which is misleading or deceptive or is likely to mislead or deceive. Section 53(a) prohibits the making of false or misleading representations about a particular standard, quality, value, grade, composition, style or model, or a particular history or previous use of goods or services. Section 53(c) prohibits businesses from making a false or misleading representation that goods or services have approval or benefits they do not have. Section 53(d) prohibits false or misleading representations by a corporation that it has approval it does not have. Section 55 prohibits conduct that is liable to mislead the public about the nature, the manufacturing process, and the suitability for their purpose or the characteristics of any goods. See Australian Competition & Consumer Commission, ‘Genetically Modified Organisms and Foods’, (December 2001), <<http://www.accc.gov.au/fs-pubs.htm>>.

⁵⁸ For example, see *Fair Trading Act 1987* (NSW).

⁵⁹ Australian Competition & Consumer Commission, ‘Genetically Modified Organisms and Foods’, (December 2001), <<http://www.accc.gov.au/fs-pubs.htm>>.

Transporters and Contract Harvesters

Local transporters and contract harvesters may potentially be held liable for breach of contractual warranties. Alternatively, transporters and harvesters may be held liable for any loss caused to third parties resulting from the unintended presence of GMOs under the common law actions of trespass or negligence.

(i) Contractual Warranties

Transporters and contract harvesters may have contractual obligations in relation to the correct procedure for transporting and harvesting the crops. For example, such requirements may relate to the cleaning of equipment or the covering of loads. Unintended presence of GMOs in the produce is more likely to occur if such requirements are not met.

Risk Minimisation Strategies

Transporters and contract harvesters should take steps to avoid the unintended presence of GMOs by fulfilling any contractual obligations and complying with relevant guidelines (for example, transporting protocols).

(ii) Trespass

As discussed above in relation to GM farmers, the spillage of transgenic seeds from a truck would be likely to amount to a trespass should it occur due to the intentional, reckless or negligent actions of another party.

Risk Minimisation Strategies

Transporters of GM produce and contract harvesters should take precautions that guard against seed spilling from their equipment. By taking such action, it is unlikely that transporters/contract harvesters will be held liable for trespass.

(iii) Negligence

As for GM farmers, local transporters and contract harvesters may be held liable for any loss caused to third parties if it is demonstrated that they owed the third party a duty to take care, there was a breach of that duty, and damage sustained as a result of that breach. For example, where the negligence of a transporter or harvester of GM crops results in GM seeds spilling onto surrounding farms, that transporter/harvester may be liable for negligence. Alternatively, where inadequate cleaning of equipment between swapping from GM to non-GM crops results in cross contamination, the transporter or harvester may be held liable for negligence. The discussion above (in relation to GM farmers) regarding whether a duty to take care will be held to exist and what constitutes a breach of that duty will be equally applicable to local transporters and contract harvesters.

Risk Minimisation Strategies

Local transporters and contract harvesters should comply with any relevant protocols. Importantly, they should take care to ensure that GM seeds do not spill from their equipment onto a third party's property. Equipment should also be cleaned when swapping from GM crops to non-GM crops and vice versa.

Manufacturers / Retailers

Those who manufacturer or sell food have a number of obligations under the Australia New Zealand *Food Standards Code* and fair trading legislation relating to the marketing of food. These

obligations apply to all businesses along the food supply chain – from manufacturer to the end retailer. Manufacturers and retailers must implement steps to ensure they comply with these obligations.

(i) *Australia New Zealand Food Standards Code*

Food Standard 1.5.2 of the Food Standards Code requires labelling of any food that contains more than 1% by weight of GM material. Breach of this standard can result in product recalls and/or legal action. If food is not labelled as containing GM material, the manufacturer/retailer should take care to ensure that the food does not contain GM material.

Risk Minimisation Strategies

Where there are commercial GM varieties of the food or ingredient on the market, a manufacturer or retailer will need to determine whether or not the food is GM in order to comply with the standard. Evidence to show the GM status of the food or ingredient can be obtained from documentary evidence from the supplier or, if this is not possible, through testing. Should these requirements be met, the unintentional presence of a GM food not more than 10g/kg (1%) per ingredient will not be in breach of the standard. Further information on obligations under Food Standard 1.5.2 may be obtained on the Food Standards Australia New Zealand website (<http://www.foodstandards.gov.au>), specifically the document *Labelling Genetically Modified Food: A User Guide to Standard A18/1.5.2*.⁶⁰

(ii) *Fair Trading Legislation*

While the Food Standard Code does not address negative label claims such as ‘GM free’ or ‘organic’, fair trading legislation prohibits conduct that is misleading or deceptive. See above, under the heading “Non-GM, Organic and GM-free Farmers”, for a discussion of the obligations imposed by fair trading legislation.

III. Conclusion

There are a number of potential legal liability issues associated with GMOs, with much debate regarding the adequacy of Australia’s existing regime.

Some members of the agricultural community maintain that agricultural biotechnology is fundamentally different from other forms of agricultural breeding technology, and argue that a special legal liability regime is necessary to ensure that those who experience loss arising from GMOs can obtain adequate relief. Proponents of legal reform in this area identify a number of potential ‘gaps’ in the existing regime. For example, where the unintended presence of GMOs occurs despite all those involved in the GM supply chain complying with all relevant requirements and guidelines, it is possible for those affected by the unintended presence to bear all the associated costs. Similarly, where the precise source of the GMO cannot be ascertained, farmers affected by unintended presence will have difficulty identifying the party responsible and thus may have no legal redress to obtain compensation for any loss incurred.

Others believe that GMOs pose no unique risks and argue that liability regimes commonly used for other agricultural endeavours should apply. It is argued that a liability regime targeted specifically at GMOs will only serve to create a disincentive to scientific inquiry and to impose extra, unnecessary costs upon a beneficial, emerging technology.

⁶⁰ Available at <http://www.foodstandards.gov.au/assistanceforindustry/userguides/index.cfm>.

When drafting the *Gene Technology Act 2000* (Cth), the legislature considered liability issues associated with GMOs and chose not to implement a specific liability regime for damage caused by GMOs. This was, in part, to ensure comparable activities are dealt with equally and in accordance with the consistent application of general principles. Importantly, in all other cases where the activities of one farmer affect a neighbour, recourse is to existing statute and common law.

Since the implementation of the *Gene Technology Act 2000* (Cth), there does not appear to be new evidence or direct experience demonstrating any inadequacies in the existing regime. This is despite the commercial growth of GM cotton in Australia since 1996. It may therefore be sufficient to monitor the situation at this stage, including the possible implementation and effect of New Zealand's 'New Organisms and Other Matters Bill' (2003). This would be consistent with the Primary Industries Ministerial Council's approach to the risks posed by gene technology to agricultural production – namely that such risks should be primarily handled by industry self-regulation with continued government monitoring.

Appendix I

List of Acronyms

ABAC	Australian Biotechnology Advisory Council
ACCC	Australian Competition & Consumer Commission
AEBC	Agriculture and Environment Biotechnology Commission (United Kingdom)
AGHA	Australian Grain Harvesters Association Inc
FZANZ	Food Standards Australia New Zealand
GM	Genetically Modified
GMO	Genetically Modified Organism
NFF	National Farmers' Federation
OFA	Organic Federation of Australia
OGTR	Office of the Gene Technology Regulator
PIMC	Primary Industries Ministerial Council

Table Two: Definitions of GM, non-GM and GM-free crops*

GM	Crops produced under a GM production system.
Non-GM	Meets all commodity trading standard requirements. Within market specification for unintended presence. Implicitly excludes crops produced under a GM production system.
GM-free	Meets all commodity trading standard requirements. Market specification for 'nil' unintended presence of GM (based on a testing protocol that would provide an agreed level, eg 95% confidence, that it does not exceed 0.1% unintended presence). Must be produced under a GM-free production system that meets customer specification or export.
Organic	Crops produced in compliance with the National Standard for Organic and Biodynamic Production (Organic Produce Export Committee, Australian Quarantine and Inspection Service, 'National Standard for Organic and Bio-Dynamic Product', December 2002).

Table Notes:

* Definitions of 'non-GM' and 'GM-free' adapted from Appendix 1 of the *Canola Industry Stewardship Protocols for Coexistence of Production Systems and Supply Chains*, Gene Technology Grains Committee, 20 December 2002
<<http://www.avcare.org.au/documents/Canola%20Industry%20Stewardship%20Protocols.pdf>>.