



Department of
**Primary Industries and
Regional Development**

Standing Committee on Environment and Public Affairs
Parliament House
4 Harvest Terrace
WEST PERTH WA 6005

Inquiry into mechanisms for compensation for economic loss to farmers in Western Australia caused by contamination by genetically modified material.

The Department of Primary Industries and Regional Development (the Department) provides the following responses to questions posed by the Committee with regards to the hearing on 11 April 2018.

The Department requests the Committee note that the word contamination refers to the presence of a toxic substance or substances. As the Australian Gene Technology Regulator (GTR) has concluded that the Genetically Modified Organism (GMOs) licenced for commercial release are safe to human health and the environment, any presence of GTR approved Genetically Modified (GM) grain in non-GM grain should be referred to as accidental presence, admixture or unintended presence.

Overview of supply chains

1.1 Please give the Committee a general overview of how the supply chains work for GM and non-GM crops such as canola, including harvesting, transport, segregation practices, testing for GM in non-GM crops, taxes and levies payable and markets.

The Department is able to provide limited information on the supply chain and the various elements in the question.

Growers of canola have the option of choosing non-GM or GM canola seed. If they choose to grow a GM canola crop, they are required to sign a licence and stewardship agreement with the licence holder/technology provider to obtain access to the GM seed.

By signing the licence and stewardship agreement, growers agree to comply with the licence terms, the Crop Management Plan, and all relevant regulatory requirements of the Australian Pesticides and Veterinary Medicines Authority (APVMA) and the Office of the Gene Technology Regulator (OGTR). They also agree to deliver GM grain to an authorised grain handler and to declare their grain as GM.

The Crop Management Plan includes recommended separation distances between non-GM and GM canola crops destined for grain (5m) and for seed (400m).

Growers must declare canola as either GM or non-GM at delivery to the grain handler, and it is the responsibility of the grain handler to maintain grain segregation to meet individual customer specifications. Industry members undertaking bulk

handling and marketing of grain may be in a better position to provide detailed information on the supply chain for GM and non-GM canola.

In 2016/17 the major export market for canola was the European Union, in particular Germany, Belgium and France.

All canola growers pay a Research and Development levy, administered through the Commonwealth Government, which supports research organisations such as the Grains Research and Development Corporation.

Location of GM and non-GM farmers in Western Australia

1.2 The Committee requires a clear understanding of the scale of the risk of any contamination by GM crops in Western Australia. As part of this, the Committee requires the location of GM and non-GM farming properties (both conventional and organic) that border one another/are in close proximity.

- **Does the Department possess a map or other information which contains this information?**

The Department does not possess a map which contains information on locations of GM crops.

- **If so, please provide the Committee with a copy**

Not Applicable.

- **If not, please provide other sources of information.**

The GM licence holder(s)/technology providers may hold this information.

Questions in submission invite

1.3 In the letter inviting the Department to make a submission for this inquiry, the following questions were posed:

1.3.1. What were the reasons for the Gene Technology (Western Australia) Bill 2014 not being passed by the last Western Australian Parliament?

Consideration of the *Gene Technology (Western Australia) Bill 2014* (the Bill) was adjourned at an early stage and never resumed, presumably due to Parliament having other priorities.

1.3.2. What were the regulatory consequences for gene technology in Western Australia as a result of the Gene Technology Act 2006 (Cth) remaining the governing legislation?

The regulatory consequences for gene technology in Western Australia following the non-passage of the Bill were not "a result of the Gene Technology Act 2006 (Cth) remaining the governing legislation". Rather, the consequences were a result of the fact that the non-passage of the Bill meant the WA legislation remained out of step

with the rest of the national scheme. The non-passage of the 2014 Bill didn't cause any issues, rather, it prevented the resolution of issues.

1.3.3. What is the current regulatory status of the Gene Technology Act 2006 (Cth) with respect to the regulation of gene technology in Western Australia?

The Commonwealth Act continues to have effect according to its constitutional reach and due to the nature of work in the field of gene technology, and the organisations involved in it, most dealings with GMOs are covered by the Commonwealth Act.

Because the WA legislation is not currently "corresponding law" within the meaning of the legislation, the regulation of any dealing with GMOs in Western Australia that was not covered by the Commonwealth legislation would not be able to be undertaken by the Gene Technology Regulator.

1.3.4. As the Gene Technology (Western Australia) Bill 2014 lapsed on the prorogation of the last Parliament, are you aware whether the Government intends to reintroduce a Bill in the same, or substantially the same, form and content as the Gene Technology (Western Australia) Bill 2014 in the current Parliament? If so, when and what effect will this have on the regulation of gene technology in Western Australia. If not, why not?

The Department understands that Government has not yet decided whether a Bill in substantially the same form and content as the *Gene Technology (Western Australia) Bill 2014* will be introduced.

If such a Bill was passed, the WA legislation would be in step with the rest of the country and all dealings with GMO's would be covered by the national regulatory system, as intended. A Bill in the same form as the 2014 Bill would be the simplest way to achieve this outcome.

Other options, and a full discussion of the issues raised by the WA legislation being out of step, can be found in the Report on the Review of the Gene Technology Act 2006 tabled on 14 August 2012.

1.3.5. If Western Australia did introduce legislation providing for a compensation scheme for non-GM farmers for economic loss caused by GM contamination, would this be effective in applying to all farmers in Western Australia? If so, is it likely that this would be introduced as an amendment to the Gene Technology Act 2006 or would separate legislation be drafted?

It is not possible to consider the effect of "legislation providing for a compensation scheme for non-GM farmers for economic loss caused by GM contamination" without any idea of what the terms of that legislation might be.

As the WA *Gene Technology Act 2006* is intended to "form a component of a nationally consistent scheme for the regulation of certain dealings with genetically modified organisms by the Commonwealth and the States" (section 5 of the Act) then it seems to follow that legislation to introduce a compensation scheme would not be introduced as an amendment to that legislation, because it would not be in keeping

with that intention. Nor would such a scheme find a place in a Bill in the same form as the 2014 Bill.

1.4 No question listed.

The Committee would appreciate the Department's feedback.

1.5 The Committee has received evidence that 'no jurisdiction can introduce arrangements under the national regulatory scheme to implement a compensation scheme unilaterally and that any proposals regarding compensation would need to be considered by the Legislative and Governance Forum on Gene Technology and agreed to by the Commonwealth and all states and territories.' What is the Department's view on that statement?

The quoted statement is correct. If some form of compensation scheme were to be introduced under the national regulatory scheme it would need to go through the process indicated.

Segregation systems and Departmental guidelines

1.6 In its submission (p4) the Department states:

Experience to date suggests that the current mechanisms to minimize the impacts of unintended consequences of GM materials in non-GM farming systems, such as effective supply chain segregation and identity preservation systems, are effective.

- **Could you give details of these mechanisms and explain how they have been effective, using practical examples? As part of your answer, please give an overview of the Department's guidelines on coexistence (i.e. buffer zone distances) including how they were created, the rationale behind recommendations made; whether observance is monitored and why they are not mandatory**

Please refer to tabled document "Farmnote – On-farm segregation of canola varieties".

The Department does not monitor co-existence effectiveness, or elements of the Licence and Stewardship Agreement.

1.7 Some submitters have called for the imposition of mandatory farming practices to manage GM and GM free crop coexistence to ensure a GM free food chain is preserved and protected, such as a public GM growers map; no swathing of GM crops; the prohibition of GM crops in areas prone to flooding and trucks to be double sealed when transporting GM seed.

- **What is the Department's position?**

The Department does not see any basis to impose mandatory farming practices in relation to legal farming activities.

These crops have been assessed as safe to human health and the environment by the OGTR and have been approved for commercial release in Australia. Food labelling laws are in place to deal with the presence of GM material in the food chain.

2010 Audit Program

1.8 The Committee refers to a document titled 'Genetically Modified Canola Audit Program in Western Australia – Department of Agriculture and Food' tabled in the Parliament on 11 April 2011.

The Committee notes that in 2010 the Department carried out an audit program of GM canola growers who chose to grow GM canola following the issue of the exemption order under the *Genetically Modified Crops Free Areas Act 2003* to enable the commercial cultivation of GM canola in WA. Compliance of growers with conditions of the Roundup Ready licence and Stewardship Agreement with technology provider Monsanto Australia was assessed.

There were no identified major or minor non-conformities with the Roundup Ready licence and Stewardship Agreement.

The Committee also notes the document states the information gathered as part of the audit program 'would be a useful tool in the decision making process for future oversight of the GM canola production system in Western Australia.'

- Were there follow up audits of GM canola growers following the initial audits in 2011? If so please give details and if not, why not?**

No, there were no follow up audits. The initial audit was carried out because GM canola was a new exemption under the *Genetically Modified Crops Free Areas Act 2003*. The Department does not play a role in monitoring compliance with agreements between growers and licence holders.

Mandatory requirements are prescribed by the licence holder and part of the Licence and Stewardship Agreement between the grower and the licence holder.

- Were practices described in the document as mandatory as well as industry best practices by GM canola growers subsequently monitored and enforced?**

The Crop Management Plan includes recommended separation distances between non-GM and GM canola crops destined for grain (5m) and for seed (400m). The Department does not play a role in monitoring contractual agreements between growers and licence holders.

Department factsheet

1.9 The Committee understands the Department produced a factsheet in 2010 titled 'Genetically Modified Crops and Farmer Liability'. Could you provide the Committee with a copy and give an overview of its contents?

Please refer to tabled factsheet "Genetically Modified Crops and Farmer Liability".

The Factsheet contains:

- A short introduction referring to the Commonwealth *Gene Technology Act 2000*, the Office of the Gene Technology Regulator, the currently approved GM crops and the first commercial plantings – including commercial trials of GM canola in WA.
- Brief information on:
 - potential areas of liability for alleged damage from GM crops based on the torts of negligence, private nuisance and trespass to land;
 - issues related to intellectual property in GM crops; and
 - consequences of claims made about the GM status of crops.
- The suggestion is that the “best way forward” with regards to any potential disagreement is for farmers to talk to their neighbours and reach mutually agreeable solutions.

1.10 Is the factsheet still available to the public and has it been updated since 2010?

No, the factsheet is not still publically available. As the Department did not receive any requests for this information the factsheet was not considered necessary.

GM tolerance levels

1.11 What was the process by which the GM admixture tolerance levels of 0.9%, 0.5% and 1% came about (including consultation with industry) and where do they apply and why?

The 0.9% threshold was agreed by the Primary Industries Ministerial Council (PIMC) in October 2005. The 0.9% tolerance level was based upon the European Union tolerance standard and subsequently adopted by all parts of the Australian Grains Industry in preparation for the commercial release of GM canola.

The 0.5% tolerance level was agreed by the PIMC in 2005 as the standard for commercial seed for sale.

The 1.0% level was set by Food Standards Australia New Zealand as the maximum level per ingredient of an approved GM food unintentionally present in a non-GM food (in which case labelling is not required).

In 2001, ministers responsible for food regulation agreed upon the Australian labelling requirements for GM foods. Amongst other things these requirements state that a food does not need to be labelled as GM when there is no more than 1% (per ingredient) of an approved GM food unintentionally present in a non-GM food. In 2011 the Australian GM food labelling requirements were reviewed as part of the Labelling Logic review and in 2011 the ministers responsible for food regulation agreed the labelling requirements should remain in place.

The Department is not aware of the consultation undertaken in determination of these levels.

Economic losses from contamination

1.12 In its submission (p2) the Department states:

To DPIRD's knowledge, there has only been one litigated case in WA where a non-GM farmer has claimed alleged losses resulting from a GM crop.

Some submissions to this inquiry have stated there have been a number of instances of economic loss due to contamination by GM crops.

- **Is the Department aware of other cases that have not reached the courts where economic losses have been claimed?**

No, the Department is not aware of any such cases.

- **If so, please provide the Committee with details.**

Not applicable

Export and domestic markets

1.13 The Department states in its submission (p2) that 'since 2010 when GM canola was first planted in WA no shipments of grain have been rejected by our export markets due to the unintended presence of GM canola in grain.'

The Committee has received evidence that 'in WA any GM free canola that is even remotely suspected of being exposed to GM contamination is downgraded and discounted.'

- **Could it be that the reason why there have been no losses of export markets due to the unintended presence of GMOs as asserted by some submitters is that any contamination is detected before export and the crop sold by the producer as non-GM is subsequently categorised as and then sold as GM, potentially attracting a lower price?**

The Department does not play a role in the handling and sale of grain and is not in apposition to answer this question.

1.14 Have any shipments been rejected by domestic markets due to the unintended presence of GM canola? If so, please provide details.

The Department is not aware of any shipments being rejected due to the unintended presence of GM canola.

Agricultural Practices (Disputes) Act 1995

1.15 The Committee notes the *Agricultural Practices (Disputes) Act 1995*, which provided for a Board to determine disputes between neighbouring landholders, was repealed in 2011 because, according to the Second Reading Speech, there was no need for the Act because it was only very rarely used.

- **Does the Department believe a non-litigious dispute resolution mechanism designed to settle disagreements between neighbouring farmers may be appropriate for any disputes regarding matters such as GM contamination?**

Dispute resolution without the need for court action is to be desired, no matter what the nature of the dispute involved.

1.16 Does the Department believe it is likely other GM crops will be approved for commercial use in Western Australia in the future, such as GM wheat? If so, does the Department have measures in place/guidelines to manage coexistence and segregation from conventional wheat?

The Department is not in a position to determine the future commercial releases of other GM crops. The Department does not have legislated responsibilities for coexistence and segregation systems.

Organic Notice 2018-01

1.17 What is the Department's position on Organic Notice 2018-01 recently released by the Federal Government, in particular the statement that where there has been accidental introduction of GMO to an organic production unit and such presence is determined to be minor (nonpersistent, effective treatment can be applied) the sanction is to issue a Corrective Action Request only, not suspend or decertify the unit?

The Department does not have a specific position on Organic Notice 2018-01, however the Department supports any measure that supports co-existence and assists growers to achieve that outcome.

1.18 Can you envisage scenarios where there has been accidental introduction of GMOs of moderate or major severity where suspension or decertification would be justified which may lead to a claim for compensation?

There may be scenarios where there is accidental introduction of GM material of moderate or major severity. The Department is not, however, in a position to comment on whether, or to what extent, this may lead to decertification or claims for compensation.

Organic standards

1.19 In its submission the Department states (p2) the two key standards in Australia which govern the production, processing and labelling of organic food do not clearly define the tolerance level for unintended presence of GM material.

The Committee notes clause 1.3.1 of the National Standard for Organic and Biodynamic Produce provides:

The use of genetically modified organisms or their derivatives is prohibited. This includes but is not limited to, animals, seed and farm inputs such as fertilisers, soil conditioners, vaccines, crop production materials, food additives or processing aids.

Similarly, clause 1.7.3 provides:

The use of genetically modified/engineered seed and transgenic plants or the application of GMO derived substances for treating plants is prohibited in organic and bio-dynamic farming.1

- **Could the Department clarify why there would need to be a tolerance level set out in a standard for a substance which it identifies as prohibited**

It is common for agricultural systems to have acceptable thresholds for the presence of unintended substances. These include, for example, thresholds for the presence of weed seeds in grain consignments, chemical residue levels, and disease levels.

By not defining a tolerance threshold, the Standard is not consistent with standards for other substances (such as chemicals) or international organic standards, and may create a barrier to organic growers in Australia.

Likelihood of contamination

1.20 The Committee has received evidence GM canola cannot cross pollinate with crops other than crops from the same family as canola. What repercussions, in the Department's view, does this opinion have on the likelihood of GM contamination and possible economic loss?

GM canola cannot cross pollinate with non-canola crops.

The OGTR carefully considered the issues of GM canola cross pollination and gene flow during their 2003 safety assessment of GM canola. The OGTR concluded:

- In commercial situations, outcrossing between different canola varieties from the *B. napus* species such as between GM and non-GM canola varieties is inevitable. However, the overall frequency of out-crossing will be very low and significantly decreased at distances of over 5-10 metres.
- There is less chance of gene transfer from Roundup Ready canola to the closely related *Brassica* species *B. rapa* and *B. juncea*. Even if there is successful cross pollination and production of progeny, the reduced fitness of the progeny means it is unlikely that transgenes will persist in the environment.
- Gene transfer to vegetables from the *B. oleracea* species (cauliflower, broccoli, Brussels sprouts) vegetables would be unlikely as these crosses do not produce viable progeny.

Furthermore a large Australian study (Rieger et al 2002) found the maximum frequency of outcrossing between canola fields was 0.07 per cent. This level of outcrossing is much lower than the Australian grains industry tolerance level of 0.9 per cent presence of GM canola in non GM canola. The Australian grains industry already routinely and effectively keeps specialist canola varieties such as high oleic and erucic canola separate from other canola.

Based on this evidence, any economic loss as a result of cross pollination and gene flow are considered to be minimal.