GIWA
Grain Industry Association of Western Australia

REFERENCE DOCUMENTS

GIWA public hearing at WA Parliament Legislative Council's Environment and Public Affairs Committee Enquiry into Potential Compensation Mechanisms for Farmers Suffering Economic Loss from Genetically Modified Organisms

3rd May 2018

Reference documents

These reference documents are intended as supporting material to be read in conjunction with the submission from the Grain Industry Association of Western Australia dated 14th February 2018 to the WA Parliament Legislative Council's Environment and Public Affairs Committee Enquiry into Potential Compensation Mechanisms for Farmers Suffering Economic Loss from Genetically Modified Organisms
http://www.parliament.wa.gov.au/Parliament/commit.nsf/(EvidenceOnly)/CA81A38C140AF895482581EE0081A3CC?opendocument

GIWA does not support the introduction of any compensation mechanism.

1.1 International Grain Trade Coalition http://igtcglobal.org/#

International Grain Trade Coalition Global Low Level Presence (GLI) initiative http://igtcglobal.org/news/news-detail/global-low-level-presence-initiative-gli-moving-forward/

"Global Low Level Presence Initiative Statement (2017): Principles, Criteria and Practical Approaches for Addressing Low Level Presence in International Food and Feed Trade of Plant Material" https://www.fas.usda.gov/topics/new-technologies

Grain Trade Australia is a member of the International Grain Trade Coalition, and GIWA is a member of Grain Trade Australia, and the Australian Oilseeds Federation.

The global trade in food is facilitated on the assumption that it is impossible and impractical to have 0 tolerance to impurities in food safety codes and standards. Each country differs in their handling of chemical residues, or impurities, or GM material

The most widely adopted international food safety standard is the Codex Alimentarius (below), on which the International Grain Trade Coalition's Low Level Presence (GLI) initiative is based. Australia is a participant in both CODEX (the chair of the Australian

CODEX Committee is the current Director of the National Residue Survey, part funded by grower levies and part funded by the Department of Agriculture and Water Resources) and in the International Grain Trade Coalition's GLI initiative.

1.2 World Health Organisation and Food & Agriculture Organisation, Codex Alimentarius Commission: Foods Derived from Modern Biotechnology

One of the CODEX food safety policies is the Codex Guideline for the Conduct of Food Safety Assessment of Food Derived from Recombinant DNA Plants (CAC/GL 45-2003), which is referenced in the GLI initiative above in 1.1.

http://www.fao.org/docrep/011/a1554e/a1554e00.htm

1.3 Australian regulatory systems

Which have legislative responsibility for human health, safety and environmental issues re GM technology:
Office of the Gene Technology Regulator (OGTR)
Food Standards Australia New Zealand (FSANZ)
Australian Pesticide & Veterinary Medicines Authority (APVMA) https://apvma.gov.au/
Department of Agriculture and Water Resources (DAWR)

1.4 Australian Gene Technology Act 2000 and Office of the Gene Technology Regulator

http://www.ogtr.gov.au/

The Office of the Gene Technology Regulator has been established within the Australian Government Department of Health to provide administrative support to the Gene Technology Regulator in the performance of the functions under the *Gene Technology Act 2000*.

Previous reviews of Gene Technology Regulation
http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/regs-process-1
including the 2011 review of the Gene Technology Act 2000 and the 2005 Statutory Review of the Gene Technology Act 2000

Current as at May 2018: Third Review of the National Scheme for the Review of Gene Technology, 2017 http://health.gov.au/internet/main/publishing.nsf/Content/gene-technology-review WA is a signatory to the Intergovernmental Agreement on Gene Technology.

Current as at May 2018: Technical Review of the Gene Technology Regulations 2001
http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/reviewregulations-1
This is being carried out by the Regulator to assess new technologies and whether they quality as genetic modification technology.

An example of the **OGTR's risk assessment and risk management plans** and consultation framework can be found here

http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/dir162

Example: OGTR DIR162, application from CSIRO for the limited and controlled release of bread wheat and durum wheat genetically modified for enhanced rust disease resistance, 2018-2023.

1.5 OGTR and GM Canola

Recent 30 April 2018 and specific information on GM or Roundup Ready Canola can be found here:

http://search.health.gov.au/s/search.html?query=low+level+presence+canola&collection=health&profile=ogtr&Submit=

1.6 Australian Grain Industry Code of Practice

Australia is the only grain producing country which has a self-regulated, industry-endorsed, whole of supply chain code of practice:

http://www.graintrade.org.au/node/1040

2.4.4 Commodity Vendor Declarations in the Australian Grain Industry Code of Practice refers to the identification and segregation of GM grain.

1.7 Australian Oilseeds Federation

From the period of 2000 to 2008 extensive industry consultation, led by the federal Office of Gene Technology Regulator, took place in Australia regarding the introduction of genetically modified crop technologies, specifically GM cotton and GM canola. I understand from national colleagues that the organic industry was directly engaged in these consultations.

The two major industry documents which governed the implementation of market choice and supply chain management for GM canola were published under a whole of industry initiative called "Single Vision":

http://www.australianoilseeds.com/Technical_Info/industry_reports/gm_canola

"Delivering market choice with GM canola" Single Vision, 2007

"Principles for process management of grain within the Australian supply chain: A guide for industry in an environment where GM and non-GM grain is marketed" Single Vision, 2007

1.8 Low Level Presence, Standards and Labelling of GM

Following the OGTR approval of GM canola on the east coast in 2008, standards were developed to manage food safety, impurities and supply chain segregation for GM canola,

and were incorporated into the newly developed national grain standards framework.

A 0.9% Low Level Presence for GM material in non-GM canola was adopted:

http://www.australianoilseeds.com/__data/assets/pdf_file/0012/10803/AOF_Standards_Explanatory_Note_2016-17_1Aug16.pdf and

A 1% tolerance of GM material was adopted in the labelling of food which can be found at **Food Standards Australia New Zealand:**
http://www.foodstandards.gov.au/consumer/gmfood/labelling/Pages/default.aspx

The 0.9% Low Level Presence for GM material in non-GM canola was adopted because this was the accepted international industry standard for the trade of canola, which originated from Europe. The EU has strict standards for the import of GM material, preferring to import non-GM canola in order to be able to switch easily from biodiesel energy uses to feed stock and human consumption pharmaceutical and food service uses. The EU is a large importer of GM soy and corn. Countries such as Canada have no segregated GM and non-GM canola (approximately 85%+ of the Canadian canola crop is GM), therefore Australian growers have a market advantage against competing producing countries such as Canada in being able to segregate both non-GM and GM canola.

NOTE: As the Australian Wheat Board disbanded in 2008 and the grain industry deregulated, the 'industry good' function of providing standards was developed by Grain Trade Australia nationally, the Grain Industry Association of WA (taking over from the former GrainPool), the Australian Oilseeds Federation and Pulse Australia. GIWA typically defines an 'industry good' function as standards, trade and market access and varietal classification.

Australian Oilseeds Trading Standards
http://www.graintrade.org.au/commodity_standards
http://www.australianoilseeds.com/Technical_Info/standards_manual
http://www.giwa.org.au/standards for grain standards in Western Australia
http://www.australianoilseeds.com/Export/eu_canola_certification/iscc_Overview and
https://www.iscc-system.org/index_eng.html for the ISCC or International Sustainability and Carbon Certification Scheme for canola into the EU

This last certification or standard listed above, the ISCC, was obtained for Australian canola in a joint effort of the CSIRO, Australian Export Grain Innovation Centre and the Australian Oilseeds Federation in 2017, which assures market access for $1 billion Australian canola to Europe's biodiesel market against stringent green-house gas sustainability criteria.

Australian organic standards and certifying organisations (6) in Australia can be found here:
http://agriculture.gov.au/export/controlled-goods/organic-bio-dynamic/national-standard
http://agriculture.gov.au/export/controlled-goods/organic-bio-dynamic/certifying-org

These standards are published by the Australian federal government, but certifying organic organisations can issue their own standards, whose tolerances and criteria can vary from the national standard.

The Department of Agriculture and Water Resources also publishes guidelines for responding to contamination by prohibited substances or materials in the organic export supply chain - (2018-01) http://www.agriculture.gov.au/export/controlled-goods/organic-bio-dynamic/organic-notices/2018/2018-01

The National Association for Sustainable Agriculture https://www.nasaa.com.au/ offers organic certification.

Another standard, the Australian Certified Organic Standard can be found here http://austorganic.com/consumers/australian-certified-organic-standard2/

International organic standards are numerous, an overview can be found at the IFOAM https://www.ifoam.bio/en/general-information-organic-standards-and-certification

1.9 Grain Trade Australia: Policy for Genetically Modified Grain

Grain Trade Australia is the peak industry organisation for the trade of grain in Australia http://www.graintrade.org.au/

Grain Trade Australia, of which GIWA is an industry association member, is a member of the federal Department of Agriculture and Water Resources Grain and Plant Product Export Industry Consultative Committee http://www.agriculture.gov.au/biosecurity/partnerships/consultative-committees/gppeicc

As the international trade of GM canola out of Australia developed in the period 2008-2015, in response Grain Trade Australia developed two relevant policies:
- Policy for Genetically Modified Grain
- Policy for Low Level Presence (LLP) in Grain
http://www.graintrade.org.au/node/1031

1.10 WA Grain Industry Strategy 2025+ Grain Industry Association of Western Australia, for DAFWA, 2015

In 2014, 8 years after GM canola was approved by the national Office of Gene Technology Regulator, and four years after GM canola was allowed to be grown under exemption in Western Australia under the Crop Free Areas Act, the Department of Agriculture and Food WA commissioned GIWA to develop a strategy to double the value of the WA grains industry to $10 billion by 2025.

Industry consultation in the development of this strategy took place in 2014 and Q1 2015.

The eight key strategies under the WA Grain Industry Strategy 2025+ are:
1. Optimise grain handling and transport infrastructure
2. Reduce regulation and red tape
3. Position Australia as a preferred and reliable exporter of grain

4. Analysis of value-adding opportunities
5. Provision of essential regional technology infrastructure
6. Building farm business resilience
7. Skilled industry personnel
8. Focused farm productivity R&D

In this strategy in point 2 "Reduce regulation and red tape", GIWA supported the repeal of the WA Crop Free Areas Act 2016. A copy of the report can be found at the bottom of this link: http://www.giwa.org.au/announcements/wa-grains-industry-strategy-2025-1

1.11 Agricultural Biotechnology and GM Crops, 3rd Edition Agricultural Biotechnology Council of Australia (ABCA)

https://www.abca.com.au/wp-content/uploads/2014/03/The-Official-Australian-Reference-Guide-to-Agricultural-Biotechnology-and-GM-Crops_2nd-edition.pdf

Page 7 of this document contains a simple explanation of the spectrum of agricultural biotechnology plant breeding innovations:

Conventional breeding:	cross-breeding and mutagenesis
Genetic modification:	transgenisis
Plant breeding innovation:	genome editing

This last kind of plant breeding innovation, genome editing, is the kind of technology which is being considered under the technical definitions review of the Technical Review of the Gene Technology Regulations 2001
http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/reviewregulations-1

1.12 Science Journal "Pollen-Mediated Movement of Herbicide Resistance Between Commercial Canola Fields

This was the 2002 definitive peer reviewed scientific paper which address the issue of cross pollination of GM and non-GM herbicide resistant canola. Dr Mike Lamond, GIWA Oilseeds Council Chair, member of the GRDC Western Panel, and witness to the Parliamentary Inquiry, was a co-author of this paper. Another coauthor, Dr Stephen Powles, is the recently retired Director of the internationally reknowned Australian Herbicide Resistance Initiative based at UWA, and sits on the Grains Research and Development Corporation Board.

http://www.grid.unep.ch/FP2011/step1/pdf/008_Rieger_2002.pdf

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DOI: 10.1126/science.1071682

1.13 Grains Research and Development Corporation

The grower and federally funded peak research development corporation for the Australian grain industry, the GRDC, has invested in numerous research, extension and adoption projects relating to GM canola https://grdc.com.au/resources-and-publications/groundcover/gc111/gm-news

1.14 GMO Definition

Gene Technology Act 2000 for definition of Genetically Modified Organism
http://www5.austlii.edu.au/au/legis/cth/consol_act/gta2000162/s10.html

"genetically modified organism" means:

(a) an organism that has been modified by gene technology; or

(b) an organism that has inherited particular traits from an organism (the ***initial organism***), being traits that occurred in the initial organism because of gene technology; or

(c) anything declared by the regulations to be a genetically modified organism, or that belongs to a class of things declared by the regulations to be genetically modified organisms;

but does not include:

(d) a human being, if the human being is covered by paragraph (a) only because the human being has undergone somatic cell gene therapy; or

(e) an organism declared by the regulations not to be a genetically modified organism, or that belongs to a class of organisms declared by the regulations not to be genetically modified organisms.

Guideline for responding to contamination by prohibited substances or materials in the organic export supply chain - (2018-01)

Date of issue: 4 January 2018

Attention:

- Organic Industry Standards and Certification Council
- Organic Federation of Australia
- Organic Certifying Organisations
- Organic and Biodynamic Exporters

Purpose

1. This notice provides guidance in responding to unnecessary intentional use, negligent introduction and accidental introduction or necessary intentional use of prohibited substances or materials, **including the presence of genetically modified materials and organisms.**
2. This guideline is to be read in conjunction with the **Export Control (Organic Produce Certification) Orders, the National Standard for Organic and Bio-Dynamic Produce and the Government Administrative Arrangements for Approved Certifying Organisations Managing Inspection and Certification Programs for the Export of Certified Australian Organic and Biodynamic Produce.**
3. This guideline replaces Industry Advice Notice 2015/04 and Industry Advice Notice 2016/02.

Principles

4. Sanctions applied in response to contamination by prohibited substances or materials, including the presence of genetically modified materials and organisms, should be proportional to the instance of contamination.
5. Sanctions applied in response to a contamination incident should take into account:
    a. the cause of the contamination. Sanctions should consider whether the contamination resulted from unnecessary intentional use, negligent introduction, accidental introduction or necessary intentional use of prohibited substances or materials.
    b. the extent of the contamination. Sanctions should consider whether the contamination affects the organic production unit, the off production unit procedures or the organic produce itself.
    c. the permanence of the contamination. Sanctions should consider whether the contamination has a permanent effect, a persistent effect or no persistent effect.
    d. the treatment of the contamination. Sanctions should consider whether the contamination is rectifiable. For example, whether the contamination can be removed, isolated or contained.
6. Graduated sanctions available in response to a contamination incident include corrective action requests (CARs), suspension and decertification.
7. Suspension may be applied to an entire organic production system (full suspension) or parts of an organic production system (partial suspension). Partial suspension should be applied where

the contamination can be isolated or contained from compliant elements of an organic production system.

8. Decertification only applies to an entire organic production system; an organic production system cannot be partially decertified. Where part of an organic production system is considered to be permanently ineligible, the affected part of the system should be permanently removed from the operator's approval.
9. Following an identified or reported contamination incident, it may be necessary for an approved certifying organisation to apply an interim suspension on the organic production system to allow for the extent, severity and treatment of the contamination incident to be investigated.
10. Repetitive contamination incidents that result from unnecessary intentional use of prohibited substances or materials or negligent introduction of prohibited substances or materials may result in the application of higher grade sanctions. An incident is considered repetitive if the same non-compliance occurs within three (3) years of the previous incident.
11. Not addressing a corrective action request within the stipulated terms may result in the application of higher grade sanctions.

Actions

12. When contamination by prohibited substances or materials is evident, including the presence of genetically modified materials and organisms, the operator must take immediate corrective action to ensure the integrity of the organic production system is not further compromised.
13. When contamination by prohibited substances or materials is evident, including the presence of genetically modified materials and organisms, the operator should immediately notify their approved certifying organisation. Notification should include an assessment of the cause, extent, permanence and treatment of the contamination.
14. The approved certifying organisation should assess the contamination incident against its approved QM manual to determine the appropriate response.

Note: An approved certifying organisation may stipulate additional requirements and may set limits that are higher than those published in the National Standard for Organic and Biodynamic Produce.

15. When contamination by prohibited substances or materials is evident and cannot be adequately assessed from the operator's notification, it may be necessary for the approved certifying organisation to impose an interim suspension on the organic production system while the contamination incident is investigated.
16. Attachment A provides guidance on graduated sanctions available in response to an assessment or investigation of a contamination incident.

Background

17. The *Export Control (Organic Produce Certification) Order 2005* is the legal basis for the export of produce/goods labelled as organic or biodynamic.
18. The National Standard for Organic and Biodynamic Produce (national standard) details primary production and processing requirements for organic and biodynamic produce/goods for export.
19. Industry Advice Note 2015/04 was issued in October 2015 for a 6 month trial period. This notice reflects feedback and experience during the trial period.

The information provided above is current at the time of writing and is intended for use as guidance only and should not be taken as definitive or exhaustive. The Commonwealth endeavours to keep information current and accurate, however, it may be subject to change without notice. Exporters are encouraged to verify these details with their importers prior to undertaking production/exports. The Commonwealth will not accept liability for any loss resulting from reliance on information contained in this notice.

CAUSE OF NON-COMPLIANCE	EXTENT OF NON-COMPLIANCE	OUTCOME OF SEVERITY ASSESSMENT/INVESTIGATION BY THE ORGANIC CERTIFYING ORGANISATION		ACTIONS
Negligent introduction of prohibited substances or materials, including the presence of genetically modified organisms and materials	**Organic Production Unit**	**Minor**	No persistent contamination, effective treatments applied	Issue Corrective Action Request (CAR) Issue Letter of Warning regarding repetition
		Moderate	Some persistent or permanent contamination, effective treatments applied or available	Suspend organic production unit only Issue Corrective Action Request (CAR) Lift suspension when CAR is resolved Issue Letter of Warning regarding further repetition
			2nd repeat instance of negligent contamination of the organic production unit	
		Major	Permanent contamination, effective treatments not available	Decertify organic production system
			3rd repeat instance of negligent contamination of the organic production unit	
	Off Production Unit Processes	**Minor**	No persistent contamination, effective treatments applied	Issue Corrective Action Request (CAR) Issue Letter of Warning regarding repetition
		Moderate	Some persistent or permanent contamination, effective treatments applied or available	Suspend off production unit processes only

			2nd repeat instance of negligent contamination of the off production unit procedures	Issue Corrective Action Request (CAR) Lift suspension when CAR is resolved Issue Letter of Warning regarding further repetition
		Major	Permanent contamination, effective treatments not available	Decertify organic production system
			3rd repeat instance of negligent contamination of the off production unit procedures	
	Organic Produce	**Minor**	**Contamination** level does not exceed the requirements of the Approved Certifying Organisation, relevant Australian legislation or standards or the relevant Importing Country	Issue organic produce certificate
		Major	**Contamination** level exceeds the requirements of the Approved Certifying Organisation, relevant Australian legislation or standards or the relevant Importing Country	Do not issue organic produce certificate Produce to be re-labelled

Table 3 – Sanctions available in response to necessary use of, or accidental introduction of, prohibited substances or materials, including genetically modified organisms and materials

CAUSE OF NON-COMPLIANCE	EXTENT OF NON-COMPLIANCE	OUTCOME OF SEVERITY ASSESSMENT/INVESTIGATION BY THE ORGANIC CERTIFYING ORGANISATION		ACTIONS
Accidental introduction or necessary use of prohibited substances or materials, including the presence of genetically modified organisms or materials	**Organic Production Unit**	**Minor**	No persistent contamination, effective treatments applied	Issue Corrective Action Request (CAR)
		Moderate	Some persistent or permanent contamination, effective treatments applied or available	Suspend organic production unit only

Table 3 – Sanctions available in response to necessary use of, or accidental introduction of, prohibited substances or materials, including genetically modified organisms and materials

CAUSE OF NON-COMPLIANCE	EXTENT OF NON-COMPLIANCE	OUTCOME OF SEVERITY ASSESSMENT/INVESTIGATION BY THE ORGANIC CERTIFYING ORGANISATION		ACTIONS
				Issue Corrective Action Request (CAR) Lift suspension when CAR is resolved
		Major	Permanent contamination, effective treatments not available	Decertify organic production system
	Off Production Unit Processes	**Minor**	No persistent contamination, effective treatments applied	Issue Corrective Action Request (CAR)
		Moderate	Some persistent or permanent contamination, effective treatments applied or available	Suspend off production unit processes only Issue Corrective Action Request (CAR) Lift suspension when CAR is resolved
		Major	Permanent contamination, effective treatments not available	Decertify organic production system
	Organic Produce	**Minor**	Contamination level does not exceed the requirements of the Approved Certifying Organisation, relevant Australian legislation or standards or the relevant Importing Country	Issue organic produce certificate
		Major	**Contamination** level exceeds the requirements of the Approved Certifying Organisation, relevant Australian legislation or standards	Do not issue organic produce certificate

Table 3 – Sanctions available in response to necessary use of, or accidental introduction of, prohibited substances or materials, including genetically modified organisms and materials

CAUSE OF NON-COMPLIANCE	EXTENT OF NON-COMPLIANCE	OUTCOME OF SEVERITY ASSESSMENT/INVESTIGATION BY THE ORGANIC CERTIFYING ORGANISATION	ACTIONS
		or the relevant Importing Country	Produce to be re-labelled

Glossary

Note: Unless specifically referenced below words in this guideline should be taken to have the same meaning as that provided in the National Standard for Organic and Biodynamic Produce

Unnecessary intentional use the deliberate use of prohibited substances or materials, including genetically modified organisms and materials, in a manner that is inconsistent with the National Standard for Organic and Biodynamic Produce and is not required under Commonwealth, State or Territory, Local or Statutory laws

Negligent introduction the introduction of prohibited substances or materials, including genetically modified organisms and materials, where the presence of those inputs could have been reasonably avoided through a level of care that someone of ordinary prudence would have exercised under the same circumstances

Accidental introduction the introduction of prohibited substances or materials, including genetically modified organisms and materials, where the presence of those inputs did not occur through deliberate action and count not have been reasonably avoided through a level of care that someone of ordinary prudence would have exercised under the same circumstances

Necessary intentional use the deliberate use of prohibited substances or materials, including genetically modified organisms and materials, in a manner that is inconsistent with the National Standard for Organic and Biodynamic Produce but is required under Commonwealth, State or Territory, Local or Statutory laws

Off production unit processes approved processes within an operator's supply chain that occur outside of the organic production unit

Organic production system all activities relating to an operator's approved production unit, off production unit processes and produce

Full suspension the suspension of all activities in an operator's organic production system

Partial suspension the suspension of some activities in an operator's organic production system