



Australian Government

Department of Health and Aged Care
Office of the Gene Technology Regulator

Licence for dealings involving an intentional release of a GMO into the environment

Licence number: DIR 209

Licence holder: The University of Queensland

Limited and controlled release of sorghum genetically modified for altered reproduction from sexual to asexual

Issued: 6 March 2025

Office of the Gene Technology Regulator

Gene Technology Regulation in Australia

Australia's gene technology regulatory system operates as part of an integrated legislative framework. The *Gene Technology Act 2000* (Cth) and corresponding State and Territory legislation form part of a nationally consistent regulatory system controlling activities involving genetically modified (GM) organisms.

This licence is issued by the Gene Technology Regulator (the Regulator) in accordance with the *Gene Technology Act 2000* and, as applicable, corresponding State law.

The Regulator is required to consult with, and take into account advice from, a range of key stakeholders, including other regulatory authorities, on risks to human health and safety and to the environment in assessing applications for dealings involving the intentional release of GM organisms into the Australian environment.

Other agencies that also regulate GM organisms or GM products include Food Standards Australia New Zealand, Australian Pesticides and Veterinary Medicines Authority, Therapeutic Goods Administration, Australian Industrial Chemicals Introduction Scheme and the Department of Agriculture, Fisheries and Forestry. Dealings conducted under any licence issued by the Regulator may also be subject to regulation by one or more of these agencies. It is recommended that the licence holder consult the relevant agency (or agencies) about their regulatory requirements.

Dealings permitted by this licence may also be subject to the operation of State legislation recognising areas as designated for the purpose of preserving the identity of GM crops, non-GM crops, or both GM crops and non-GM crops, for marketing purposes.

Further information on licence DIR 209

More information about the decision to issue this licence is contained in the Risk Assessment and Risk Management Plan prepared in connection with the assessment of the application for the licence. This document can be obtained from the [Office of the Gene Technology Regulator \(OGTR\) website](#) or by telephoning the Office on 1800 181 030.

Information about where the GMOs have been planted pursuant to this licence can be accessed on the [OGTR website](#).

Section 1 Interpretations and Definitions

1. In this licence:

- (a) unless defined otherwise, words and phrases used in this licence have the same meaning as they do in the Act and the Regulations;
- (b) words importing a gender include every other gender;
- (c) words in the singular number include the plural and words in the plural number include the singular;
- (d) expressions used to denote persons generally (such as “person”, “party”, “someone”, “anyone”, “no one”, “one”, “another” and “whoever”), include a body politic or corporate as well as an individual;
- (e) references to any statute or other legislation (whether primary or subordinate) are a reference to a statute or other legislation of the Commonwealth of Australia as amended or replaced from time to time and equivalent provisions, if any, in corresponding State law, unless the contrary intention appears;
- (f) where a word or phrase is given a particular meaning, other grammatical forms of that word or phrase have corresponding meanings;
- (g) specific conditions prevail over general conditions to the extent of any inconsistency.

2. In this licence:

‘Act’ means the *Gene Technology Act 2000* (Commonwealth) or the corresponding State law under which this licence is issued.

‘Clean’ means, as the case requires:

- (a) in relation to Equipment or a facility, remove and/or Destroy the GMOs; or
- (b) in relation to an area of land specified in this licence as requiring Cleaning:
 - i. Destroy Sorghum plants, if present, to the reasonable satisfaction of the Regulator, and
 - ii. remove Sorghum seeds from the soil surface to the reasonable satisfaction of the Regulator.

Note: The intent of removing seeds from the soil surface is to minimise seed dispersal. One method of removing seeds from the soil surface is Tillage, which moves seeds to under the soil. Tillage must be in accordance with condition 39.

‘Contingency Plan’ means a written plan detailing measures to be taken in the event of the unintended presence of the GMOs outside an area that must be inspected. A Contingency Plan must include procedures to:

- (a) ensure the Regulator is notified immediately if the licence holder becomes aware of the event; and
- (b) recover and/or Destroy the GMOs to the reasonable satisfaction of the Regulator; and
- (c) inspect for and Destroy any Volunteers that may exist as a result of the event to the reasonable satisfaction of the Regulator.

‘Destroy’, (or **‘Destruction’**) means, as the case requires, kill by one or more of the following methods:

- (a) uprooting;
- (b) root cutting and shredding/mulching;
- (c) Tillage, but only in accordance with condition 39;
- (d) treatment with herbicide;
- (e) burning/incineration;

- (f) autoclaving;
- (g) crushing or grinding of seed; or
- (h) a method approved in writing by the Regulator.

Note: 'As the case requires' has the effect that, depending on the circumstances, one or more of these techniques may not be appropriate. For example, treatment with herbicide would not successfully kill GM seeds.

'Equipment' includes, but is not limited to, seeders, harvesters, threshers, storage equipment, transport equipment (e.g. bags, containers, trucks), clothing, footwear and tools.

'Extreme Weather' includes, but is not limited to, fires, flooding, cyclones or torrential rain, that could disperse GMOs or affect the licence holder's ability to comply with licence conditions.

'GM' means genetically modified.

'GMOs' means the genetically modified organisms that are the subject of the dealings authorised by this licence. GMOs include live plants, root stock that is able to grow into live plants and viable seed.

'Logbook' means a written or electronic record containing information required to be collected and maintained by this licence and which is able to be presented to the Regulator on request.

'Monitoring Zone' means an area of land extending outwards at least 200 metres from the outer edge of a Planting Area, as shown in Figure 1A.

'OGTR' means the Office of the Gene Technology Regulator.

'Personal Information' means information or an opinion about an identified individual, or an individual who is reasonably identifiable:

- (a) whether the information or opinion is true or not; and
- (b) whether the information or opinion is recorded in a material form or not.

'Planting Area' means an area of land where the GMOs and non-GM Sorghum are intentionally planted and grown pursuant to this licence.

'Plant Material' means any part of the GM or non-GM Sorghum plants grown at a Planting Area, whether viable or not, or any product of these plants.

'Post-Harvest Buffer Zone' means an area of land extending outwards at least 10 metres from the outer edge of a Planting Area after the GMOs in the Planting Area have been harvested or Destroyed, as shown in Figure 1B.

'Regulations' means the Gene Technology Regulations 2001 (Commonwealth) or the corresponding State law under which this licence is issued.

'Regulator' means the Gene Technology Regulator.

'Related Species' means plants from the subgenus *Eusorghum* of the genus *Sorghum*, excluding Sorghum.

'Sign off' means a notice in writing from the Regulator, in respect of an area, that post-Cleaning obligations no longer apply to that area.

'Sorghum' means plants of the subspecies *Sorghum bicolor* (L.) Moench subsp. *bicolor*.

'Tillage' means the use of any technique to disturb the soil.

Note: Tillage must be in accordance with condition 39.

'Volunteers' means GM or non-GM Sorghum plants, which have not been intentionally grown.

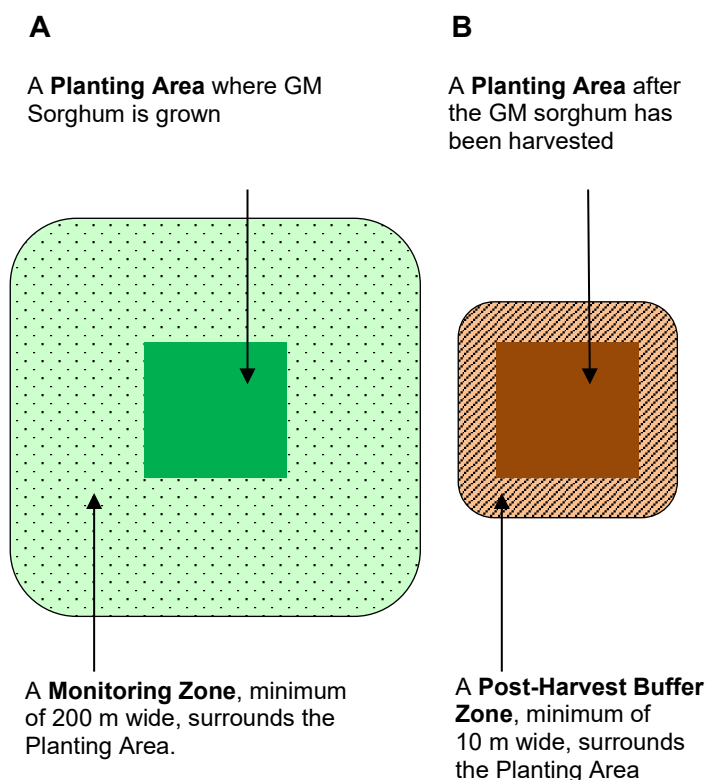


Figure 1. Diagrams (not to scale) showing the relationships between Planting Area, Monitoring Zone and Post-Harvest Buffer Zone.

A: diagram while the GMOs are grown;

B: diagram after the GMOs are harvested.

Section 2 General conditions and obligations

3. This licence does not authorise dealings with the GMOs that are otherwise prohibited as a result of the operation of State legislation recognising an area as designated for the purpose of preserving the identity of GM crops, non-GM crops, or both GM crops and non-GM crops, for marketing purposes.
4. This licence remains in force until it is suspended, cancelled or surrendered. No dealings with the GMOs are authorised during any period of suspension.

Note: Although this licence has no expiry date, the period when GMOs may be grown is restricted in accordance with Condition 18.

5. The licence holder is The University of Queensland.
6. The persons covered by this licence are the licence holder and employees, agents or contractors of the licence holder and other persons who are, or have been, engaged or otherwise authorised by the licence holder to undertake any activity in connection with the dealings authorised by this licence.
7. The GMOs with which dealings are authorised by this licence are those listed at **Attachment A**.
8. The dealings authorised by the licence are to:
 - (a) conduct experiments with the GMOs;
 - (b) propagate the GMOs;
 - (c) grow the GMOs;
 - (d) transport the GMOs;
 - (e) dispose of the GMOs;

and the possession, supply or use of the GMOs in the course of any of these dealings.

9. This licence does not apply to dealings with the GMOs conducted as a Notifiable Low Risk Dealing (NLRD) or pursuant to another authorisation under the Act.

Note: Dealings conducted as an NLRD must be assessed by an Institutional Biosafety Committee (IBC) before commencement and must comply with the requirements of the Regulations.

General obligations of the licence holder

10. The licence holder must, at all times, remain an accredited organisation in accordance with the Act and must comply with its instrument of accreditation.
11. The licence holder must be able to access and control all Planting Areas, Monitoring Zones, Post-Harvest Buffer Zones and approved facilities to the extent necessary to comply with this licence.

Note: Arrangements to access and control these areas must be notified to the Regulator as part of each planting notification (Condition 47(a)).

12. The licence holder must inform any person covered by this licence, to whom a particular condition of the licence applies, of the following:
- (a) the particular condition, including any variations of it;
 - (b) the cancellation or suspension of the licence;
 - (c) the surrender of the licence.
13. The licence holder must not permit a person covered by this licence to conduct any dealing with the GMOs unless:
- (a) the person has been informed of any applicable licence conditions, including any variation of them; and
 - (b) the licence holder has obtained from the person a signed and dated statement that the person:
 - i. has been informed by the licence holder of the licence conditions including any variation of them; and
 - ii. has understood and agreed to be bound by the licence conditions, or variation.
14. The licence holder must inform the persons covered by this licence that any Personal Information relevant to the administration and/or enforcement of the licence may be released to the Regulator.

General obligations of persons covered by the licence

15. If a person is authorised by this licence to deal with the GMOs and a particular condition of the licence applies to the dealing by the person, the person must allow the Regulator, or a person authorised by the Regulator, to enter premises where the dealing is being undertaken, for the purposes of auditing or monitoring the dealing.

Note: Under the Act, the definition of premises includes a building, area of land or vehicle.

Section 3 Limits and control measures

3.1 Limits on the release

The following licence conditions impose limits on where and when the GMOs may be grown.

16. The only plants that may be intentionally grown at a Planting Area are:
- (a) the GMOs covered by this licence; and
 - (b) non-GM Sorghum; and
 - (c) plants approved in writing by the Regulator.
17. Non-GM Sorghum plants grown in a Planting Area must be handled as if they were the GMOs.

18. Planting and growing of the GMOs may only occur within the following limits:

| Period | Maximum number of Planting Areas per year | Maximum size of any Planting Area | Local Government Area in which Planting Areas may be located |
|-------------------------|---|-----------------------------------|--|
| March 2025 - March 2028 | 1 | 1 hectare | Lockyer Valley (Queensland) |

3.2 Control measures

The following licence conditions restrict the spread or persistence of the GMOs and their genetic material in the environment.

GMOs must not enter food or feed

19. Plant Material must not be used, sold or otherwise disposed of for any purpose which would involve or result in its use as food for humans or feed for animals.

Conditions to restrict pollen flow

20. In each Planting Area, all GM Sorghum panicles must be enclosed in pollination bags that are made from a material that is impermeable to pollen and weather resistant, and are fastened in a way that provides effective containment of pollen. Each GM Sorghum panicle must be bagged from at least 2 days prior to commencement of flowering of the panicle and until at least 10 days after the panicle has finished flowering.

21. A Planting Area must be surrounded by a Monitoring Zone (as shown in Figure 1A).

22. While the GMOs are growing in a Planting Area, the Monitoring Zone must be maintained in a manner that enables identification and Destruction of Sorghum or Related Species.

*Note: An example of an area that does **not** enable identification of Sorghum or Related Species is an area planted with a closed-canopy crop that grows simultaneously with the GMOs, and grows to a height that is comparable to, or taller than, Sorghum.*

23. While the GMOs are growing in a Planting Area, inspections must be conducted by people trained to recognise Sorghum and Related Species, and actions must be taken as follows:

| Area | Period of inspection | Inspection frequency | Inspect for | Action |
|------------------|---|-----------------------------|---|---|
| Planting Area | First inspection must occur at least 10 days prior to the expected commencement of flowering of any GMO*, and inspections must continue until all GMOs in the Planting Area have finished flowering | At least once every 14 days | Related Species | Destroy before flowering or prevent from flowering simultaneously with the GMOs |
| Monitoring Zone | First inspection must occur at least 10 days prior to the expected commencement of flowering of any GMO*, and inspections must continue until all GMOs in the Planting Area have finished flowering | At least once every 14 days | Sorghum and Related Species | Destroy before flowering or prevent from flowering simultaneously with the GMOs |
| Pollination bags | While pollination bags are in place | At least once every 14 days | Damage that may permit pollen to escape | Repair or replace as soon as practicable |

**Condition 47(a) requires the licence holder to provide information to the Regulator on the expected flowering period, however the inspection period should be based on the observed development of the GMOs, so that inspections commence prior to any GMOs flowering.*

Note: Details of any inspection activity must be recorded in a Logbook (Condition 48) and reported to the Regulator (Condition 47).

Conditions to restrict seed dispersal

- 24. Equipment used in connection with the GMOs must be Cleaned as soon as practicable after use with the GMOs and before use for any other purpose.
- 25. Planting Areas must be at least 100 metres away from any permanent natural watercourses or man-made drainage features that flow into natural watercourses.

Note: This includes irrigation channels or storm water drains that flow into a natural watercourse.

- 26. Planting Areas must not be located in flood prone areas.
- 27. Measures must be implemented to control rodents within each Planting Area from at least 7 days prior to planting the GMOs, while the GMOs are being grown and until the Planting Area is Cleaned.

Note: Measures for rodent control may include, but are not limited to, traps and/or poison baits within and/or surrounding the Planting Area.

- 28. At least the innermost 10 metres of the Monitoring Zone must be maintained in a manner that does not attract or harbour rodents while the GMOs are being grown at a Planting Area and until the Planting Area is Cleaned.

Note: Acceptable measures to achieve this include keeping land free of vegetation or keeping vegetation mown to a height of less than 10 centimetres.

- 29. Each Planting Area must be enclosed in netting that is capable of excluding birds, livestock and other large animals while the GMOs are being grown and until the Planting Area is Cleaned.
- 30. The netting required by Condition 29 must be inspected for damage and action taken as follows:

| Item | Period of inspection | Inspection frequency | Inspect for | Action |
|---------|---|---|---|--|
| Netting | First inspection must occur prior to planting the GMOs in the Planting Area, and inspections must continue until the Planting Area has been Cleaned | At least once every 35 days; and After any Extreme Weather event | Damage that may permit access to the Planting Area by birds, livestock or other large animals | Repair or replace as soon as practicable |

Conditions relating to harvesting

- 31. All GMOs planted within a Planting Area must be harvested or Destroyed within 8 months after the first planting of any GMO within that Planting Area.
- 32. If all GMOs in a Planting Area have been Destroyed, then for the purposes of this licence:
 - (a) the GMOs are taken to have been harvested; and
 - (b) the Planting Area is taken to have been Cleaned.

Note: Cleaning activities must be reported to the Regulator (Condition 47). Areas of land that have been Cleaned are subject to inspections (Condition 37).

- 33. The GMOs must be harvested and threshed separately from any other crop.
- 34. Harvested GM seed not required for experimentation or future planting must be Destroyed as soon as practicable.
- 35. After harvest of GMOs in a Planting Area, the Planting Area must be surrounded by a Post-Harvest Buffer Zone, as shown in Figure 1B.

Conditions to restrict persistence of GMOs on trial sites

- 36. Areas of land used in connection with the GMOs must be Cleaned as follows:

| Areas of land to be Cleaned | When |
|--|--|
| Planting Area and Post-Harvest Buffer Zone | Within 14 days after harvest of the GMOs |
| Any area, outside a Planting Area or Post-Harvest Buffer Zone, used to Clean any Equipment used in connection with the GMOs | As soon as practicable |
| Any area, outside a Planting Area or Post-Harvest Buffer Zone, where GMOs have dispersed, e.g. during planting, growing, harvesting or Destruction | As soon as practicable |

Note: Cleaning activities must be reported to the Regulator (Condition 47). Areas of land that have been Cleaned are subject to inspections (Condition 37).

37. After Cleaning, areas of land must be inspected by people trained to recognise Sorghum and Related Species. Inspections must cover the entirety of areas to be inspected. Actions must be taken as follows:

| Area | Period of inspection | Inspection frequency | Inspect for | Action |
|--|---|-----------------------------|--------------------------------|--------------------------|
| Planting Area, Post-Harvest Buffer Zone and other areas of land that were Cleaned in accordance with Condition 36. | From the day of Cleaning until: i. the area is planted as a new Planting Area in accordance with Condition 16; or ii. the Regulator has issued a Sign off for the area. | At least once every 35 days | Volunteers and Related Species | Destroy before flowering |

Note: Details of any inspection activity must be recorded in a Logbook (Condition 48) and reported to the Regulator (Condition 47).

38. While post-Cleaning inspection requirements apply to an area:

- (a) the area must be maintained in a manner appropriate to allow identification of Volunteers; and
- (b) no plants may intentionally be grown in the area unless:
 - i. the area is planted as a new Planting Area in accordance with condition 16; or
 - ii. the plants are agreed to in writing by the Regulator; and
- (c) the area must not be used for grazing livestock; and
- (d) at least 3 months prior to an application for Sign off of a Planting Area, the Planting Area must be Tilled and then receive a watering event as described in **Attachment B**, with both the Tillage and the watering event occurring between October and February in the growing season following harvest of the Planting Area.

Tillage

39. Any Tillage of the Planting Area must be to a depth no greater than 7 centimetres.

Processing or experimentation with the GMOs

40. Treatment, threshing or processing of GM seed or experimentation or analysis with the GMOs may only be undertaken within:

- (a) a Planting Area before Cleaning; or
- (b) the innermost 10 metres of the Monitoring Zone before Cleaning; or
- (c) a facility approved in writing by the Regulator.

Note: This condition does not apply to dealings conducted as an NLRD (see Condition 9).

41. Within a facility approved in writing by the Regulator in accordance with Condition 40, any area that is used for treatment, threshing, processing, experimentation or analysis of the GMOs must be Cleaned as soon as practicable and before use for any other purpose.

Transport or storage of the GMOs

42. Transport or storage of the GMOs must:

- (a) only occur to the extent necessary to conduct the dealings permitted by this licence or other valid authorisation under the Act, or to the extent necessary to enable export of the GMOs; and
- (b) be in accordance with the Regulator's *Guidelines for the Transport, Storage and Disposal of GMOs* for PC2 GM plants as current at the time of transportation or storage; and
- (c) comply with all other conditions of this licence.

Note: Activities with the GMOs within a Planting Area prior to Cleaning are not regarded as transport or storage.

Note: Condition 13 requires signed statements for persons transporting the GMOs.

Note: This condition does not apply to dealings conducted as an NLRD (see Condition 9).

43. Methods and procedures used to transport GMOs must be recorded, and must be provided to the Regulator, if requested.

Note: The Contingency Plan must be implemented if the GMOs are detected outside areas under inspection (Condition 44).

Contingency plan

44. If any unintentional presence of the GMOs is detected outside the areas requiring Cleaning, the Contingency Plan must be implemented.

Section 4 Sign off

45. The licence holder may make written application to the Regulator that planting restrictions and inspection requirements no longer apply to the Planting Area and other areas requiring Cleaning if:
- (a) post-Cleaning inspection activities have been conducted for at least 12 months on the area; and
 - (b) conditions have been conducive for germination and detection of Volunteers; and
 - (c) no Volunteers have been detected in the area during the 6 months prior to the Sign off request.

Note: A Planting Area requires Tillage and a watering event prior to a Sign off application (Condition 38).

Note: The Regulator will take into account the management and inspection history for the Planting Area and other areas requiring Cleaning, including post-harvest crops planted (if any), Tillage, irrigation, rainfall, application of herbicide and occurrence of Volunteers, in deciding whether or not further inspections are required to manage persistence of the GMOs.

Section 5 Reporting and documentation

The following licence conditions are imposed to demonstrate compliance with other conditions and facilitate monitoring of compliance by staff of the OGTR.

46. General notifications must be sent to the Regulator as follows:

Note: Please send all correspondence related to the licence to OGTR.M&C@health.gov.au.

| Notice | Content of notice | Timeframe |
|-------------------------------|---|------------------------|
| a. Changes to contact details | Changes to any of the contact details of the project supervisor that were notified in the licence application or subsequently | As soon as practicable |

| Notice | Content of notice | Timeframe |
|---|--|--|
| b. Ongoing suitability to hold a licence | i. any relevant conviction of the licence holder; or ii. any revocation or suspension of a licence or permit held by the licence holder under a law of the Australian Government, a State or a foreign country, being a law relating to the health and safety of people or the environment; or iii. any event or circumstances that would affect the capacity of the licence holder to meet the conditions of the licence; and iv. any information related to the licence holder's ongoing suitability to hold a licence, that is requested by the Regulator | As soon as practicable after any of these events occur Within the timeframe stipulated by the Regulator |
| c. People covered by the licence | i. names of all organisations and persons, or functions or positions of the persons, who will be covered by the licence, with a description of their responsibilities; and <i>Note: Examples of functions or positions are 'project supervisor', 'site manager', 'farm labourer' etc.</i> ii. detail of how the persons covered by the licence will be informed of licence conditions | At least 14 days prior to conducting any dealings with the GMOs (to be updated within 14 days if the notified details change) |
| d. Testing methodology | A written methodology to reliably detect the genetic modifications described in this licence. | At least 14 days prior to conducting any dealings with the GMOs (to be updated within 14 days if the notified details change) |
| e. Contingency plan | A Contingency Plan to respond to inadvertent presence of the GMOs outside an area that must be inspected | At least 14 days prior to conducting any dealings with the GMOs (to be updated within 14 days if the notified details change) |
| f. Training records | Copies of the signed and dated statements referred to in condition 13 if requested by the Regulator | Within the timeframe stipulated by the Regulator |
| g. Additional information required by the Act | i. additional information as to any risks to the health and safety of people, or to the environment, associated with the dealings authorised by the licence; or ii. any contraventions of the licence by a person covered by the licence; or iii. any unintended effects of the dealings authorised by the licence <i>Note: The Act requires, for the purposes of the condition 46(g), that:</i> <ul style="list-style-type: none"> • the licence holder will be taken to have become aware of additional information of a kind mentioned in Condition 46(g) if he or she was reckless as to whether such information existed; and • the licence holder will be taken to have become aware of contraventions, or unintended effects, of a kind mentioned in Condition 46(g), if he or she was reckless as to whether such contraventions had occurred, or such unintended effects existed | Without delay after becoming aware of any new information <i>Note: An example of notification without delay is contact made within a day of a contravention of the licence via the OGTR free call phone number 1800 181 030. Notification without delay will allow the OGTR to conduct a risk assessment on the incident and attend the location, if required</i> |

| Notice | Content of notice | Timeframe |
|---|--|--|
| | <i>Note: Contraventions of the licence may occur through the action or inaction of a person.</i> | |
| h. Further details regarding additional information | Any further details requested by the Regulator in relation to information provided under condition 46(g) | Within the timeframe stipulated by the Regulator |

47. Notifications relating to each trial site must be sent to the Regulator as follows:

Note: please send all correspondence related to the licence to OGTR.M&C@health.gov.au.

| Notice | Content of notice | Timeframe |
|--------------------------|--|--|
| a. Intention to plant | <p>i. Details of the Planting Area including size, the local government area, GPS coordinates, a street address, a diagrammatical representation of the trial site (e.g. Google Maps) and any other descriptions</p> <p>ii. Detail of how the licence holder will access and control the Planting Area and the associated Monitoring Zone and Post-Harvest Buffer Zone, in accordance with condition 11</p> <p><i>Note: this should include a description of any contracts, agreements, or other enforceable arrangements.</i></p> <p>iii. Date on which the GMOs will be planted</p> <p>iv. Period when the GMOs are expected to flower</p> <p>v. Period when harvesting is expected to commence</p> <p>vi. How all areas requiring post-Cleaning inspections are intended to be used until Sign off, including proposed post-harvest crops (if any)</p> <p>vii. Details of how inspection activities will be managed, including strategies for the detection and Destruction of Volunteers and Related Species</p> <p>viii. History of how the trial site has been used for the previous two years</p> | At least 7 days prior to each planting (to be updated as soon as practicable if the notified details change) |
| b. Planting | <p>i. Actual date(s) of planting the GMOs</p> <p>ii. Any changes to the details provided under part (a) of this condition</p> | Within 7 days of any planting |
| c. Extreme Weather | <p>Any Extreme Weather event that is expected to affect or has already affected an area where the GMOs are or may be present.</p> <p><i>Note: The Contingency Plan must be implemented if the GMOs are detected outside areas requiring Cleaning (Condition 44).</i></p> | As soon as practicable |
| d. Harvest | Actual date(s) of harvesting the GMOs | Within 7 days of commencement of any harvesting |
| e. Cleaning | <p>i. Date(s) on which required Cleaning was performed on any areas of land</p> <p>ii. Method(s) of Cleaning</p> | Within 7 days of completion of Cleaning |
| f. Inspection activities | Information recorded in a Logbook as per the inspection requirements (Conditions 23, 30, 37 and 48). | Within 35 days of inspection |

Note: Additional records must be provided to the Regulator, if requested, in accordance with condition 43.

48. Details of any inspection activity must be recorded in a Logbook and must include:

- (a) date of the inspections; and
- (b) name of the person(s) conducting the inspections; and
- (c) details of the experience, training or qualification that enables the person(s) to recognise Sorghum and Related Species, if not already recorded in the Logbook; and
- (d) details of areas inspected including current land use (including any post-harvest crops) and recent management practices applied; and

Note: management practices include Tillage events, spraying or maintenance measures used to facilitate inspections.

- (e) details of the developmental stage of the GMOs while they are being grown; and
- (f) details of any post-Cleaning rainfall events including measurements at or near the area, or any irrigation events; and
- (g) details of any Volunteers and/or Related Species observed during inspections or during land-management activities, including number, developmental stage and approximate position of the Volunteers and/or Related Species within each area inspected[†]; and
- (h) date(s) and method(s) of Destruction of or preventing flowering of any Volunteers and/or Related Species, including destruction of Volunteers and/or Related Species during land-management activities; and
- (i) details of any damage and any repairs or replacement of pollination bags, while the pollination bags are required; and
- (j) details of rodent control methods used and any evidence of rodent activity, while rodent control methods are required; and
- (k) details of any damage and any repairs to the netting surrounding the Planting Area, while the netting is required.

[†] *Examples of acceptable ways to record the positional information for Volunteers and/or Related Species in the Logbook include:*

- *descriptive text*
- *marking on a diagram*
- *indicating grid references on a corresponding map/sketch.*

Note: Details of inspection activities must be provided to the Regulator (Condition 47).

DIR No: 209

Full Title: Limited and controlled release of sorghum genetically modified for altered reproduction from sexual to asexual

Organisation Details

Postal address: The University of Queensland
St Lucia
QLD 4072

IBC Details

IBC Name: The University of Queensland Institutional Biosafety Committee

GMO Description

GMOs covered by this licence

Sorghum plants genetically modified by introduction of only the genes and gene fragments listed below.

Parent Organism

Common Name: Sorghum

Scientific Name: *Sorghum bicolor* subspecies *bicolor*

Modified traits

Category: Asexual seed production
Selectable markers – herbicide tolerance, visual marker

Description: The GM sorghum lines contain an introduced gene that confers parthenogenesis and an introduced gene-editing system that knocks out 4 endogenous sorghum genes and causes mitosis instead of meiosis. Due to the combination of these 2 traits, the GM sorghum will produce clonal seed that grows into offspring genetically identical to the parent plant.

The GM sorghum lines also contain 2 introduced marker genes.

Confidential commercial information (CCI)

The exact identity of the introduced genes and gene fragments was declared CCI under Section 185 of the *Gene Technology Act 2000*.

ATTACHMENT B

A watering event is irrigation or natural rainfall that provides sufficient soil moisture to promote germination of Sorghum seeds on a trial site.

Examples of acceptable watering events are:

- At least 26 millimetres of rainfall over one day; or
- At least 28 millimetres of rainfall over two days; or
- At least 30 millimetres of rainfall over three days; or
- At least 32 millimetres of rainfall over four days; or
- Irrigation that provides equivalent levels of soil moisture to one of the examples of rainfall above.

Rainfall measurements must be taken on the site or within 3 km of the site. An irrigation or natural rainfall that matches one of the examples listed above, and occurs during the time period specified for a watering event in Condition 38 of the licence, is considered a valid watering event. The licence holder should keep records of the date/s and amount of water applied during the watering event, and provide this information when requesting Sign off of the relevant site.

If an irrigation or natural rainfall does not match one of the examples listed above, the licence holder may submit a request to the Regulator for it to be considered a watering event. The request should provide:

- evidence of amount of water applied, such as rainfall measurements on the site or within 3 km of the site, and
- evidence that resultant soil moisture is suitable for germination, such as photos of germinating plants on the site.

It is recommended that any requests that an irrigation or natural rainfall be considered a watering event be submitted at the time of the event, to minimise potential delays to Sign off of the site.