



Australian Government

Department of Health

Office of the Gene Technology Regulator

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

Licence No.: DIR 158

Licence holder: GO Resources Pty Ltd

Commercial release of safflower genetically modified for high oleic acid composition

Issued: 27 June 2018

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 website or by telephoning the Office on 1800 181 030.

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 a substantial part of a nationally consistent regulatory system controlling the development and use of genetically modified organisms (GMOs).

This licence is issued by the Gene Technology Regulator in accordance with the *Gene Technology Act 2000* and, as applicable, Corresponding State Law.

The Gene Technology 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 GMOs into the Australian environment.

Other agencies that also regulate GMOs or GM products include Food Standards Australia New Zealand, Australian Pesticides and Veterinary Medicines Authority, Therapeutic Goods Administration, National Industrial Chemicals Notification and Assessment Scheme and the Department of Agriculture and Water Resources. 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.

The licence authorises the licence holder and persons covered by the licence to conduct specified dealings with the genetically modified organism(s) listed in Attachment A of this licence.

Dealings permitted by this licence may also be subject to the operation of State legislation declaring areas to be GM, GM free, or both, for marketing purposes.

Section 1 Interpretations and Definitions

1. In this licence:
 - (a) unless defined otherwise in this licence, 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 any other gender;
 - (c) words in the singular include the plural and words in the plural include the singular;
 - (d) words importing persons include a partnership and a body whether corporate or otherwise;
 - (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 any word or phrase is given a defined meaning, any other part of speech or other grammatical form in respect of that word has a corresponding meaning;
 - (g) specific conditions prevail over standard conditions to the extent of any inconsistency.
2. In this licence:

'Act' means the *Gene Technology Act 2000* (Cth) or the corresponding State legislation under which this licence is issued.

'Annual Report' means a written report provided to the Regulator by the end of September each year containing all the information required by this licence to be provided in the Annual Report for the preceding financial year.

'GM' means genetically modified.

'GMO' means the genetically modified organism that is the subject of the dealings authorised by this licence.

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

'Regulator' means the Gene Technology Regulator.

'Safflower' means plants of the species *Carthamus tinctorius* L.

Section 2 Licence conditions and obligations

3. This licence does not authorise dealings with the GMO that are otherwise prohibited as a result of the operation of State legislation declaring areas to be GM, GM free, or both, for marketing purposes.
4. This licence remains in force until it is suspended, cancelled or surrendered. No dealings with the GMO are authorised during any period of suspension.
5. The holder of this licence ('the licence holder') is GO Resources Pty Ltd.
6. The licence holder must immediately notify the Regulator, via OGTR.M&C@health.gov.au, if any of the contact details of the project supervisor change.
7. Any person, including the licence holder, may conduct any permitted dealing(s) with the GMO.
8. All dealings with the GMO are permitted.
9. Dealings with the GMO may be conducted in all areas of Australia.

10. The GMO covered by this licence is described in Attachment A of the licence.
11. To the extent that the conditions of any prior licence authorising dealings with the GMO are inconsistent with the conditions of this licence, the conditions of this licence will prevail.

2.1 Obligations of the Licence Holder

Prior to issuing a licence, the Regulator considers suitability of the applicant to hold a licence. The following conditions address ongoing suitability of the licence holder.

12. The licence holder must, at all times, remain an accredited organisation in accordance with the Act and must comply with its instrument of accreditation.
13. The licence holder must:
 - (a) inform the Regulator immediately in writing, of:
 - i. any relevant conviction of the licence holder occurring after the commencement of this licence; and
 - 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; and
 - iii. any event or circumstances occurring after the commencement of this licence that would affect the capacity of the holder of this licence to meet the conditions in it; and
 - (b) provide any information related to the licence holder's ongoing suitability to hold a licence, if requested, within the stipulated timeframe.
14. 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); and
 - (b) the cancellation or suspension of the licence; and
 - (c) the surrender of the licence.

2.2 Provision of new information to the Regulator

Licence conditions are based on the risk assessment and risk management plan developed in relation to the application using information available at the time of assessment. The following condition requires that any new information that may affect the risk assessment is communicated to the Regulator.

15. The licence holder must inform the Regulator if the licence holder becomes aware of:
 - (a) 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
 - (b) any contraventions of the licence by a person covered by the licence; or
 - (c) any unintended effects of the dealings authorised by the licence.

Note: The Act requires, for the purposes of the above condition, that:

- (a) *the licence holder will be taken to have become aware of additional information of a kind mentioned in paragraph 15 if he or she was reckless as to whether such information existed; and*
- (b) *the licence holder will be taken to have become aware of contraventions, or unintended effects, of a kind mentioned in paragraph 15, if he or she was reckless as to whether such contraventions had occurred, or such unintended effects existed.*

Note: Contraventions of the licence may occur through the action or inaction of a person.

16. If the licence holder is required to inform the Regulator under the immediately preceding condition, the Regulator must be informed without delay.

Note: An example of informing without delay is contact made at the time of the incident via the OGTR free call phone number 1800 181 030, which provides emergency numbers for incidents that occur out of business hours. Notification without delay will allow the OGTR to conduct a risk assessment on the incident and attend the location if required.

17. If at any time the Regulator requests the licence holder to collect and provide information about any matter to do with the progress of the dealings authorised by this licence, including but not confined to:
 - (a) 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, whether or not the licence holder has provided information to the Regulator under condition 15(a);
 - (b) any contraventions of the licence by a person covered by the licence, whether or not the licence holder has provided information to the Regulator under condition 15(b);
 - (c) any unintended effects of the dealings authorised by the licence, whether or not the licence holder has provided information to the Regulator under condition 15(c);
 - (d) research, including by way of survey, to verify predictions of the risk assessment, or for any purpose related to risks to the health and safety of people, or to the environment;
 - (e) scientific literature and reports in respect of the GMO authorised by this licence, for a nominated period;
 - (f) details of any refusals of applications for licences or permits (however described) to deal with the GMO made pursuant to the regulatory laws of a foreign country;

and the request is reasonable, having regard to consistency with the Act and relevance to its purpose, then the licence holder must collect the information and provide it to the Regulator at a time and in the manner requested by the Regulator.

Note: The Regulator may invite the licence holder to make a submission on the reasonability of a request by the Regulator to collect and provide information relevant to the progress of the GMO.

2.3 Obligations of persons covered by the licence

18. Persons covered by this licence must not deal with the GMO except as expressly permitted by this licence.
19. If a person is authorised by this licence to deal with the GMO and a particular condition of this licence applies to the dealing by that 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.

Section 3 Reporting and Documentation Requirements

3.1 Annual Report

20. The licence holder must provide an Annual Report to the Regulator. An Annual Report must include the following:
 - (a) information about any adverse impacts, unintended effects, or new information relating to risks, to human health and safety or the environment caused by the GMO or material from the GMO;

- (b) information about the volumes of the GMO grown for commercial purposes, including seed increase operations, in each State and Territory for each growing season in the period;
- (c) information about the volumes of the GMO grown for non-commercial (e.g. research) purposes in each State and Territory for each growing season in the period.

3.2 Testing methodology

21. Prior to conducting any dealings with the GMO, the licence holder must provide to the Regulator a written methodology to reliably detect the GMO, and the presence of the genetic modifications described in this licence in a recipient organism. The detection method must be capable of reliably distinguishing between the specific genetic modifications in the GMO described in this licence and other genetic modifications in GM safflower described in other licences.

DIR No: 158

Full Title: Commercial release of safflower genetically modified for high oleic acid composition

Organisation Details

Postal address: GO Resources Pty Ltd
15 Sutherland Street
Brunswick VIC 3056

Phone No: +61 425 761 997

IBC Details

IBC Name: GO Resources IBC

GMO Description

GMOs covered by this licence

Two safflower (*Carthamus tinctorius* L.) lines genetically modified by the introduction of only the genes listed below, known by their unique OECD identifiers, GOR-73226-6 (Event 26) and GOR-73240-2 (Event 40), respectively.

Parent Organism

Common Name: Safflower

Scientific Name: *Carthamus tinctorius* L.

Modified traits

Category: Altered fatty acid composition
Selectable marker – antibiotic

Description: The GM safflower has been genetically modified for increased levels of oleic acid and decreased levels of other fatty acids. The GM safflower also contains a selectable marker gene.

Genetic elements responsible for conferring the modified traits:

Fragments of two endogenous safflower fatty acid biosynthesis genes, and one selectable marker gene from a soil bacterium, as well as other genetic elements, are detailed in Tables 1 and 2 of this attachment.

Purpose of the dealings with the GMO

The purpose of the dealings is commercial production of the GM safflower in all commercial safflower growing areas of Australia and for products of the GMO to enter general commerce.

Table 1 Introduced gene and gene fragments in the GM safflower lines

Gene	Associated protein	Source organism	Function
<i>CtFATB</i> fragment	Palmytoyl-ACP thioesterase	<i>Carthamus tinctorius</i>	Fatty acid biosynthesis
<i>CtFAD2.2</i> fragment	Δ 12 desaturase	<i>Carthamus tinctorius</i>	Fatty acid biosynthesis
<i>hph</i>	Hygromycin B phosphotransferase (HPT)	<i>Streptomyces</i> sp.	Marker - antibiotic resistance (hygromycin)

Table 2 Introduced regulatory elements in the GM safflower lines

Element	Function	Source
Flax linin promoter	Promoter used for gene silencing construct	<i>Linum usitatissimum</i> (flax)
Int1	Non-coding pyruvate dehydrogenase kinase intron sequence	<i>Flaveria trinervia</i> (clustered yellowtops)
Int2	Non-coding catalase 1 intron sequence	<i>Ricinus communis</i> (castor bean)
ocs	Terminator used for gene silencing construct (3' non translated region of the octopine synthase gene)	<i>Agrobacterium tumefaciens</i>
35S	Promoter used for selectable marker	<i>Cauliflower mosaic virus</i>
nos 3'	Terminator used for selectable marker (3' non translated region of the nopaline synthase gene)	<i>Agrobacterium tumefaciens</i>