



Western Australia

## **Gene Technology Regulations 2007**

Compare between:

[28 Jul 2007, 00-a0-10] and [29 Aug 2020, 00-b0-00]



Gene Technology Act 2006

## Gene Technology Regulations 2007

### Part 1 — Preliminary

**1. Citation**

These regulations are the *Gene Technology Regulations 2007*<sup>1</sup>.

**2. Commencement**

These regulations come into operation on the day on which the *Gene Technology Act 2006* comes into operation<sup>1</sup>.

**3. Definitions**

In these regulations —

***advantage***, in relation to an organism that is genetically modified, means a superior ability in its modified form, relative to the unmodified parent organism, to survive, reproduce or otherwise contribute to the gene pool;

***animal*** includes every kind of organism in the animal kingdom, including non-vertebrates but not including human beings;

***characterised***, in relation to nucleic acid, means nucleic acid that has been sequenced and in respect of which there is an understanding of potential gene products or potential functions;

***code for***, for Schedule 2, has the meaning given in Schedule 2 Part 3;

***Commonwealth regulations*** means the *Gene Technology Regulations 2001* of the Commonwealth;

**expert adviser** means —

- (a) in Part 4 — an expert adviser appointed under section 102(1) of the Commonwealth Act; and
- (b) in Part 6 — an expert adviser appointed under section 113(1) of the Commonwealth Act;

**genetically modified laboratory mouse** means a laboratory strain of mouse of the species *Mus musculus* that has been modified by gene technology;

**genetically modified laboratory rat** means a laboratory strain of rat of either the species *Rattus rattus* or *Rattus norvegicus* that has been modified by gene technology;

**infectious agent** means an agent that is capable of entering, surviving in, multiplying, and potentially causing disease in, a susceptible host;

**known** means known within the scientific community;

**non-conjunctive plasmid**, for Schedule 2, has the meaning given in Schedule 2 Part 3;

**non-vector system**, for Schedule 2, has the meaning given in Schedule 2 Part 3;

**nucleic acid** means either, or both, deoxyribonucleic acid (DNA), or ribonucleic acid (RNA), of any length;

**oncogenic modification** means a genetic modification that is capable of inducing unregulated cell proliferation in a vertebrate cell;

**packaging cell line** means an animal or human cell line that contains a gene or genes that when expressed *in trans* are necessary and sufficient to complement packaging defects of a replication defective viral vector in order to produce packaged replication defective virions;

**pathogenic**, in relation to an organism, means having the capacity to cause disease or abnormality;

***pathogenic determinant*** means a characteristic that has the potential to increase the capacity of a host or vector to cause disease or abnormality;

***physical containment level***, followed by a numeral, is a specified containment level under guidelines made by the Regulator, under section 90 of the Act, for the certification of facilities;

***plasmid*** means a DNA molecule capable of autonomous replication and stable extra-chromosomal maintenance in a host cell;

***shot-gun cloning*** means the production of a large random collection of cloned fragments of nucleic acid from which genes of interest can later be selected;

***toxin*** means a substance that is toxic to any vertebrate;

***toxin-producing organism*** means an organism producing toxin with a LD<sub>50</sub> of less than 100µg/kg;

***transduce***, in relation to a viral vector or viral particle, means enter an intact cell by interaction of the viral particle with the cell membrane.

Note for this regulation:

Several other words and expressions used in these Regulations have the meaning given by section 10, or another provision, of the Act. For example —

accredited organisation

Commonwealth Act

deal with

environment

facility

Gene Technology Technical Advisory Committee

GMO

GM product

Institutional Biosafety Committee

intentional release of the GMO into the environment (see section 11)

notifiable low risk dealing

Regulator

**s. 3A**

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**3A. Numbering**

- (1) In order to maintain consistent numbering between these regulations and the Commonwealth regulations —
  - (a) if the Commonwealth regulations contain a regulation that is not required in these regulations, the provision number and heading to the Commonwealth regulation are included in these regulations despite the omission of the body of the regulation; and
  - (b) if these regulations contains a regulation that is not included in the Commonwealth regulations, the regulation is numbered so as to maintain consistency in numbering between provisions common to both regulations.
- (2) A provision number and heading mentioned in subregulation (1)(a) form part of these regulations.

Notes for this regulation:

1. A note appears under each heading of a kind mentioned in subregulation (1)(a) describing the omitted Commonwealth regulation.
2. A note appears under each regulation of a kind mentioned in subregulation (1)(b) highlighting the non-appearance of an equivalent provision in the Commonwealth regulations.
3. This regulation does not appear in the Commonwealth regulations.

**3B. Notes**

Notes do not form part of these regulations.

Note for this regulation:

This regulation does not appear in the Commonwealth regulations.

## **Part 2 — Interpretation and general operation**

**4. Techniques not constituting gene technology**

For the purposes of paragraph (c) of the definition of “gene technology” in section 10(1) of the Act, gene technology does not include a technique mentioned in Schedule 1A.

**5. Organisms that are not genetically modified organisms**

For the purposes of paragraph (e) of the definition of “genetically modified organism” in section 10(1) of the Act, an organism mentioned in Schedule 1 is not a genetically modified organism.

## **Part 3 — Dealings with GMOs**

### **Division 1 — Licensing system**

#### **6. Dealings exempt from licensing**

- (1) For the purposes of section 32(3) of the Act, a dealing, in relation to a GMO, is an exempt dealing if —
  - (a) it is a dealing of a kind mentioned in Schedule 2 Part 1; and
  - (b) it does not involve a genetic modification other than a modification described in Schedule 2 Part 1; and
  - (c) it is conducted in accordance with applicable technical and procedural guidelines, as in force from time to time under section 27(d) of the Act, relating to —
    - (i) containment of the GMO; and
    - (ii) if the dealing involves transporting the GMO — transport;and
  - (d) it does not involve an intentional release of the GMO into the environment; and
  - (e) it does not involve a retroviral vector that is able to transduce human cells.
- (2) For the avoidance of doubt, exemption under subregulation (1) does not apply to a dealing that does not comply with subregulation (1), whether or not that dealing is related to a dealing that does so comply.

Notes for this regulation:

1. A dealing affected by this regulation could be any of the forms of dealing mentioned in the definition of “deal with” in section 10(1) of the Act.
2. Exemption from provisions of the Act does not preclude the application of another law of the State or a law of the Commonwealth or another State.



**6A. Particular dealings relating to COVID-19 vaccine exempt dealings**

(1) In this regulation —

***Health Minister*** means the Minister responsible for the administration of the *Health Services Act 2016*;

***relevant dealing*** means a dealing with a GMO that —

(a) is —

(i) authorised under a GMO licence issued under the Commonwealth Act; and

(ii) undertaken by a person, or a person in a class of persons, approved under subregulation (3)(a);

or

(b) is specified in an emergency dealing determination in force under section 72B of the Commonwealth Act; or

(c) is declared by the Commonwealth regulations to be a notifiable low risk dealing; or

(d) is specified by the Commonwealth regulations to be an exempt dealing; or

(e) is included in the GMO Register.

(2) For the purposes of section 32(3) of the Act, a dealing with a GMO is an exempt dealing if the dealing —

(a) relates to a vaccine for COVID-19; and

(b) is a relevant dealing; and

(c) is conducted in accordance with any applicable technical and procedural guidelines approved by the Minister under subregulation (3)(b).

(3) The Minister may, after consulting the Health Minister, by written notice published in the *Gazette* —

(a) approve a person or class of persons to deal with a GMO for the purposes of paragraph (a)(ii) of the definition of ***relevant dealing*** in subregulation (1); and

(b) approve technical and procedural guidelines to deal with a GMO for the purposes of subregulation (2)(c).

(4) Without limiting subregulation (3)(b), the Minister may approve technical and procedural guidelines as in force from time to time under section 27(d) of the Commonwealth Act.

(5) If the Minister approves technical and procedural guidelines, the Minister must publish the technical and procedural guidelines on the website of the department of the Public Service principally assisting in the administration of the Act.

[Regulation 6A inserted: SL 2020/145 r. 4.]

**7. Application for license — prescribed fee**

Note for this regulation:

At the commencement of the regulations, no application fee is prescribed under section 40(6) of the Act.

**8. Time limit for deciding an application**

- (1) For the purposes of section 43(3) of the Act, the period within which the Regulator must issue or refuse to issue, a licence is —
  - (a) in relation to an application to which Part 5 Division 3 of the Act applies — 90 days after the day the application is received by the Regulator; or
  - (b) in relation to an application to which Part 5 Division 4 of the Act applies — 170 days after the day the application is received by the Regulator.
- (2) For the purpose of determining the end of a period mentioned in subregulation (1), the following days are not counted —
  - (a) a Saturday, a Sunday or a public holiday in the Australian Capital Territory;
  - (b) a day on which the Regulator cannot proceed with the decision-making process, or a related function, because the Regulator is awaiting information that the applicant has been requested, in writing, to give;

- (c) if, in relation to the application, the Regulator publishes notice of a public hearing under section 53 of the Act, a day in the period that —
    - (i) begins on the day of publication; and
    - (ii) ends on the day when the public hearing ends;
  - (d) a day on which the Regulator cannot proceed with the decision-making process, or a related function, because —
    - (i) the applicant has requested, under section 184 of the Act, that information given in relation to the application be declared confidential commercial information for purposes of the Act; and
    - (ii) the Regulator is —
      - (A) considering the application; or
      - (B) waiting until any review rights under section 181 or 183 of the Act, in relation to the application, are exhausted;
  - (e) if, in relation to the application, the Regulator requests the Gene Technology Ethics Committee to provide advice on an ethical issue, a day in the period that —
    - (i) begins on the day the request is made; and
    - (ii) subject to subregulation (3) — ends on the day when the advice is given or, if the advice is not given within the period, if any, specified under subregulation (3), on the last day of that period.
- (3) The Regulator, when seeking advice under section 50(3) or 52(3) of the Act, or from the Gene Technology Ethics Committee, may specify a reasonable period within which the advice must be received, and, if the advice is not received within that period, must proceed without regard to that advice.

**9. Prescribed authorities**

For the purposes of sections 50(3)(c) and 52(3)(c) of the Act, the following Commonwealth authorities and agencies are prescribed —

- (a) Food Standards Australia New Zealand;
- (b) Australian Quarantine and Inspection Service;
- (c) National Health and Medical Research Council;
- (d) the Director, National Industrial Chemical Notification and Assessment Scheme under the *Industrial Chemical (Notification and Assessment) Act 1989* of the Commonwealth;
- (e) Australian Pesticides and Veterinary Medicines Authority;
- (f) Therapeutic Goods Administration, Department of Health and Aged Care.

**10. Risk assessment — matters to be taken into account**

(1) For the purposes of section 51(1)(g) and (2)(g) of the Act, other matters to be taken into account in relation to dealings proposed to be authorised by a licence include —

- (a) subject to section 45 of the Act, any previous assessment by a regulatory authority, in Australia or overseas, in relation to allowing or approving dealings with the GMO; and
- (b) the potential of the GMO concerned to —
  - (i) be harmful to other organisms; and
  - (ii) adversely affect any ecosystems; and
  - (iii) transfer genetic material to another organism; and
  - (iv) spread, or persist, in the environment; and
  - (v) have, in comparison to related organisms, an advantage in the environment; and

- (vi) be toxic, allergenic or pathogenic to other organisms.
- (2) In taking into account a risk mentioned in section 51(1) of the Act, or a potential capacity mentioned in subregulation (1), the Regulator must consider both the short term and the long term.

#### **11. Prescribed conditions of licence**

Note for this regulation:

At the commencement of these regulations, no conditions are prescribed under section 61(b) of the Act.

### **Division 2 — Notifiable low risk dealings**

#### **12. Notifiable low risk dealings**

- (1) For the purposes of section 74(1) of the Act, a dealing with a GMO is a notifiable low risk dealing if —
  - (a) it is a dealing of a kind mentioned in Schedule 3 Part 1 (other than a dealing also mentioned in Schedule 3 Part 2); and
  - (b) it does not involve an intentional release of the GMO into the environment.
- (2) For the avoidance of doubt, subregulation (1) does not apply to a dealing that does not comply with subregulation (1), whether or not that dealing is related to a dealing that does so comply.

Note for this regulation:

A dealing affected by this regulation could be any of the forms of dealing mentioned in the definition of “deal with” in section 10(1) of the Act.

#### **13. Requirements in relation to notifiable low risk dealings**

- (1) A person must not undertake a notifiable low risk dealing unless an Institutional Biosafety Committee has —
  - (a) notified the Regulator, in the form approved by the Regulator, of the proposed dealing; and

- (b) notified the person, and the project supervisor for the proposed dealing, in writing, that —
  - (i) the proposed dealing is a dealing of a kind mentioned in Schedule 3 Part 1; and
  - (ii) it considers that the personnel to be involved in the proposed dealing have appropriate training and experience; and
  - (iii) paragraph (a) has been complied with.
- (2) A notifiable low risk dealing, when undertaken, must comply with the following requirements —
  - (a) the dealing must be conducted in a facility that —
    - (i) is certified by the Regulator to —
      - (A) at least physical containment level 2; or
      - (B) any other containment level that the Regulator considers suitable for conducting the dealing;
    - and
    - (ii) is of appropriate design for the kind of dealing being undertaken;
  - (b) to the extent that the dealing involves transporting a GMO, the transporting must be conducted in accordance with applicable technical and procedural guidelines, as in force from time to time under section 27(d) of the Act.
- (3) The Regulator may, by notice in writing, require —
  - (a) the Institutional Biosafety Committee that has notified the Regulator of a proposed notifiable low risk dealing; or
  - (b) a person or organisation involved with the conduct of a notifiable low risk dealing of which the Regulator has been notified,

to give the Regulator such further information in relation to the dealing as the Regulator requires in order to be satisfied that the dealing is a notifiable low risk dealing.

- (4) A Committee, person or organisation receiving a notice under subregulation (3) must, by the end of the period specified in the notice, give the Regulator the information required by the notice.

### **Division 3 — Certification and accreditation**

#### **14. Regulator to decide certification application within 90 days**

Note for this regulation:

The Commonwealth regulations state the period within which the Regulator must consider and decide an application for certification of a facility.

#### **15. Application for certification — failure to provide section 85 information**

If an applicant for certification fails to provide information required under section 85(1) of the Act within the period specified in a notice given under section 85(2) of the Act, and gives no reasonable explanation for the failure, the Regulator may refuse to certify the facility that is the subject of the application.

Note for this regulation:

A refusal to certify a facility is a reviewable decision (see Part 12 Division 2 of the Act).

#### **16. Regulator to decide accreditation application within 90 days**

Note for this regulation:

The Commonwealth regulations provide the period within which the Regulator must consider and decide an application for accreditation of an organisation.

**17. Application for accreditation — failure to provide section 93 information**

If an applicant for accreditation fails to provide information required under section 93(1) of the Act within the period specified in a notice given under section 93(2) of the Act, and gives no reasonable explanation for the failure, the Regulator may refuse to accredit the organisation that is the subject of the application.

Note for this regulation:

A refusal to accredit an organisation is a reviewable decision (see Part 12 Division 2 of the Act).



## **Part 4 — Gene Technology Technical Advisory Committee**

### **Division 1 — Conditions of appointment**

#### **18. GTTAC members and advisers — term of appointment**

Note for this regulation:

Regulation 18 of the Commonwealth regulations provides for the term of appointment of members of the Gene Technology Technical Advisory Committee and expert advisers to the GTTAC.

#### **19. GTTAC members and advisers — resignation**

Note for this regulation:

Regulation 19 of the Commonwealth regulations provides for the resignation of members of the Gene Technology Technical Advisory Committee and expert advisers to the GTTAC.

#### **20. GTTAC members — disclosure of interests**

Note for this regulation:

Regulation 20 of the Commonwealth regulations sets out when and how members of the Gene Technology Technical Advisory Committee must disclose any interests of a kind likely to be considered at a meeting of the GTTAC.

#### **21. GTTAC members and advisers — termination of appointment**

Note for this regulation:

Regulation 21 of the Commonwealth regulations sets out the circumstances of terminating the appointment of members of the Gene Technology Technical Advisory Committee and expert advisers to the GTTAC.

#### **22. GTTAC members — leave of absence**

Note for this regulation:

Regulation 22 of the Commonwealth regulations provides when the Chairperson and members of the Gene Technology Technical Advisory Committee may be granted leave.

**23. Expert advisers — disclosure of interests**

Note for this regulation:

Regulation 23 of the Commonwealth regulations sets out when and how expert advisers to the Gene Technology Technical Advisory Committee must disclose any interests of a kind likely to be considered at a meeting of the GTTAC.

**Division 2 — Committee procedures**

**24. Committee procedures generally**

Note for this regulation:

Regulation 24 of the Commonwealth regulations provides that the Gene Technology Technical Advisory Committee must perform its functions as informally as the Commonwealth regulations allow and how the GTTAC may obtain information.

**25. Committee meetings**

Note for this regulation:

Regulation 25 of the Commonwealth regulations provides when the Gene Technology Technical Advisory Committee may have meetings and provides that in certain circumstances meetings may be by videoconference or teleconference.

**26. Presiding Member**

Note for this regulation:

Regulation 26 of the Commonwealth regulations provides that the Chairperson of the Gene Technology Technical Advisory Committee presides at its meetings and who presides in the Chairperson's absence.

**27. Quorum**

Note for this regulation:

Regulation 27 of the Commonwealth regulations provides that half the members of the Gene Technology Technical Advisory Committee comprises the GTTAC's quorum.

**28. Voting**

Note for this regulation:

Regulation 28 of the Commonwealth regulations provides that decisions of the Gene Technology Technical Advisory Committee must

be made by a majority of members present and voting and that the Chairperson has a deliberative and casting vote.

**29. Records and reports**

Note for this regulation:

Regulation 29 of the Commonwealth regulations provides that records must be kept of the Gene Technology Technical Advisory Committee's proceedings and when reports must be prepared.

**Division 3 — Subcommittees**

**30. Operation of subcommittees**

Note for this regulation:

Regulation 30 of the Commonwealth regulations states that regulations 24, 25, 26 and 28 of those regulations apply to a subcommittee established under section 105(1) of the Commonwealth Act.

## **Part 5 — Gene Technology Community Consultative Committee**

### **31. GTCCC — conditions of appointment**

Note for this regulation:

Regulation 31 of the Commonwealth regulations provides that Part 4 Division 1 of the Commonwealth regulations applies to the conditions of appointment of members of the Gene Technology Community Consultative Committee.

### **32. GTCCC — Consultative Committee procedures**

Note for this regulation:

Regulation 32 of the Commonwealth regulations provides that Part 4 Division 2 of the Commonwealth regulations applies to the procedures of the Gene Technology Community Consultative Committee.

### **33. GTCCC — operation of subcommittees**

Note for this regulation:

Regulation 33 of the Commonwealth regulations provides that regulations 24, 25, 26 and 28 of the Commonwealth regulations apply to a subcommittee established under section 110A(1) of the Commonwealth Act.

## **Part 6 — Gene Technology Ethics Committee**

### **34. GTEC — conditions of appointment**

Note for this regulation:

Regulation 34 of the Commonwealth regulations provides that Part 4 Division 1 of the Commonwealth regulations applies to the conditions of appointment of members of and expert advisers to the Gene Technology Ethics Committee.

### **35. GTEC — committee procedures**

Note for this regulation:

Regulation 35 of the Commonwealth regulations provides that Part 4 Division 2 of the Commonwealth regulations applies to the procedures of the Gene Technology Ethics Committee.

### **36. GTEC — operation of subcommittees**

Note for this regulation:

Regulation 36 of the Commonwealth regulations provides that regulations 24, 25, 26 and 28 of the Commonwealth regulations apply to a subcommittee established under section 116(1) of the Commonwealth Act.

## Part 7 — Miscellaneous

### 37. Reviewable State decisions

Note for this regulation:

At the commencement of these regulations, no decision has been declared by the Commonwealth regulations to be a reviewable State decision under section 19 of the Commonwealth Act.

### 38. Review of decisions

Note for this regulation:

Regulation 38 of the Commonwealth regulations provides that a person whose interests are affected by a decision in relation to the appointment of a member to a committee under those regulations may apply to the Administrative Appeals Tribunal for review of the decision.

### 39. Record of GMO and GM Product Dealings

- (1) For the purposes of section 138(2) of the Act, the following particulars are prescribed in relation to a notifiable low risk dealing that is notified to the Regulator —
  - (a) the name of the organisation proposing to undertake the notified dealing;
  - (b) in terms of Schedule 3 Part 1 — the kind of notifiable low risk dealing proposed;
  - (c) the identifying name given to the proposed undertaking by the organisation;
  - (d) the date of the notification.
- (2) For the purposes of section 138(3) of the Act, the following particulars are prescribed in relation to a GM product mentioned in a designated notification —
  - (a) the name of the organisation producing the GM product;
  - (b) a description of the GM product, with reference to —
    - (i) the *applicable Act* (being the *Agricultural and Veterinary Chemicals (Western Australia) Act 1995*); and

- (ii) its common name as a product, or type or class of product (for example, bread or insulin);
- (c) information about the GM product, including —
  - (i) the common name and the scientific name of the parent organism involved; and
  - (ii) details of the introduced trait in the GMO from which the GM product is derived; and
  - (iii) the identity of the introduced gene responsible for conferring the introduced trait;
- (d) the date on which a decision under the applicable Act, that enables supply of the GM product in Australia, takes effect;
- (e) details of any conditions attaching to that permission.

Note for this regulation:

This regulation differs from regulation 39 of the Commonwealth regulations.

#### **40. Inspector identity card**

For the purposes of section 151(2)(a) of the Act, an inspector's identity card must —

- (a) display a recent photograph of the inspector's face; and
- (b) state the date of issue; and
- (c) state the period of its validity.

## Part 8 — Transitional

### 41. Existing facilities — certification

- (1) If, at the commencement of Part 7 of the Act, there is in force for an existing facility a notice from the Genetic Manipulation Advisory Committee that the facility provides a specified physical containment level, the facility is taken to be certified to that physical containment level under section 84 of the Act.
- (2) Subregulation (1) applies —
  - (a) subject to sections 86(b) and (c), 87 and 88 of the Act; and
  - (b) for a facility in relation to which the notice specifies that it is a physical containment level 2 facility (other than a PC2 Large Scale facility) — until the end of 2 years after the commencement of Part 7 of the Act, provided the facility maintains compliance with the Regulator’s guidelines about the requirements for certification at that level; and
  - (c) for a facility in relation to which the notice specifies that it is a physical containment level 3 or level 4 facility, a PC2 Large Scale facility or a facility providing appropriate physical containment for a specified purpose — until the end of 1 year after the commencement of Part 7 of the Act, provided the facility maintains compliance with the Regulator’s guidelines about the requirements for certification at its specified containment level.
- (3) For the purposes of subregulation (2) —

***PC2 Large Scale facility*** means a physical containment level 2 facility so described by the notice given in relation to the facility by the Genetic Manipulation Advisory Committee.



**42. Existing organisations — accreditation**

- (1) If, at the commencement of Part 7 of the Act, there is in force for an existing organisation a notice from the Genetic Manipulation Advisory Committee that the organisation is an accredited organisation, the organisation is taken to be an accredited organisation under section 92 of the Act.
- (2) Subregulation (1) applies —
  - (a) subject to sections 94(b) and (c), 95 and 96 of the Act; and
  - (b) until the end of 2 years after the commencement of Part 7 of the Act, provided the organisation maintains compliance with the Regulator's guidelines, if any, under section 98 of the Act.

**Schedule 1A — Techniques that are not gene technology**

[r. 4]

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<b>Item</b>	<b>Description of organism</b>
1	Somatic cell nuclear transfer, if the transfer does not involve genetically modified material.
2	Electromagnetic radiation-induced mutagenesis.
3	Particle radiation-induced mutagenesis.
4	Chemical-induced mutagenesis.
5	Fusion of animal cells, or human cells, if the fused cells are unable to form a viable whole animal or human.
6	Protoplast fusion, including fusion of plant protoplasts.
7	Embryo rescue.
8	In vitro fertilisation.
9	Zygote implantation
10	A natural process, if the process does not involve genetically modified material.
	<i>Examples</i>
	Examples of natural processes include conjugation, transduction, transformation and transposon mutagenesis.

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**Schedule 1 — Organisms that are not genetically modified organisms**

[r. 5]

**Part 1 — Organisms**

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<b>Item</b>	<b>Description of organism</b>
1	A mutant organism in which the mutational event did not involve the introduction of any foreign nucleic acid (that is, non-homologous DNA, usually from another species).
2	A whole animal, or a human being, modified by the introduction of naked recombinant nucleic acid (such as DNA vaccine) into its somatic cells, if the introduced nucleic acid is incapable of giving rise to infectious agents.
3	Naked plasmid DNA that is incapable of giving rise to infectious agents when introduced into a host cell.
6	An organism that results from an exchange of DNA if — (a) the donor species is also the host species; and (b) the vector DNA does not contain any heterologous DNA.
7	An organism that results from an exchange of DNA between the donor species and the host species if — (a) such exchange can occur by naturally occurring processes; and (b) the donor species and the host species are micro-organisms that — (i) satisfy the criteria in AS/NZS 2243.3:2002 (Safety in laboratories, Part 3: Microbiological aspects and containment facilities) jointly published by Standards Australia and Standards New Zealand, for classification as Risk Group 1; and (ii) are known to exchange nucleic acid by a natural physiological process; and

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**Schedule 1** Organisms that are not genetically modified organisms

**Part 1** Organisms

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<b>Item</b>	<b>Description of organism</b>
	(c) the vector used in the exchange does not contain heterologous DNA from any organism other than an organism that is involved in the exchange.

## Schedule 2 — Dealings exempt from licensing

[r. 6]

Note for this Schedule:

Regulation 6(1) sets out other requirements for exempt dealings.

### Part 1 — Exempt dealings

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<b>Item</b>	<b>Description of dealing</b>
1	A dealing with a genetically modified laboratory mouse or a genetically modified laboratory rat, unless — <ol style="list-style-type: none"><li>(a) an advantage is conferred on the animal by the genetic modification; or</li><li>(b) as a result of the genetic modification, the animal is capable of secreting or producing an infectious agent.</li></ol>
2	A dealing with a genetically modified <i>Caenorhabditis elegans</i> , unless — <ol style="list-style-type: none"><li>(a) an advantage is conferred on the animal by the genetic modification; or</li><li>(b) as a result of the genetic modification, the animal is capable of secreting or producing an infectious agent.</li></ol>
3	A dealing with an animal into which genetically modified somatic cells have been introduced, if — <ol style="list-style-type: none"><li>(a) the somatic cells are not capable of giving rise to infectious agents as a result of the genetic modification; and</li><li>(b) the animal is not infected with a virus that is capable of recombining with the genetically modified nucleic acid in the somatic cells.</li></ol>
4	<ol style="list-style-type: none"><li>(1) Subject to subitems (2) and (3), a dealing involving a host/vector system mentioned in Part 2 of this Schedule and producing no more than 10 litres of GMO culture in each vessel containing the resultant culture.</li><li>(2) The donor nucleic acid —<ol style="list-style-type: none"><li>(a) must satisfy either of the following requirements —<ol style="list-style-type: none"><li>(i) it must not be derived from organisms implicated</li></ol></li></ol></li></ol>

**Gene Technology Regulations 2007**

**Schedule 2** Dealings exempt from licensing

**Part 1** Exempt dealings

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**Item Description of dealing**

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- in, or with a history of causing, disease in human beings, animals, plants or fungi;
- (ii) must be characterised and not know to alter the host range or mode of transmission, or increase the virulence, pathogenicity or transmissibility of the host or vector;
- and
- (b) must not code for a toxin with an LD<sub>50</sub> of less than 100 µg/kg; and
- (c) must not code for a toxin with an LD<sub>50</sub> of 100 µg/kg or more, if the intention is to express the toxin at high levels; and
- (d) must not be uncharacterised nucleic acid from a toxin-producing organism; and
- (e) must not include a viral sequence unless the donor nucleic acid —
- (i) is missing at least one gene essential for viral multiplication that —
- (A) is not available in the cell into which the nucleic acid is introduced; and
- (B) will not become available through subsequent breeding;
- and
- (ii) is incapable of correcting a defect in the host/vector system leading to production of replication competent virions.
- (3) If the vector is able to transduce human cells, the donor nucleic acid must not confer an oncogenic modification.
- 5 A dealing involving shot-gun cloning, or the preparation of a cDNA library, in a host/vector system mentioned in Part 2 item 1 of this Schedule, if the donor nucleic acid is not derived from either —
- (a) a pathogen; or
- (b) a toxin-producing organism.
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**Part 2 — Host/vector systems for exempt dealings**

Item	Class	Host	Vector
1	Bacteria	<p><i>Escherichia coli</i> K12, <i>E. coli</i> B or <i>E. coli</i> C — any derivative that does not contain —</p> <p>(a) generalising transducing phages; or</p> <p>(b) genes able to complement the conjugation defect in a non-conjugative plasmid</p> <p><i>Bacillus</i> — specified species — asporogenic strains with a reversion frequency of less than <math>10^{-7}</math></p> <p>(a) <i>B. amy loliuefaciens</i></p> <p>(b) <i>B. licheniformis</i></p> <p>(c) <i>B. pumilus</i></p> <p>(d) <i>Bacillus subtilis</i></p> <p>(e) <i>B. thuringiensis</i></p> <p><i>Pseudomonas putida</i> — strain KT 2440</p>	<p>1. Non-conjugative plasmids</p> <p>2. Bacteriophage</p> <p style="padding-left: 20px;">(a) lambda</p> <p style="padding-left: 20px;">(b) lambdoid</p> <p style="padding-left: 20px;">(c) Fd or F1 (eg. M13)</p> <p>3. None (non-vector systems)</p> <p>1. Non-conjugative plasmids</p> <p>2. Plasmids and phages whose host range does not include <i>B. cereus</i>, <i>B. anthracis</i> or any other pathogenic strain of <i>Bacillus</i></p> <p>3. None (non-vector systems)</p> <p>1. Non-conjugative plasmids including certified plasmids: pKT 262, pKT 263, pKT 264</p> <p>2. None (non-vector systems)</p>

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Item	Class	Host	Vector
		<i>Streptomyces</i> — specified species —	1. Non-conjugative plasmids
	(a)	<i>S. aureofaciens</i>	2. Certified plasmids: SCP2, SLP1, SLP2, PIJ101 and derivatives
	(b)	<i>S. coelicolor</i>	
	(c)	<i>S. cyaneus</i>	
	(d)	<i>S. griseus</i>	
	(e)	<i>S. lividans</i>	3. Actinophage phi C31 and derivatives
	(f)	<i>S. parvulus</i>	
	(g)	<i>S. rimosus</i>	4. None (non-vector systems)
	(h)	<i>S. venezuelae</i>	
		<i>Agrobacterium radiobacter</i>	1. Non-tumorigenic disarmed Ti plasmid vectors, or Ri plasmid vectors
		<i>Agrobacterium rhizogenes</i> — disarmed species	2. None (non-vector systems)
		<i>Agrobacterium tumefaciens</i> — disarmed species	
		<i>Lactobacillus</i>	1. Non-conjugative plasmids
		<i>Oenococcus oeni</i> syn.	
		<i>Leuconostoc oenis</i>	2. None (non-vector systems)
		<i>Pediococcus</i>	
		<i>Photobacterium augustum</i>	
		<i>Pseudoalteromonas tunicate</i>	
		<i>Rhizobium</i> (including the genus <i>Allorhizobium</i> )	
		<i>Sphingopyxis alaskensis</i> syn. <i>Sphingomonas alaskensis</i>	
		<i>Vibrio cholerae</i> CVD103-HgR	



Item	Class	Host	Vector
2	Fungi	<i>Neurospora crassa</i> — laboratory strains <i>Pichia pastoris</i> <i>Saccharomyces cerevisiae</i> <i>Schizosaccharomyces pombe</i> <i>Kluyveromyces lactis</i> <i>Trichoderma reesei</i>	<ol style="list-style-type: none"> <li>1. All vectors</li> <li>2. None (non-vector systems)</li> </ol>
3	Slime moulds	<i>Dictyostelium species</i>	<ol style="list-style-type: none"> <li>1. <i>Dictyostelium</i> shuttle vectors, including those based on the endogenous plasmids Ddp1 and Ddp2</li> <li>2. None (non-vector systems)</li> </ol>
4	Tissue culture	Animal or human cell cultures (including packaging cell lines)	<ol style="list-style-type: none"> <li>1. Non-conjugative plasmids</li> <li>2. Non-viral vectors, or defective viral vectors (other than a retroviral vector that is able to transduce human cells)</li> <li>3. Avipox vectors (attenuated vaccine strains)</li> <li>4. Baculovirus (<i>Autographa californica</i> nuclear polyhedrosis virus), polyhedron minus</li> <li>5. None (non-vector systems)</li> </ol>

<b>Item</b>	<b>Class</b>	<b>Host</b>	<b>Vector</b>
		Plant cell cultures	<ol style="list-style-type: none"><li>1. Non-tumorigenic disarmed Ti plasmid vectors, or Ri plasmid vectors, in <i>Agrobacterium tumefaciens</i>, <i>Agrobacterium radiobacter</i> or <i>Agrobacterium rhizogenes</i></li><li>2. Non-pathogenic viral vectors</li><li>3. None (non-vector systems)</li></ol>

### **Part 3 — Definitions**

In this Schedule —

**code for**, in relation to a toxin, means to specify the amino acid sequence of the toxin;

**non-conjugative plasmid** means a plasmid that is not self-transmissible, and includes, but is not limited to, non-conjugative forms of the following plasmids —

- (a) bacterial artificial chromosomes (BACs);
- (b) cosmids;
- (c) P1 artificial chromosomes (PACs);
- (d) yeast artificial chromosomes (YACs);

**non-vector system** means a system by which donor nucleic acid is introduced (for example, by electroporation or particle bombardment) into a host in the absence of a nucleic acid-based vector (for example, a plasmid, viral vector or transposon).



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**Schedule 3** Notifiable low risk dealings in relation to a GMO

**Part 1** Dealings that are notifiable low risk dealings

**cl. 1.1**

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- (ii) the animal is not capable of secreting or producing an infectious agent as a result of the genetic modification;
- (b) a dealing involving a genetically modified plant (including a genetically modified flowering plant), if the dealing occurs in a facility that is designed to prevent the escape from the facility of —
  - (i) pollen, seed, spores or other propagules which may be produced in the course of the dealing; or
  - (ii) invertebrates that are capable of carrying the material mentioned in subparagraph (i);
- (ba) a dealing involving a genetically modified flowering plant, if, before flowering, all inflorescences are wholly enclosed in bags designed to prevent escape of viable pollen and seed;
- (c) a dealing involving a host and vector that are not mentioned as a host/vector system in Schedule 2 Part 2, if —
  - (i) the host has not been implicated in, or had a history of causing, disease in human beings, animals, plants or fungi; and
  - (ii) the vector has not been implicated in, or had a history of causing, disease in human beings, animals, plants or fungi;
- (d) a dealing involving a host and vector that are not mentioned as a host/vector system in Schedule 2 Part 2, if —
  - (i) either —
    - (A) the host has been implicated in, or had a history of causing, disease in human beings, animals, plants or fungi;
    - (B) the vector has been implicated in, or had a history of causing, disease in human beings, animals, plants or fungi;
  - and
  - (ii) the donor nucleic acid is characterised and is not known to alter the host range or mode of transmission, or increase the virulence, pathogenicity or transmissibility of the host or vector;



## **Part 2 — Dealings that are not notifiable low risk dealings**

Notes for this Part:

1. The following list qualifies the list in Part 1, and is not an exhaustive list of dealings that are not notifiable low risk dealings.
2. A dealing that is not a notifiable low risk dealing, or an exempt dealing, can be undertaken only by a person who is licensed, under the Act, for the dealing (see Act, section 32).

### **2.1 Kinds of dealing**

A dealing of any of the following kinds, or involving a dealing of the following kinds, is not a notifiable low risk dealing —

- (a) a dealing (other than a dealing mentioned in Part 1 item 1.1(h)) involving cloning of nucleic acid encoding a toxin having an LD<sub>50</sub> of less than 100 µg/kg;
- (b) a dealing involving high level expression of toxin genes, even if the LD<sub>50</sub> is 100 µg/kg or more;
- (c) a dealing (other than a dealing mentioned in Part 1 item 1.1(h)) involving cloning of uncharacterised nucleic acid from a toxin-producing micro-organism;
- (d) unless the viral vector is a part of a host/vector system mentioned in Schedule 2 Part 2 or Part 1 item 1.1(h) of this Schedule — a dealing involving donor nucleic acid in a viral vector if the donor nucleic acid —
  - (i) confers an oncological modification; or
  - (ii) encodes —
    - (A) immunomodulatory molecules; or
    - (B) cytokines; or
    - (C) growth factors, or components of a signal transduction pathway, that, when expressed may lead to cell proliferation;
- (e) a dealing involving, as host or vector, a micro-organism that has been implicated in, or has a history of causing, disease in humans, animals, plants or fungi, unless —
  - (i) the host/vector system is a system mentioned in Schedule 2 Part 2; or



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**cl. 2.1**

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- (k) a dealing producing, in each vessel containing the resultant GMO culture, more than 10 litres of that culture, other than a dealing mentioned in Part 1 item 1.1(f);
- (l) a dealing that is inconsistent with a policy principle issued by the Ministerial Council;
- (m) a dealing involving the intentional introduction of a GMO into a human being;
- (n) a dealing involving a genetically modified pathogenic organism, if the practical treatment of any disease or abnormality caused by the organism would be impaired by the genetic modification.





## Notes

<sup>†</sup> ~~\_\_\_\_\_~~ This is a compilation of the *Gene Technology Regulations 2007*. ~~The following and includes amendments made by other written laws. For provisions that have come into operation see the compilation table contains information about those regulations.~~

## Compilation table

Citation	<del>Gazetta</del> <u>Publi</u> <u>shed</u>	Commencement
<i>Gene Technology Regulations 2007</i>	27 Jul 2007 p. 3691-732	28 Jul 2007 (see r. 2 and <i>Gazette</i> 27 Jul 2007 p. 3735)

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**Notes**                      Compilation table

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<a href="#"><u>Gene Technology Amendment Regulations 2020</u></a>	<a href="#"><u>SL 2020/145</u></a> <a href="#"><u>28 Aug 2020</u></a>	<a href="#"><u>r. 1 and 2: 28 Aug 2020</u></a> <a href="#"><u>(see r. 2(a));</u></a> <a href="#"><u>Regulations other than r. 1 and 2:</u></a> <a href="#"><u>29 Aug 2020 (see r. 2(b))</u></a>
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