

Gene Technology Regulations 2001

Statutory Rules 2001 No. 106 as amended

made under the

Gene Technology Act 2000

This compilation was prepared on 1 September 2011 taking into account amendments up to SLI 2011 No. 73

Prepared by the Office of Legislative Drafting and Publishing, Attorney-General's Department, Canberra

Contents

Part 1		Preliminary	
	1 2 3	Name of Regulations [<i>see</i> Note 1] Commencement [<i>see</i> Note 1] Definitions	5 5 5
Part 2		Interpretation and general operation	
	4 5	Techniques not constituting gene technology Organisms that are not genetically modified organisms	9 9
Part 2A		Gene Technology Regulator	
	5A	Functions of the Regulator	10
Part 3		Dealings with GMOs	
Division 1		Licensing system	
	6	Dealings exempt from licensing	11
	7	Application for licence — prescribed fee	11
	8	Time limit for deciding an application	11
	9	Prescribed authorities	13
	9A	Risks posed by dealings proposed to be authorised by licence	14
	10	Risk assessment — matters to be taken into account	14
	11	Prescribed conditions of licence	15
	11A	Time limit for deciding variation application	15
Division 2		Notifiable low risk dealings	
	12	Notifiable low risk dealings	15
	13	Requirements for undertaking notifiable low risk dealings	16
	13A	Time limits for stopping notifiable low risk dealings	18
	13B	Requirements for Institutional Biosafety Committees about records of assessments of	
		notifiable low risk dealing proposals	18

2

			Page
	13C	Information to be kept or given to the Regulator by persons or accredited organisations	19
Division 3		Certification and accreditation	
	14	Regulator to decide certification application within 90 days	20
	15	Application for certification — failure to provide section 85 information	21
	16	Regulator to decide accreditation application within 90 days	21
	17	Application for accreditation — failure to provide section 93 information	22
Part 4		Gene Technology Technical Advisory Committee	
Division 1		Conditions of appointment	
	18	GTTAC members and advisers — term of appointment	23
	19	GTTAC members and advisers — resignation	23
	20	GTTAC members — disclosure of interests	23
	21	GTTAC members and advisers — termination of appointment	24
	22	GTTAC members — leave of absence	25
	23	Expert advisers — disclosure of interests	25
Division 2		Committee procedures	
	24	Committee procedures generally	26
	25	Committee meetings	26
	26	Presiding member	27
	27	Quorum	27
	28	Voting	27
D	29	Records and Reports	28
Division 3		Subcommittees	
	30	Operation of subcommittees	28
Part 5		Ethics and Community Committee	
	31	Ethics and Community Committee — conditions of appointment	29
	32	Ethics and Community Committee — Committee	00
		procedures	29

Gene Technology Regulations 2001

			Page
	33	Ethics and Community Committee — operation of subcommittees	30
Part 7		Miscellaneous	
	37	Reviewable State decisions	31
	38	Review of decisions	31
	39	Record of GMO and GM Product Dealings	31
	40	Inspector identity card	32
Schedule 1A		Techniques that are not gene technology	33
Schedule 1		Organisms that are not genetically modified	
		organisms	34
Schedule 2		Dealings exempt from licensing	35
Part 1		Exempt dealings	35
Part 2		Host/vector systems for exempt dealings	37
Part 3		Definitions	40
Schedule 3		Notifiable low risk dealings in relation to a GMO	41
Part 1		Notifiable low risk dealings suitable for at least	
		physical containment level 1	41
Part 2		Notifiable low risk dealings suitable for at least physical containment level 2 or 3	42
Part 3		Dealings that are not notifiable low risk dealings	47
Notes			51

Gene Technology Regulations 2001

Part 1 Preliminary

1 Name of Regulations [see Note 1]

These Regulations are the Gene Technology Regulations 2001.

2 Commencement [see Note 1]

These Regulations commence on the date of commencement of provisions of the Act to which subsection 2 (3) of the Act apply.

3 Definitions

In these Regulations:

Act means the Gene Technology Act 2000.

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.

AS/NZS 2243.3:2010 means the Australian/New Zealand Standard Safety in laboratories Part 3: Microbiological safety and containment, jointly published by Standards Australia and Standards New Zealand, as in force on 1 September 2011.

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 Part 3 of that Schedule.

expert adviser means:

- (a) in Part 4 an expert adviser appointed under subsection 102 (1) of the Act; and
- (b) in Part 5 an expert adviser appointed under subsection 112 (1) of the Act.

Gene Technology Regulations 2001

Regulation 3

genetically modified laboratory guinea pig means a laboratory strain of guinea pig of the species *Cavia porcellus* that has been modified by gene technology.

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 rabbit means a laboratory strain of rabbit of the species *Oryctolagus cuniculus* 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.

inspector means a person appointed by the Regulator under section 150 of the Act as an inspector.

known means known within the scientific community.

non-conjugative plasmid, for Schedule 2, has the meaning given in Part 3 of that Schedule.

non-vector system, for Schedule 2, has the meaning given in Part 3 of that Schedule.

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

oncogenic modification means a genetic modification capable of contributing to tumour formation, including modifications that cause at least 1 of the following:

- (a) defects in DNA proofreading and repair;
- (b) defects in chromosome maintenance;
- (c) defects in cell cycle checkpoint mechanisms;
- (d) uncontrolled cell proliferation;
- (e) resistance to apoptosis;
- (f) cellular immortalisation.

out of session, for regulation 25, has the meaning given in subregulation 25 (4).

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 an LD_{50} of less than 100 µg/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 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
- deal with
- environment
- Ethics and Community Committee
- facility
- Gene Technology Technical Advisory Committee
- GMO
- GM product
- Institutional Biosafety Committee

Gene Technology Regulations 2001

Regulation 3

- intentional release of the GMO into the environment (see section 11)
- notifiable low risk dealing
- Regulator.

Part 2 Interpretation and general operation

4 Techniques not constituting gene technology

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

5 Organisms that are not genetically modified organisms

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

Gene Technology Regulations 2001

Gene Technology Regulator Part 2A

Functions of the Regulator 5A

For paragraph 27 (1) of the Act, the Regulator has the function of making inspectors available to be appointed as inspectors under Division 7 of Part 3 of the National Health Security Act 2007.

10

Part 3 Dealings with GMOs

Division 1 Licensing system

6 Dealings exempt from licensing

- (1) For subsection 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 Part 1 of Schedule 2; and
 - (b) it does not involve a genetic modification other than a modification described in Part 1 of Schedule 2; and
 - (d) it does not involve an intentional release of the GMO into the environment.
- (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.

Note 1 A dealing affected by this regulation could be any of the forms of dealing mentioned in the definition of *deal with* in subsection 10(1) of the Act.

Note 2 Exemption from provisions of the Act does not preclude the application of other Commonwealth and State laws.

7 Application for licence — prescribed fee

Note At the commencement of the Regulations, no application fee is prescribed under subsection 40 (6) of the Act.

8 Time limit for deciding an application

- (1) For subsection 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 Division 3 of Part 5 of the Act applies 90 days after the day the application is received by the Regulator; or

Gene Technology Regulations 2001

- (b) for an application to which Division 4 of Part 5 of the Act applies:
 - (i) for a limited and controlled release application for which the Regulator is satisfied that the dealings proposed to be authorised by the licence do not pose significant risks to the health and safety of people or to the environment — 150 days after the day the application is received by the Regulator; and
 - (ii) for a limited and controlled release application for which the Regulator is satisfied that at least one of the dealings proposed to be authorised by the licence may pose significant risks to the health and safety of people or to the environment — 170 days after the day the application is received by the Regulator; and
 - (iii) in any other case 255 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 the 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 Ethics and Community 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 subsection 50 (3) or 52 (3) of the Act, or from the Ethics and Community 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.
- (4) In subregulation (1):

limited and controlled release application means an application for a licence to which section 50A of the Act applies.

9 Prescribed authorities

For paragraphs 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;
- (d) the Director, National Industrial Chemical Notification and Assessment Scheme under the *Industrial Chemical* (*Notification and Assessment*) Act 1989;
- (e) Australian Pesticides and Veterinary Medicines Authority;
- (f) Therapeutic Goods Administration, Department of Health and Aged Care.

9A Risks posed by dealings proposed to be authorised by licence

For paragraph 51 (1) (a) of the Act, the Regulator must have regard to the following matters:

- (a) the properties of the organism to which dealings proposed to be authorised by a licence relate before it became, or will become, a GMO;
- (b) the effect, or the expected effect, of the genetic modification that has occurred, or will occur, on the properties of the organism;
- (c) provisions for limiting the dissemination or persistence of the GMO or its genetic material in the environment;
- (d) the potential for spread or persistence of the GMO or its genetic material in the environment;
- (e) the extent or scale of the proposed dealings;
- (f) any likely impacts of the proposed dealings on the health and safety of people.

10 Risk assessment — matters to be taken into account

- (1) For paragraphs 51 (1) (g) and 51 (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.

Gene Technology Regulations 2001

(2) In taking into account a risk mentioned in subsection 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 At the commencement of the Regulations, no conditions are prescribed under paragraph 61 (b) of the Act.

11A Time limit for deciding variation application

- (1) For subsection 71 (7) of the Act, the Regulator must vary the licence, or refuse to vary the licence, within 90 days after the day an application for a variation of the licence is received by the Regulator.
- (2) For the 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 waiting for information that the applicant has been asked, in writing, to give.

Division 2 Notifiable low risk dealings

12 Notifiable low risk dealings

- (1) For subsection 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 Part 1 or 2 of Schedule 3 (other than a dealing also mentioned in Part 3 of Schedule 3); 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 A dealing affected by this regulation could be any of the forms of dealing mentioned in the definition of *deal with* in subsection 10(1) of the Act.

13 Requirements for undertaking notifiable low risk dealings

- (1) A person may undertake a notifiable low risk dealing only if:
 - (a) a person or an accredited organisation has prepared and submitted a written proposal for an Institutional Biosafety Committee to assess whether the dealing is a notifiable low risk dealing; and
 - (b) the Institutional Biosafety Committee has assessed the dealing to be a notifiable low risk dealing mentioned in Part 1 or 2 of Schedule 3; and
 - (c) the dealing undertaken is the dealing described in the Institutional Biosafety Committee's record of assessment of the proposal; and
 - (d) the dealing is only undertaken before the day mentioned in regulation 13A for the dealing; and
 - (e) the person is mentioned in the Institutional Biosafety Committee's record of assessment as having the appropriate training and experience to undertake the dealing; and
 - (f) the dealing is undertaken in facilities mentioned in the Institutional Biosafety Committee's record of assessment as being appropriate for the dealing; and
 - (g) the person keeps or can give, on request, a copy of the Institutional Biosafety Committee's record of assessment to an inspector; and
 - (h) the person does not compromise the containment of a GMO involved in the dealing; and
 - (i) the person undertakes the dealing in accordance with subregulations (2) and (3).

Note A person complies with paragraph (e) if the person is in a class of persons that an Institutional Biosafety Committee has included in the record of assessment as having the appropriate training and experience to

Gene Technology Regulations 2001

undertake the dealing. Similarly, a person complies with paragraph (f) if the facility in which the person undertakes the dealing is in a class of facilities that an Institutional Biosafety Committee has included in the record of assessment as being appropriate for the dealing.

- (2) A notifiable low risk dealing must be undertaken:
 - (a) for a kind of dealing mentioned in Part 1 of Schedule 3 in a facility certified by the Regulator to at least physical containment level 1 and that is appropriate for the dealing; or
 - (b) for a kind of dealing mentioned in Part 2 of Schedule 3:
 - (i) that is not a dealing mentioned in subparagraph (ii) — in a facility certified by the Regulator to at least physical containment level 2 and that is appropriate for the dealing; or
 - (ii) that involves a micro-organism that satisfies the criteria in AS/NZS 2243.3:2010 for classification as Risk Group 3 in a facility certified by the Regulator to at least physical containment level 3 and that is appropriate for the dealing; or
 - (c) in a facility that the Regulator has agreed in writing is a facility in which the dealing may be undertaken.
- (3) However, if a notifiable low risk dealing involves the transportation, storage or disposal of a GMO, the transportation, storage or disposal:
 - (a) may only be undertaken before the day mentioned in regulation 13A as being the day on or before which the dealing must stop being undertaken; and
 - (b) may happen outside a facility mentioned in subregulation (2), but in that case must be conducted in accordance with:
 - (i) the *Guidelines for the Transport, Storage and Disposal of GMOs*, as in force on 1 September 2011, that have been issued by the Regulator for this purpose under paragraph 27 (d) of the Act; or
 - (ii) transportation, storage or disposal requirements that the Regulator has agreed in writing are appropriate for the containment of the GMO.

(4) For paragraph (2) (c), the Regulator must consider the capacity of a facility to contain GMOs before deciding whether to agree, in writing, to a facility.

13A Time limits for stopping notifiable low risk dealings

For paragraph 13 (1) (d), the day on or before which the dealing described in the record of assessment of the dealing must stop being undertaken is:

- (a) the day 5 years after the date of assessment, if the dealing is assessed by an Institutional Biosafety Committee on or after 1 September 2011; and
- (b) 31 August 2016, if the dealing is assessed by an Institutional Biosafety Committee in the period 31 March 2008 to 31 August 2011 (inclusive); and
- (c) 31 March 2015, if the dealing is assessed by an Institutional Biosafety Committee before 31 March 2008.

Note A person will have to apply for, and obtain, a new assessment of the dealing as a notifiable low risk dealing from an Institutional Biosafety Committee to continue to undertake the dealing after the applicable day mentioned in this regulation.

13B Requirements for Institutional Biosafety Committees about records of assessments of notifiable low risk dealing proposals

An Institutional Biosafety Committee that has assessed a proposal as to whether a dealing is a notifiable low risk dealing must:

- (a) make a record of its assessment, in a form approved by the Regulator, that includes the following:
 - (i) the identifying name of the dealing to be undertaken that was given to the dealing by the person or accredited organisation proposing to undertake the dealing;
 - (ii) a description of the dealing to be undertaken;
 - (iii) its assessment whether the dealing is a notifiable low risk dealing mentioned in Part 1 or 2 of Schedule 3;

Gene Technology Regulations 2001

- (iv) if the Committee has assessed the dealing as being a notifiable low risk dealing mentioned in Part 1 or 2 of Schedule 3, the kind of notifiable low risk dealing that the dealing is, in terms of those Parts;
- (v) the date of the Committee's assessment of the dealing;
- (vi) the persons or classes of persons considered by the Committee to have the appropriate training and experience to undertake the dealing;
- (vii) the facilities or classes of facilities the Committee considers to be of the appropriate physical containment level and type for the dealing;
- (viii) the name of the Committee that assessed the proposal;
 - (ix) the name of the person or accredited organisation that submitted the proposal;
 - (x) the name of the person or accredited organisation proposing to undertake the dealing; and
- (b) give a copy of the record of assessment to the person or accredited organisation that submitted the proposal to the Committee.

13C Information to be kept or given to the Regulator by persons or accredited organisations

- (1) A person or an accredited organisation that has been given a copy of a record of assessment by an Institutional Biosafety Committee must, if the dealing has been assessed by the Committee as a notifiable low risk dealing, give the Regulator a record of the proposed dealing, in the form approved by the Regulator, that includes:
 - (a) the particulars, prescribed under regulation 39 (1) in relation to the dealing, to be included in the Record of GMO and GM Product Dealings; and
 - (b) the name of the Committee that assessed the dealing; and
 - (c) the name of the person or accredited organisation that submitted the proposal for assessment of the dealing to the Committee.

- (2) The record of the proposed dealing mentioned in subregulation (1) must be given to the Regulator in the financial year in which the Institutional Biosafety Committee made the assessment:
 - (a) by an accredited organisation in the annual report for the financial year to be given by the organisation to the Regulator; or
 - (b) by any other person in a report for the financial year to be given by the person to the Regulator, in the form approved by the Regulator.
- (3) A person or accredited organisation given a copy of a record of assessment by an Institutional Biosafety Committee must keep a copy of the Committee's record of assessment for 8 years after the date of the assessment.
- (4) The Regulator may at any time, by written notice, require from the following persons or organisations further information about how a notifiable low risk dealing is being undertaken, including information about a GMO being dealt with:
 - (a) the person or accredited organisation that submitted the proposal for assessment of the dealing;
 - (b) any other person involved with undertaking the dealing.
- (5) A person or organisation given a notice under subregulation (4) must, by the end of the period mentioned 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

- (1) For section 84 of the Act, the period within which the Regulator must consider, and decide, an application for certification of a facility is:
 - (a) 90 days after the day the application is received by the Regulator; or

- (b) if the Regulator has given the applicant a notice under subsection 85 (1) of the Act, 90 days plus the period beginning on the day the notice is given and ending when the required information is given to the Regulator.
- (2) For the purpose of determining the end of a period mentioned in subregulation (1), Saturdays, Sundays and public holidays in the Australian Capital Territory are not counted.

15 Application for certification — failure to provide section 85 information

If an applicant for certification fails to provide information required under subsection 85 (1) of the Act within the period specified in a notice given under subsection 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 A refusal to certify a facility is a reviewable decision (see Division 2 of Part 12 of the Act).

16 Regulator to decide accreditation application within 90 days

- (1) For subsection 92 (1) of the Act, the period within which the Regulator must consider, and decide, an application for accreditation of an organisation is:
 - (a) 90 days after the day the application is received by the Regulator; or
 - (b) if the Regulator has given the applicant a notice under subsection 93 (1) of the Act, 90 days plus the period beginning on the day the notice is given and ending when the required information is given to the Regulator.
- (2) For the purpose of determining the end of a period mentioned in subregulation (1), Saturdays, Sundays and public holidays in the Australian Capital Territory are not counted.

Gene Technology Regulations 2001

17 Application for accreditation — failure to provide section 93 information

If an applicant for accreditation fails to provide information required under subsection 93 (1) of the Act within the period specified in a notice given under subsection 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 A refusal to accredit an organisation is a reviewable decision (see Division 2 of Part 12 of the Act).

22

Part 4 Gene Technology Technical Advisory Committee

Division 1 Conditions of appointment

18 GTTAC members and advisers — term of appointment

- (1) The term of appointment of a member of the Gene Technology Technical Advisory Committee, or an expert adviser, is 3 years, or a lesser period specified in the instrument of appointment of the member or adviser.
- (2) A member or adviser may be reappointed for a further term or terms.

19 GTTAC members and advisers — resignation

A member of the Gene Technology Technical Advisory Committee, or an expert adviser, may resign by giving the Minister written notice of resignation.

20 GTTAC members — disclosure of interests

- (1) Before the Minister appoints a person as a member of the Gene Technology Technical Advisory Committee, the Minister must obtain from the person a declaration setting out all direct or indirect interests, pecuniary or otherwise, that the person is aware of having in a matter of a kind likely to be considered at a meeting of the Committee.
- (2) A member of the Gene Technology Technical Advisory Committee who is aware of having a direct or indirect interest, pecuniary or otherwise, in a matter being considered, or about to be considered, at a meeting of the Committee must, without delay, disclose the nature of the interest at, or before, the meeting of the Committee.

Gene Technology Regulations 2001

- (a) for subregulation (1) a matter likely to be considered at a meeting of the Committee; or
- (b) for subregulation (2) the matter being considered or about to be considered.
- (4) A disclosure under this regulation must be recorded in the minutes of the meeting and the member must not:
 - (a) be present during any deliberation of the Committee about the matter, except to give information requested by the Committee; or
 - (b) take part in any decision of the Committee about that matter.

21 GTTAC members and advisers — termination of appointment

- (1) The Minister may terminate the appointment of a member of the Gene Technology Technical Advisory Committee, or an expert adviser, for misbehaviour (including failure to disclose an interest) or physical or mental incapacity:
 - (a) in the case of the chairperson of the Committee with the agreement of a majority of jurisdictions; or
 - (b) in any other case on the initiative of the Minister.
- (2) The Minister must terminate a member's appointment if the member:
 - (a) becomes bankrupt, applies to take the benefit of any law for the relief of bankrupt or insolvent debtors, compounds with his or her creditors or makes an assignment of his or her remuneration for their benefit; or
 - (b) fails to fulfil his or her obligations, as a member, in enabling the Committee to comply with section 101 of the Act; or
 - (c) fails to attend for 3 consecutive attendance days of the Committee, except with leave of absence granted under regulation 22.

Gene Technology Regulations 2001

Note Under section 27A of the *Administrative Appeals Tribunal Act 1975*, a decision-maker must give to persons whose interests are affected by the making of the decision, notice of the decision and of their right to have the decision reviewed. In notifying such a person, the decision-maker must have regard to the Code of Practice determined under section 27B of that Act (see *Gazette* No. S 432, 7 December 1994), which is accessible on the Internet at:

http://scaleplus.law.gov.au/html/instruments/0/14/0/IN000020.htm.

22 GTTAC members — leave of absence

- (1) The Minister may grant the Chairperson of the Gene Technology Technical Advisory Committee leave of absence.
- (2) The Chairperson may grant a member of the Gene Technology Technical Advisory Committee leave of absence.

23 Expert advisers — disclosure of interests

- (1) Before the Minister appoints a person as an expert adviser to the Gene Technology Technical Advisory Committee, the Minister must obtain from the person a declaration setting out all direct or indirect interests, pecuniary or otherwise, that the person is aware of having in a matter of a kind likely to be considered at a meeting of the Committee.
- (2) An expert adviser who is aware of having a direct or indirect interest, pecuniary or otherwise, in a matter being considered, or about to be considered, at a meeting of the Committee for which he or she is providing advice must, without delay, disclose the nature of the interest at, or before, the meeting of the Committee.
- (3) Disclosure must include interests that could be perceived to represent a possible conflict of interest in relation to:
 - (a) for subregulation (1) a matter likely to be considered at a meeting of the Committee; or
 - (b) for subregulation (2) the matter being considered or about to be considered.
- (4) A disclosure under this regulation must be recorded in the minutes of the meeting.

Part 4

Division 2

Division 2 Committee procedures

24 Committee procedures generally

In performing its functions, the Gene Technology Technical Advisory Committee:

- (a) must act according to these Regulations; and
- (b) must act with as little formality and as quickly as the requirements of these Regulations, and a proper consideration of the issues before the Committee, allow; and
- (c) may obtain information about an issue in any way it considers appropriate, subject to any direction in a request from the Regulator or Ministerial Council about the extent to which, or manner in which, information is to be obtained.

25 Committee meetings

- (1) The Chairperson of the Gene Technology Technical Advisory Committee may, by written notice to the Committee, direct the Committee to hold a meeting:
 - (a) at the time and place stated in the notice; and
 - (b) to deal with specified matters in the manner stated in the notice.
- (2) In each year, the Committee may have as many meetings (other than meetings by videoconference or teleconference) as:
 - (a) before the beginning of the year the Regulator and the Chairperson have agreed may be held; and
 - (b) the Regulator and the Chairperson agree should be additionally held.
- (3) If the Chairperson of the Committee considers it appropriate and efficient in the circumstances, the Committee may be directed:
 - (a) to meet, and resolve decisions, by videoconference or teleconference; and
 - (b) to meet out of session.

Gene Technology Regulations 2001

(4) For this regulation:

out of session, in relation to a meeting, means a meeting in which the members take part by correspondence, electronic mail, telephone or in any other way that does not involve formal simultaneous meeting and voting.

(5) Subject to these Regulations, the procedure of a meeting is as decided by the Committee.

26 Presiding member

- (1) At a meeting of the Gene Technology Technical Advisory Committee, the Chairperson of the Committee must:
 - (a) preside; or
 - (b) nominate, in writing, a member of the Committee (other than a member to whom paragraph 100 (7A) (a) or (b) of the Act applies) to preside.
- (2) If the Chairperson is temporarily absent from a meeting, the members present must choose a member to preside in the Chairperson's absence.

27 Quorum

At a meeting of the Gene Technology Technical Advisory Committee, a quorum exists if half of the members appointed under subsection 100 (2) of the Act are present.

28 Voting

- (1) A decision of the Gene Technology Technical Advisory Committee is made by a majority of the members present, and voting for the decision, at a Committee meeting.
- (2) The member presiding at a Committee meeting has a deliberative vote and also has a casting vote in the event of an equality of votes by members present.

Gene Technology Regulations 2001

29 Records and Reports

- (1) The Gene Technology Technical Advisory Committee must keep a record of its proceedings, and must give to the Regulator a copy of each resolution passed by the Committee.
- (2) Copies of resolutions are to be maintained by the Regulator in a form accessible to the public, except to the extent that information in a resolution is considered by the Regulator to be confidential commercial information.
- (3) The Committee must prepare any other report about its activities that is requested by the Ministerial Council or the Regulator.

Division 3 Subcommittees

30 Operation of subcommittees

- (1) Regulations 24, 25, 26 and 28 apply to a subcommittee established under subsection 105 (1) of the Act as if a reference in those regulations to the Gene Technology Technical Advisory Committee were a reference to the subcommittee.
- (2) At a meeting of a subcommittee, a quorum exists if half of the members of the subcommittee are present.
- (3) A subcommittee must keep a record of its proceedings, and must give to the Gene Technology Technical Advisory Committee a copy of each resolution passed by the subcommittee.

Gene Technology Regulations 2001

Part 5 Ethics and Community Committee

31 Ethics and Community Committee — conditions of appointment

Division 1 of Part 4 applies to the conditions of appointment of a member of the Ethics and Community Committee, or an expert adviser, as if:

- (a) a reference to the Gene Technology Technical Advisory Committee were a reference to the Ethics and Community Committee; and
- (b) a reference to a member of the Gene Technology Technical Advisory Committee were a reference to a member of the Ethics and Community Committee; and
- (c) the reference, in paragraph 21 (2) (b), to section 101 of the Act were a reference to section 107 of the Act.

32 Ethics and Community Committee — Committee procedures

Division 2 of Part 4 applies to the procedures of the Ethics and Community Committee as if:

- (a) a reference to the Gene Technology Technical Advisory Committee were a reference to the Ethics and Community Committee; and
- (b) a reference to a member or Chairperson of the Gene Technology Technical Advisory Committee were a reference to a member or Chairperson of the Ethics and Community Committee; and
- (c) the reference, in paragraph 26 (1) (b), to paragraph 100 (7A) (a) or (b) of the Act were a reference to paragraph 108 (4) (a) or (b) of the Act; and
- (d) the reference, in regulation 27, to subsection 100 (2) of the Act were a reference to subsection 108 (1) of the Act.

Regulation 33

33 Ethics and Community Committee — operation of subcommittees

- (1) Regulations 24, 25, 26 and 28 apply to a subcommittee established under subsection 111 (1) of the Act as if a reference in those regulations to the Gene Technology Technical Advisory Committee were a reference to the subcommittee.
- (2) At a meeting of a subcommittee, a quorum exists if half of the members of the subcommittee are present.
- (3) A subcommittee must keep a record of its proceedings, and must give to the Ethics and Community Committee a copy of each resolution passed by the subcommittee.

30

Part 7 Miscellaneous

37 Reviewable State decisions

Note At the commencement of these Regulations, no decisions of the Regulator are reviewable State decisions under section 19 of the Act.

38 Review of decisions

Subject to the Administrative Appeals Tribunal Act 1975, a person whose interests are affected by a decision of the Minister under regulation 21, or that regulation as applied to Part 5 of these Regulations, may apply to the Administrative Appeals Tribunal for review of the decision.

39 Record of GMO and GM Product Dealings

- (1) For subsection 138 (4) 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 Part 1 or 2 of Schedule 3 the kind of notifiable low risk dealing proposed;
 - (c) the identifying name given to the proposed undertaking by the organisation;
 - (d) the date of assessment by an Institutional Biosafety Committee that the dealing is a notifiable low risk dealing.
- (2) For subsection 138 (5) 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* (that is, whichever of the following Acts is applicable):
 - (A) Agricultural and Veterinary Chemicals (Administration) Act 1992;

Gene Technology Regulations 2001

Regulation 40

- (B) Australia New Zealand Food Authority Act 1991;
- (C) Industrial Chemicals (Notification and Assessment) Act 1989;
- (D) Therapeutic Goods Act 1989; 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.

40 Inspector identity card

For paragraph 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.

Schedule 1A Techniques that are not gene technology

(regulation 4)

Item	Description of technique
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.
	Examples
	Examples of natural processes include conjugation, transduction, transformation and transposon mutagenesis.

_

Gene Technology Regulations 2001

Schedule 1 Organisms that are not genetically modified organisms

(regulation 5)

ltem	Description of organism
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 a 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 2243.3:2010 for classification as Risk Group 1; and
	 (ii) are known to exchange nucleic acid by a natural physiological process; and
	(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.

34

Schedule 2 Dealings exempt from licensing

(regulation 6)

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

Part 1 Exempt dealings

Item Description of dealing

- 2 A dealing with a genetically modified *Caenorhabditis elegans*, unless:
 - (a) an *advantage* is conferred on the animal by the genetic modification; or
 - (b) as a result of the genetic modification, the animal is capable of secreting or producing an infectious agent.
- 3 A dealing with an animal into which genetically modified somatic cells have been introduced, if:
 - (a) the somatic cells are not capable of giving rise to infectious agents as a result of the genetic modification; and
 - (b) the animal is not infected with a virus that is capable of recombining with the genetically modified nucleic acid in the somatic cells.
- 3A A dealing with an animal whose somatic cells have been genetically modified *in vivo* by a replication defective viral vector, if:
 - (a) the *in vivo* modification occurred as part of a previous dealing; and
 - (b) the replication defective viral vector is no longer in the animal; and
 - (c) no germ line cells have been genetically modified; and
 - (d) the somatic cells cannot give rise to infectious agents as a result of the genetic modification; and
 - (e) the animal is not infected with a virus that can recombine with the genetically modified nucleic acid in the somatic cells of the animal.

ltem	Description of dealing			
4	 Subject to subitem (2), a dealing involving a host/vector system mentioned in Part 2 of this Schedule and producing no more than 25 litres of GMO culture in each vessel containing the resultant culture. 			
	(2) The donor nucleic acid:			
	(a) must meet either of the following requirements:			
	(i) it must not be derived from organisms implicated in, or with a history of causing, disease in otherwise healthy:			
	(A) human beings; or			
	(B) animals; or			
	(C) plants; or(D) fungi;			
	 (ii) it must be characterised and the information derived from its characterisation show that it is unlikely to increase the capacity of the host or vector to cause harm; 			
	Example			
	Donor nucleic acid would not comply with subparagraph (ii) if its characterisation shows that, in relation to the capacity of the host or vector to cause harm, it:			
	(a) provides an advantage; or			
	(b) adds a potential host species or mode of transmission; or(c) increases its virulence, pathogenicity or transmissibility; and			
	(b) must not code for a toxin with an LD_{50} of less than 100 µg/kg; and			
	(c) must not code for a toxin with an LD_{50} of 100 µg/kg or more, 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 1 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 during the dealing; and			
	(ii) cannot restore replication competence to the vector.			
36	Gene Technology Regulations 2001			

Item	Description of dealing
5	A dealing involving shot-gun cloning, or the preparation of a cDNA library, in a host/vector system mentioned in item 1 of Part 2 of this Schedule, if the donor nucleic acid is not derived from either:
	(a) a pathogen; or
	(b) a toxin-producing organism.

Part 2 Host/vector systems for exempt dealings

Item	Class	Host	Ve	ector
1	Bacteria	 <i>Escherichia coli</i> K12, <i>E. coli</i> B, <i>E. coli</i> C or <i>E. coli</i> Nissle 1917 any derivative that does not contain: (a) generalised transducing phages; or (b) genes able to complement the conjugation defect in a non-conjugative plasmid 	2.	Non-conjugative plasmids Bacteriophage (a) lambda (b) lambdoid (c) Fd or F1 (eg M13) None (non-vector systems)
		 Bacillus — specified species — asporogenic strains with a reversion frequency of less than 10⁻⁷: (a) B. amyloliquefaciens (b) B. licheniformis (c) B. pumilus (d) B. subtilis (e) B. thuringiensis 	2.	Non-conjugative plasmids Plasmids and phages whose host range does not include <i>B. cereus, B. anthracis</i> or any other pathogenic strain of <i>Bacillus</i> None (non-vector systems)
		<i>Pseudomonas putida</i> — strain KT 2440		Non-conjugative plasmids including certified plasmids: pKT 262, pKT 263, pKT 264 None (non-vector systems)

Gene Technology Regulations 2001

Item	Class	Host	Ve	ector
		Streptomyces — specified	1.	Non-conjugative plasmids
		species:	2. Certified plasmids: SCP	Certified plasmids: SCP2,
		(a) S. aureofaciens		SLP1, SLP2, PIJ101 and
		(b) S. coelicolor		derivatives
		(c) S. cyaneus	3.	Actinophage phi C31 and derivatives
		(d) S. griseus		
		(e) S. lividans (f) S. paraulus	4.	None (non-vector systems)
		(f) S. parvulus (g) S. rimosus		
		(g) S. rimosus (h) S. venezuelae		
		(II) 5. venezuetae		
		Agrobacterium radiobacter	1.	Non-tumorigenic disarmed
		Agrobacterium rhizogenes — disarmed strains		Ti plasmid vectors, or Ri plasmid vectors
		Agrobacterium tumefaciens — disarmed strains	2.	None (non-vector systems)
		Lactobacillus	1.	Non-conjugative plasmids
		Lactococcus lactis	2.	None (non-vector systems)
		Oenococcus oeni syn. Leuconostoc oeni		
		Pediococcus		
		Photobacterium angustum		
		Pseudoalteromonas tunicata		
		<i>Rhizobium</i> (including the genus <i>Allorhizobium</i>)		
		Sphingopyxis alaskensis syn. Sphingomonas alaskensis		
		Streptococcus thermophilus		
		<i>Synechococcus</i> — specified strains:		
		(a) PCC 7002		
		(b) PCC 7942		
		(c) WH 8102		
		<i>Synechocystis</i> species — strain PCC 6803		
		Vibrio cholerae CVD103-HgR		

Gene Technology Regulations 2001

Dealings exempt from licensingSchedule 2Host/vector systems for exempt dealingsPart 2

2	Fungi			
	Fungi	Kluyveromyces lactis Neurospora crassa — laboratory strains Pichia pastoris Saccharomyces cerevisiae Schizosaccharomyces pombe Trichoderma reesei Yarrowia lipolytica		All vectors None (non-vector systems)
3	Slime moulds	Dictyostelium species	1.	<i>Dictyostelium</i> shuttle vectors, including those based on the endogenous plasmids Ddp1 and Ddp2
			2.	None (non-vector systems)
4	Tissue	Any of the following if they	1.	Non-conjugative plasmids
	culture	 cannot spontaneously generate a whole animal: (a) animal or human cell cultures (including packaging cell lines); (b) isolated cells, isolated tissues or isolated organs, whether animal or human; (c) early non-human mammalian embryos cultured <i>in vitro</i> 	3.	Non-viral vectors, or replication defective viral vectors unable to transduce human cells Baculovirus (<i>Autographa</i> <i>californica</i> nuclear polyhedrosis virus), polyhedrin minus None (non-vector systems)
		Either of the following if they are not intended, and are not likely without human intervention, to vegetatively propagate, flower or regenerate into a whole plant: (a) plant cell cultures; (b) isolated plant tissues or organs		Non-tumorigenic disarmed Ti plasmid vectors, or Ri plasmid vectors, in Agrobacterium tumefaciens, Agrobacterium radiobacter or Agrobacterium rhizogenes Non-pathogenic viral vectors
			2	None (non-vector systems)

Gene Technology Regulations 2001

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 in which donor nucleic acid is or was introduced into a host cell:

- (a) in the absence of a nucleic acid-based vector; or
- (b) using a nucleic acid-based vector in the course of a previous dealing and the vector is:
 - (i) no longer present; or
 - (ii) present but cannot be remobilised from a host cell.

Example 1

A system mentioned in paragraph (a) might involve the use of electroporation or particle bombardment.

Example 2

A system mentioned in paragraph (b) might involve cells that were transduced with a replication defective retroviral vector in which no vector particles remain.

Gene Technology Regulations 2001

Schedule 3 Notifiable low risk dealings in relation to a GMO

(regulations 12 and 13)

Part 1 Notifiable low risk dealings suitable for at least physical containment level 1

Note Because of subregulation 12 (1), a dealing mentioned in this Part is not a notifiable low risk dealing if it is also a dealing of a kind mentioned in Part 3.

1.1 Kinds of dealings suitable for at least physical containment level 1

The following kinds of notifiable low risk dealings must be undertaken, unless paragraph 13 (2) (c) or 13 (3) (b) applies, in facilities certified to at least physical containment level 1 and that are appropriate for the dealings:

- (a) a dealing involving a genetically modified laboratory guinea pig, a genetically modified laboratory mouse, a genetically modified laboratory rabbit or a genetically modified laboratory rat, unless:
 - (i) an advantage is conferred on the animal by the genetic modification; or
 - (ii) the animal is capable of secreting or producing an infectious agent as a result of the genetic modification;
- (c) a dealing involving a replication defective vector derived from *Human adenovirus* or *Adeno associated virus* in a host mentioned in item 4 of Part 2 of Schedule 2, if the donor nucleic acid:
 - (i) cannot restore replication competence to the vector; and
 - (ii) does not:
 - (A) confer an oncogenic modification in humans; or

Gene Technology Regulations 2001

(B) encode a protein with immunomodulatory activity in humans.

Part 2 Notifiable low risk dealings suitable for at least physical containment level 2 or 3

Note Because of subregulation 12 (1), a dealing mentioned in this Part is not a notifiable low risk dealing if it is also a dealing of a kind mentioned in Part 3.

2.1 Kinds of dealings suitable for at least physical containment level 2

The following kinds of notifiable low risk dealings must be undertaken, unless paragraph 13 (2) (c) or 13 (3) (b) applies, in facilities certified to at least physical containment level 2 and that are appropriate for the dealings:

- (a) a dealing involving whole animals (including non-vertebrates) that:
 - (i) involves genetic modification of the genome of the oocyte or zygote or early embryo by any means to produce a novel whole organism; and
 - (ii) does not involve any of the following:
 - (A) a genetically modified laboratory guinea pig;
 - (B) a genetically modified laboratory mouse;
 - (C) a genetically modified laboratory rabbit;
 - (D) a genetically modified laboratory rat;
 - (E) a genetically modified *Caenorhabditis elegans*;
- (aa) a dealing involving a genetically modified laboratory guinea pig, a genetically modified laboratory mouse, a genetically modified laboratory rabbit, a genetically modified laboratory rat or a genetically modified *Caenorhabditis elegans*, if:
 - (i) the genetic modification confers an advantage on the animal; and
 - (ii) the animal is not capable of secreting or producing an infectious agent as a result of the genetic modification;

Gene Technology Regulations 2001

- (b) a dealing involving a genetically modified plant;
- (c) a dealing involving a host/vector system not mentioned in paragraph 1.1 (c) or Part 2 of Schedule 2, if neither host nor vector has been implicated in, or has a history of causing, disease in otherwise healthy:
 - (i) human beings; or
 - (ii) animals; or
 - (iii) plants; or
 - (iv) fungi;
- (d) a dealing involving a host and vector not mentioned as a host/vector system in Part 2 of Schedule 2, if:
 - (i) the host or vector has been implicated in, or has a history of causing, disease in otherwise healthy:
 - (A) human beings; or
 - (B) animals; or
 - (C) plants; or
 - (D) fungi; and
 - (ii) the donor nucleic acid is characterised; and
 - (iii) the characterisation of the donor nucleic acid shows that it is unlikely to increase the capacity of the host or vector to cause harm;

Example

Donor nucleic acid would not comply with subparagraph (iii) if, in relation to the capacity of the host or vector to cause harm, it:

- (a) provides an advantage; or
- (b) adds a potential host species or mode of transmission; or
- (c) increases its virulence, pathogenicity or transmissibility.
- (e) a dealing involving a host/vector system mentioned in Part 2 of Schedule 2, if the donor nucleic acid:
 - (i) encodes a pathogenic determinant; or
 - (ii) is uncharacterised nucleic acid from an organism that has been implicated in, or has a history of causing, disease in otherwise healthy:
 - (A) human beings; or
 - (B) animals; or
 - (C) plants; or

Gene Technology Regulations 2001

(D) fungi;

- (f) a dealing involving a host/vector system mentioned in Part 2 of Schedule 2 and producing more than 25 litres of GMO culture in each vessel containing the resultant culture, if:
 - (i) the dealing is undertaken in a facility that is certified by the Regulator as a large scale facility; and
 - (ii) the donor nucleic acid satisfies the conditions set out in subitem 4 (2) of Part 1 of Schedule 2;
- (g) a dealing involving complementation of knocked-out genes, if the complementation is unlikely to increase the capacity of the GMO to cause harm compared to the capacity of the parent organism before the genes were knocked out;

Example

A dealing would not comply with paragraph (g) if it involved complementation that, in relation to the parent organism:

- (a) provides an advantage; or
- (b) adds a potential host species or mode of transmission; or
- (c) increases its virulence, pathogenicity or transmissibility.
- (h) a dealing involving shot-gun cloning, or the preparation of a cDNA library, in a host/vector system mentioned in item 1 of Part 2 of Schedule 2, if the donor nucleic acid is derived from either:
 - (i) a pathogen; or
 - (ii) a toxin-producing organism;
- (i) a dealing involving the introduction of a replication defective viral vector unable to transduce human cells into a host not mentioned in Part 2 of Schedule 2, if the donor nucleic acid cannot restore replication competence to the vector;
- (j) a dealing involving the introduction of a replication defective non-retroviral vector able to transduce human cells, other than a dealing mentioned in paragraph 1.1 (c), into a host mentioned in Part 2 of Schedule 2, if the donor nucleic acid cannot restore replication competence to the vector;

Gene Technology Regulations 2001

- (k) a dealing involving the introduction of a replication defective non-retroviral vector able to transduce human cells into a host not mentioned in Part 2 of Schedule 2, if:
 - (i) the donor nucleic acid cannot restore replication competence to the vector; and
 - (ii) the donor nucleic acid does not:
 - (A) confer an oncogenic modification in humans; or
 - (B) encode a protein with immunomodulatory activity in humans;
- (1) a dealing involving the introduction of a replication defective retroviral vector able to transduce human cells into a host mentioned in Part 2 of Schedule 2, if:
 - (i) all viral genes have been removed from the retroviral vector so that it cannot replicate or assemble into a virion without these functions being supplied *in trans*; and
 - (ii) viral genes needed for virion production in the packaging cell line are expressed from independent, unlinked loci with minimal sequence overlap with the vector to limit or prevent recombination; and
 - (iii) either:
 - (A) the retroviral vector includes a deletion in the Long Terminal Repeat sequence of DNA that prevents transcription of genomic RNA following integration into the host cell DNA; or
 - (B) the packaging cell line and packaging plasmids express only viral genes *gagpol*, *rev* and an envelope protein gene, or a subset of these;
- (m) a dealing involving the introduction of a replication defective retroviral vector able to transduce human cells into a host not mentioned in Part 2 of Schedule 2, if:
 - (i) the donor nucleic acid does not:
 - (A) confer an oncogenic modification in humans; or

Gene Technology Regulations 2001

- (B) encode a protein with immunomodulatory activity in humans; and
- (ii) all viral genes have been removed from the retroviral vector so that it cannot replicate or assemble into a virion without these functions being supplied *in trans*; and
- (iii) viral genes needed for virion production in the packaging cell line are expressed from independent, unlinked loci with minimal sequence overlap with the vector to limit or prevent recombination; and
- (iv) either:
 - (A) the retroviral vector includes a deletion in the Long Terminal Repeat sequence of DNA that prevents transcription of genomic RNA following integration into the host cell DNA; or
 - (B) the packaging cell line and packaging plasmids express only viral genes *gagpol*, *rev* and an envelope protein gene, or a subset of these.

2.2 Kinds of dealings suitable for at least physical containment level 3

Any kind of dealing mentioned in this Part involving a micro-organism that satisfies the criteria in AS/NZS 2243.3:2010 for classification as Risk Group 3 must be undertaken, unless paragraph 13 (2) (c) or (3) (b) applies, in facilities that are:

- (a) certified to at least physical containment level 3; and
- (b) appropriate for the dealing.

46

Note 1 The following list qualifies the list in Parts 1 and 2, and is not an exhaustive list of dealings that are not notifiable low risk dealings.

Note 2 A dealing that is not a notifiable low risk dealing, or an exempt dealing, can only be undertaken by a person who is licensed, under the Act, for the dealing (see Act, section 32).

3.1 Kinds of dealings

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

- a dealing (other than a dealing mentioned in paragraph (a) 2.1 (h)) involving cloning of nucleic acid encoding a toxin having an LD₅₀ of less than 100 μ g/kg;
- a dealing involving high level expression of toxin genes, (b) even if the LD_{50} is 100 µg/kg or more;
- a dealing (other than a dealing mentioned in paragraph (c) 2.1 (h)) involving cloning of uncharacterised nucleic acid from a toxin-producing organism;
- a dealing involving the introduction of a replication (d) defective viral vector into a host not mentioned in Part 2 of Schedule 2, other than a dealing mentioned in paragraph 2.1 (i), if the donor nucleic acid:
 - (i) confers an oncogenic modification in humans; or
 - encodes a protein with immunomodulatory activity (ii) in humans:
- (e) a dealing involving a replication competent virus or viral vector, other than a vector mentioned in Part 2 of Schedule 2, if the donor nucleic acid:
 - confers an oncogenic modification in humans; or (i)
 - (ii) encodes a protein with immunomodulatory activity in humans:
- (f) a dealing involving, as host or vector, a micro-organism, if:
 - (i) the micro-organism has been implicated in, or has a history of causing, disease in otherwise healthy:

Gene Technology Regulations 2001

47

Part 3

- (A) human beings; or
- (B) animals; or
- (C) plants; or
- (D) fungi; and
- (ii) none of the following sub-subparagraphs apply:
 - (A) the host/vector system is a system mentioned in Part 2 of Schedule 2;
 - (B) the donor nucleic acid is characterised and its characterisation shows that it is unlikely to increase the capacity of the host or vector to cause harm;
 - (C) the dealing is a dealing mentioned in paragraph 2.1 (g);

Example

Donor nucleic acid would not comply with sub-subparagraph (B) if, in relation to the capacity of the host or vector to cause harm, it:

(a) provides an advantage; or

(b) adds a potential host species or mode of transmission; or

(c) increases its virulence, pathogenicity or transmissibility.

- (g) a dealing involving the introduction, into a micro-organism, of nucleic acid encoding a pathogenic determinant, unless:
 - (i) the dealing is a dealing mentioned in paragraph 2.1 (g); or
 - (ii) the micro-organism is a host mentioned in Part 2 of Schedule 2;
- (h) a dealing involving the introduction into a micro-organism, other than a host mentioned in Part 2 of Schedule 2, of genes whose expressed products are likely to increase the capacity of the micro-organisms to induce an autoimmune response;
- (i) a dealing involving use of a viral or viroid genome, or fragments of a viral or viroid genome, to produce a novel replication competent virus with an increased capacity to cause harm compared to the capacity of the parent or donor organism;

Gene Technology Regulations 2001

Example

A dealing would comply with paragraph (i) if it produces a novel replication competent virus that has a higher capacity to cause harm to any potential host species than the parent organism because the new virus has:

- (a) an advantage; or
- (b) a new potential host species or mode of transmissibility; or
- (c) increased virulence, pathogenicity or transmissibility.
- (j) a dealing, other than a dealing mentioned in paragraph
 2.1 (l) or (m), with a replication defective retroviral vector (including a lentiviral vector) able to transduce human cells;
- (k) a dealing involving a genetically modified animal, plant or fungus that is capable of secreting or producing infectious agents as a result of the genetic modification;
- (l) a dealing producing, in each vessel containing the resultant GMO culture, more than 25 litres of that culture, other than a dealing mentioned in paragraph 2.1 (f);
- (m) a dealing that is inconsistent with a policy principle issued by the Ministerial Council;
- (n) a dealing involving the intentional introduction of a GMO into a human being, unless the GMO:
 - (i) is a human somatic cell; and
 - (ii) cannot secrete or produce infectious agents as a result of the genetic modification; and
 - (iii) if it was generated using viral vectors:
 - (A) has been tested for the presence of viruses likely to recombine with the genetically modified nucleic acid in the somatic cells; and
 - (B) the testing did not detect a virus mentioned in sub-subparagraph (A); and
 - (C) the viral vector used to generate the GMO as part of a previous dealing is no longer present in the somatic cells;
- (o) 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;

Gene Technology Regulations 2001

Schedule 3 Part 3

(p) a dealing involving a micro-organism that satisfies the criteria in AS/NZS 2243.3:2010 for classification as Risk Group 4.

50

Notes to the Gene Technology Regulations 2001

Note 1

The *Gene Technology Regulations 2001* (in force under the *Gene Technology Act 2000*) as shown in this compilation comprise Statutory Rules 2001 No. 106 amended as indicated in the Tables below.

For all relevant information pertaining to application, saving or transitional provisions *see* Table A.

Table of Instruments

Year and Number	Date of notification in <i>Gazette</i> or FRLI registration	Date of commencement	Application, saving or transitional provisions
2001 No. 106	31 May 2001	22 June 2001 (see r. 2)	
2006 No. 314	1 Dec 2006 (<i>see</i> F2006L03558)	31 Mar 2007	R. 4
2007 No. 128	24 May 2007 (<i>see</i> F2007L01317)	Schedule 1: 1 July 2007 (see r. 2 (a)) Schedule 2: (<i>a</i>) Schedule 3: 1 Jan 2008 (see r. 2 (c))	_
2009 No. 68	1 May 2009 (<i>see</i> F2009L01112)	2 May 2009	_
2011 No. 73	3 June 2011 (see F2011L00933)	1 Sept 2011	R. 4

(a) Regulation 2 (b) of SLI 2007 No. 128 provides as follows:

These regulations commence as follows:

(b) immediately after the commencement of Schedule 1 — Schedule 2.

Gene Technology Regulations 2001

Table of Amendments

Table of Amendments

ad. = added or inserted am. = amended rep. = repealed rs. = repealed and substituted

Provision affected	How affected
Part 1	
R. 3	rs. 2006 No. 314 am. 2007 No. 128; 2011 No. 73
Note to r. 3	am. 2007 No. 128
Part 2	
R. 4	rs. 2006 No. 314
Part 2A	
Part 2A	ad. 2009 No. 68
R. 5A	ad. 2009 No. 68 am. 2011 No. 73
Part 3	
Division 1	
R. 6	am. 2006 No. 314; 2007 No. 128; 2011 No. 73
R. 7	rs. 2006 No. 314
R. 8	am. 2007 No. 128
R. 9	am. 2006 No. 314; 2007 No. 128
R. 9A	ad. 2007 No. 128
R. 10	am. 2006 No. 314
R. 11A	ad. 2007 No. 128 rs. 2011 No. 73
Division 2	
R. 12	am. 2011 No. 73
R. 13	rs. 2006 No. 314; 2007 No. 128; 2011 No. 73
R. 13A	ad. 2007 No. 128
	rs. 2011 No. 73
R. 13B	ad. 2011 No. 73
R. 13C	ad. 2011 No. 73
Part 4	
Division 3	
R. 29	am. 2006 No. 314
Part 5	
Part 5	rs. 2007 No. 128
R. 31	rs. 2007 No. 128
R. 32	rs. 2007 No 128
R. 33	rs. 2007 No. 128
Part 6	rep. 2007 No. 128
Rr. 34–36	rep. 2007 No. 128

52

Table of Amendments

Provision affected	How affected
Part 7	
R. 38	am. 2007 No. 128
R. 39	am. 2006 No. 314; 2011 No. 73
Part 8	rep. 2006 No. 314
Rr. 41, 42	rep. 2006 No. 314
Schedule 1A	
Schedule 1A	ad. 2006 No. 314
Schedule 1	
Schedule 1	rs. 2006 No. 314 am. 2011 No. 73
Schedule 2	
Schedule 2	rs. 2006 No. 314 am. 2007 No. 128; 2011 No. 73
Schedule 3	
Schedule 3	rs. 2006 No. 314 am. 2007 No. 128 rs. 2011 No. 73
Schedule 4	rep. 2006 No. 314

Gene Technology Regulations 2001

Table A

Table AApplication, saving or transitional
provisions

Select Legislative Instrument 2006 No. 314

4 Transitional

- The purpose of this regulation is to provide the opportunity to apply for a licence to a person who conducted a dealing before 31 March 2007 that was then a notifiable low risk dealing but is now a dealing requiring a licence.
- (2) Despite the substitution of Schedule 3 by these Regulations but subject to subregulation (3), a dealing (the *relevant dealing*) that was a notifiable low risk dealing immediately before 31 March 2007 continues to be a notifiable low risk dealing under Division 2 of Part 6 of the Act if the dealing is carried on by the same person (the *affected person*).
- (3) Subregulation (2) ceases to apply in relation to an affected person on the earlier of:
 - (a) the day on which a licence is issued to the person in respect of the relevant dealing; and
 - (b) 31 March 2008.
- (4) In this regulation:

Act means the Gene Technology Act 2000.

licence means a licence under Part 5 of the Act.

notifiable low risk dealing means a dealing under Division 2 of Part 3 of the *Gene Technology Regulations 2001*.

54

Select Legislative Instrument 2011 No. 73

4 Transitional

- (1) The first purpose of this regulation is to provide the opportunity to apply for a licence to a person who was undertaking 1 of the following kinds of dealings before 1 September 2011 that now requires a licence:
 - (a) an exempt dealing;
 - (b) a notifiable low risk dealing.
- (2) Subject to subregulation (3), despite the amendments made to Schedules 2 and 3 by these Regulations:
 - (a) a dealing that was an exempt dealing immediately before 1 September 2011 continues to be an exempt dealing under the Act if the dealing is undertaken by the same person; and
 - (b) a dealing that was a notifiable low risk dealing immediately before 1 September 2011 continues to be a notifiable low risk dealing under Division 2 of Part 6 of the Act if the dealing is undertaken by the same person.
- (3) Subregulation (2) ceases to apply on the earlier of:
 - (a) the day on which a licence is issued to the person for the dealing; and
 - (b) 1 September 2012.
- (4) The second purpose of this regulation is to provide the opportunity to a person who was undertaking a dealing before 1 September 2011, that was then an exempt dealing but that is now likely to be a notifiable low risk dealing, to have a proposal assessed by an Institutional Biosafety Committee as to whether the dealing is a notifiable low risk dealing.
- (5) Subject to subregulation (6), despite the amendments made to Schedules 2 and 3 by these Regulations, a dealing mentioned in subregulation (4) that was an exempt dealing immediately before 1 September 2011 continues to be an exempt dealing under the Act if the dealing is undertaken by the same person.

Gene Technology Regulations 2001

- (6) Subregulation (5) ceases to apply on the earlier of:
 - (a) the day on which an Institutional Biosafety Committee assesses the dealing; and
 - (b) 1 September 2012.
- (7) In this regulation:

Act means the Gene Technology Act 2000.

exempt dealing has the meaning given by subsection 32 (3) of the Act.

licence means a licence under Part 5 of the Act.

notifiable low risk dealing means a dealing under Division 2 of Part 3 of the *Gene Technology Regulations 2001*.

56