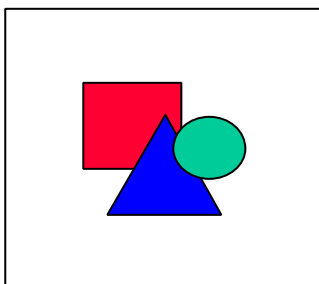


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# Guidelines for the Transport of GMOs

June 2001



For more information about the transport of genetically modified organisms, or about any other matter related to the regulation of gene technology, please contact:

**The Office of the Gene Technology  
Regulator**  
**MDP 54**  
**Commonwealth Department of Health and  
Aged Care**  
**PO Box 100**  
**WODEN ACT 2606**  
**Ph: 1800 181 030**  
**Fax: (02) 6271 4202**  
**Email: [ogtr@health.gov.au](mailto:ogtr@health.gov.au)**  
**Web: [www.ogtr.gov.au](http://www.ogtr.gov.au)**

Copies of the *Gene Technology Act 2000*, the *Gene Technology (Consequential Amendments) Act 2000* and the *Gene Technology (Licence Charges) Act 2000* may be obtained from the OGTR or may be downloaded from the following websites:

[www.aph.gov.au](http://www.aph.gov.au) (Parliament House website)  
[www.health.gov.au/tga/genetech.htm](http://www.health.gov.au/tga/genetech.htm) (IOGTR website)



#### **IMPORTANT NOTE**

These Guidelines will be updated from time to time. Users should therefore assure themselves that they have access to the most recent version.

# Glossary of terms and acronyms used

**Accredited Organisation** means an organisation that is accredited under section 92 of the *Gene Technology Act 2000*. For more information about the accreditation of organisations, please refer to the *Guidelines for the Accreditation of Organisations*

**dealings or deal with** has the same meaning as in the GT Act. Section 10 of the GT Act provides that “deal with” in relation to a GMO means the following:

- (a) conduct experiments with the GMO;
- (b) make, develop, produce or manufacture the GMO;
- (c) breed the GMO;
- (d) propagate the GMO
- (e) use the GMO in the course of manufacture of a thing that is not the GMO;
- (f) grow, raise or culture the GMO;
- (g) import the GMO

and includes the possession, supply, use, transport or disposal of the GMO for the purposes of, or in the course of, a dealing mentioned in any of the paragraphs (a) to (g)

**GMAC** Genetic Manipulation Advisory Committee

**GMO** genetically modified organism

**GM** genetically modified

**GT Act** means the Commonwealth *Gene Technology Act 2000*

**IBC** Institutional Biosafety Committee

**IOGTR** Interim Office of the Gene Technology Regulator (until 21 June 2001)

**NLRD** Notifiable Low Risk Dealings

<b>OGTR</b>	Office of the Gene Technology Regulator (after 21 June 2001)
<b>PC2</b>	Physical Containment Level 2, as certified by the Regulator in accordance with the Regulator's <i>Guidelines for Certification of Facilities/Physical Containment Requirements</i>
<b>PC3</b>	Physical Containment Level 3, as certified by the Regulator in accordance with the Regulator's <i>Guidelines for Certification of Facilities/Physical Containment Requirements</i>
<b>PC4</b>	Physical Containment Level 4, as certified by the Regulator in accordance with the Regulator's <i>Guidelines for Certification of Facilities/Physical Containment Requirements</i>
<b>Record</b>	means the publicly available Record of GMOs and GM Product Dealings
<b>the Regulations</b>	the Commonwealth Gene Technology Regulations 2001
<b>the Regulator</b>	the Gene Technology Regulator

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# ABOUT THESE GUIDELINES

## What is the purpose of these Guidelines?

On 21 June 2001, a new system for the regulation of gene technology and genetically modified organisms (GMOs) took effect.

The **Gene Technology Act 2000** was passed by Federal Parliament in December 2000 and takes effect from 21 June 2001

The legislation regulates a range of activities, or “dealings” involving GMOs.

One of the dealings with GMOs that is regulated is the transport of GMOs.

The Regulator is empowered by sections 27 and 28 of the GT Act to issue technical and procedural guidelines in relation to GMOs.

These Guidelines are issued in accordance with sections 27 and 28 of the Act and describe the conditions that people must comply with when transporting GMOs.

These Guidelines are set out as follows:

- Chapter 1 of these Guidelines discusses the dealings and the organisations to which these Guidelines apply.
- Chapter 2 of these Guidelines sets out the Regulator’s general conditions applying to the transport of GMOs.

The conditions for the transport of GMOs contained in Chapter 2 of these Guidelines may apply to the transport of GMOs that are:

- Notifiable Low Risk Dealings (NLRDs) – as described in the Gene Technology Regulations 2001 (the GT Regulations); and
- licensed by the Regulator.

The Regulator may also apply additional conditions, apply fewer or less stringent conditions or apply different conditions, for the transport of GMOs. For example, to manage any unique risks posed by a particular GMO, the Regulator may impose additional conditions.

Alternately, where the Regulator approves a GMO for general release, meaning commercial release, the Regulator may choose to apply fewer conditions, if this is appropriate.

Where the conditions in respect of the transport of a GMO differ from the conditions set out in Chapter 2 of these Guidelines, the variance in conditions will be set out in the relevant licence for dealings involving the particular GMO.

### **How do the Guidelines relate to other parts of the regulatory scheme such as the *Gene Technology Act 2000* and the *Gene Technology Regulations 2001*?**

In December 2000, Federal Parliament passed the ***Gene Technology Act 2000*** (the GT Act) and its associated Acts, the *Gene Technology (Consequential Amendments) Act 2000* and the *Gene Technology (Licence Charges) Act 2000*.

These three Acts, together with corresponding legislation enacted in each State and Territory in Australia, as well as subordinate legislation and other instruments, will comprise the national scheme for the regulation of gene technology and GMOs in Australia.

The corresponding legislation in each State and Territories will essentially mirror the Commonwealth legislation. The corresponding laws are currently being developed and passed by each individual State and Territory.

The Commonwealth ***Gene Technology Regulations 2001*** complement the GT Act and commenced operation on 21 June 2001. The Regulations provide additional detail to assist the interpretation and operation of the provisions in the GT Act. For example, the Regulations describe in detail the type of information that must be submitted in an application for a licence to deal with a GMO and also set out the types of

dealings with GMOs that are exempt from the national regulatory scheme and NLRDs.

The Regulator is empowered under the GT Act to issue **technical and procedural guidelines**. These Guidelines are the technical and procedural guidelines relating to the transport of GMOs.

The Guidelines operate alongside the GT Act and the Regulations. These Guidelines describe the Regulator's requirements for transport of GMOs. In effect, the Guidelines are the "operating instructions" issued by the Regulator as a result of powers conferred on the Regulator by the *Gene Technology Act 2000*.

The Regulator has also issued:

- *Guidelines for the Accreditation of Organisations;*
- *Guidelines for the Certification of Facilities/Requirements for Physical Containment; and*
- *a Risk Analysis Framework for licence applications before the Office of the Gene Technology Regulator.*

For more information about the various instruments that comprise the national regulatory scheme for gene technology, please refer to the *Handbook on the Regulation of Gene Technology in Australia*.

### **How do these Guidelines differ from the current voluntary GMAC system of controls on the transport of GMOs?**

Under the GMAC voluntary system of controls on GMOs, organisations dealing with GMOs were expected to observe the relevant GMAC Guidelines, and those Guidelines included information about transport of GMOs. For example, the GMAC *Guidelines for Small Scale Genetic Manipulation Work* included the section "Transport and Importation". This detailed requirements for the:

- transport and packaging of samples;
- transport of transgenic animals;

- transport of transgenic insects and their pathogens;
- transport of transgenic plants;
- provision of genetically manipulated material to other research workers; and
- importation of genetically manipulated organisms or material.

These new Guidelines have been issued by the Regulator and draw on material in the GMAC Guidelines. Where necessary, original GMAC material has been recast to bring it into line with the requirements of the new regulatory system.

These new Transport Guidelines do not address the issue of importation of GMOs (which was previously addressed in the GMAC Guidelines). Importation of GMOs is dealt with separately in the *Handbook on the Regulation of Gene Technology In Australia*.

# CHAPTER 1

## TRANSPORT OF GMOs

### What does “transport” a GMO mean?

**Definition:**

“Deal with”, in relation to a GMO, means:

- (a) conduct experiments with the GMO
- (b) make, develop, produce or manufacture the GMO;
- (c) breed the GMO;
- (d) propagate the GMO;
- (e) use the GMO in the course of manufacture of a thing that is not the GMO;
- (f) grow, raise or culture the GMO; and
- (g) import the GMO;

and includes the possession, use, transport or disposal of the GMO for the purposes of, or in the course of, a dealing mentioned in any of the paragraphs (a) to (g).

The GT Act regulates all “dealings” with GMOs.

One of the “dealings” with GMOs that is provided for in the Act is the transport of GMOs.

“Transport” is not defined in the GT Act and takes its ordinary meaning.

Within these Guidelines, it is taken to mean “to carry or convey from one place to another” and includes:

- all movements of a GMO from a certified facility to any location outside the certified facility. For example:
  - movement from one certified facility to another certified facility;
  - movement from the certified facility to another area of the building that has not been certified by the Regulator; and
  - movement of the GMO from the certified facility to a place where the GMO is destroyed or disposed of (for example, to an autoclave).
- all movements from a location specified in a licence (such as field trial site) to another location.

The Guidelines do not apply to transport:

- from a place in a certified facility to another place within the same certified facility (for example, from one side of a PC2 laboratory to the other); or
- from a place in a location specified in a licence to another place within the same specific location (for example, from one part of a field trial site to another part of the same site).

## When can my organisation transport a GMO and how does my organisation get approval to transport a GMO?

In summary, the GT Act provides that a person must not *deal with* a GMO, including *transport* a GMO, unless the dealing with the GMO is:

- authorised by a GMO licence (including a “deemed licence” issued as a “GMAC advice to proceed”);
- a notifiable low risk dealing;
- an exempt dealing; or
- on the Register of GMOs.

In order to decide what type of GMO you are dealing with, and therefore what type of approval you will need from the Regulator in order to transport the GMO, you will need to examine the legislation. The *Handbook on the Regulation of Gene Technology In Australia* may also be a useful resource. It explains in simple terms, and with examples, the types of GMOs that fall into each category.

The GT Regulations include Schedules which detail all of the “exempt dealings” with GMOs and also all of the “notifiable low risk dealings” with GMOs. All other dealings with GMOs MUST be licensed by the Regulator.

A dealing with a GMO involves **the intentional release of a GMO into the environment** if the GMO is intentionally released into the open environment, whether or not it is released with provision for limiting the dissemination or persistence of the GMO or its genetic material in the environment.

### ***Exempt dealings with GMOs***

If the GMO that you are intending to transport is on the list of **exempt dealings** – you do not need any approval from the Regulator to transport the exempt GMO. Exempt dealings must not, however, involve an intentional release of the GMO into the environment and must be conducted in accordance with Australian Standard AS/NZS 2243.3:1995 (Safety in laboratories: microbiology) for physical containment Level 1.

### ***Notifiable low risk dealings with GMOs***

If the GMO that you are intending to transport is on the list of **notifiable low risk dealings**, you must notify the Regulator that you are intending to deal with the GMO (which may include transporting the GMO). If the GMO is on the list of NLRDs, all dealings with the GMO (including transport) may be conducted provided the conditions in the Regulations are complied with. This includes the conditions contained in these Guidelines for the transport of the GMO. The process for notifying the Regulator (and the other requirements for conducting NLRDs) are included in the Gene Technology Regulations 2001 and the *Handbook on the Regulation of Gene Technology in Australia*.

### ***Dealings with GMOs on the GMO Register***

If the GMO that you are intending to deal with is on the **GMO Register**, you may deal with the GMO provided that you comply with any conditions that are noted on the GMO Register. If there is a condition attaching to the GMO that is on the GMO Register, that requires compliance with these Guidelines, then these Guidelines must be complied with in relation to any transport of the GMO.

At the commencement of the legislation, there are no dealings with GMOs on the GMO Register.

### ***All other dealings with GMOs***

If the GMO is **not on the list of exemptions, not on the list of notifiable low risk dealings and not on the GMO Register** – you must not transport the GMO unless you have a licence from the Regulator or are covered by a licence from the Regulator that allows you to transport the GMO.

The *Handbook on the Regulation of Gene Technology in Australia* provides information about how to go about applying for a licence from the Regulator.

The GMO Register is different to the Record of GMO and GM Product Dealings. The GMO Register is another form of approval by the Regulator, mainly for GMOs that have been licensed but no longer require licensing. By contrast, the Record of GMO and GM Products Dealings is a publicly available database of all GMOs and GM products approved in Australia.

## **What are the conditions that apply to the transport of GMOs?**

The transport of any GMOs that are on the list of **NLRDs** must be undertaken in accordance with the conditions for transport set out in Chapter 2 of these Guidelines.

In relation to **licensed dealings with GMOs**, the Regulator may apply whatever conditions are necessary in order to manage any risks posed by the GMO (including by transport of the GMO).

The Regulator may:

- require that any transport of the GMO be conducted only in accordance with the conditions for the transport of GMOs detailed in these Guidelines; or
- impose additional conditions if he/she consider it necessary to manage the risks posed by the GMO;
- impose lesser conditions in relation to the transport of GMOs if the conditions prescribed in these Guidelines are not necessary to be complied with, given the negligible risk posed by the GMO. For example, in the case of GMOs approved for intentional release into the environment where such approval is for the commercial release of the GMO (rather than for field trials), the Regulator may apply lesser conditions relating to transport.

In relation to licensed dealings with GMOs, you must consult the individual licence to check what conditions apply for transport of the GMO. If the licence provides that these Guidelines must be complied with, then any person transporting the GMO described in the licence must comply with the conditions detailed in Chapter 2 of these Guidelines.

## **Who must comply with the conditions for transport of GMOs set out in these Guidelines?**

In summary, the following people must comply with the conditions for transport of GMOs contained in these Guidelines:

- anyone undertaking a NLRD with a GMO;
- in relation to a licence that specifically provides that these Guidelines must be complied with:
  - the holder of the licence; and
  - anyone covered by the licence;
- in relation to an Advice to Proceed issued by GMAC that specifically provides that these Guidelines must be complied with:
  - the holder of the Advice to Proceed; and
  - anyone covered by the Advice to Proceed.

For the purposes of the Act, there is no practical difference between a licence and a GMAC Advice to Proceed.

**Explanation:**

Holders of a GMAC Advice to Proceed from GMAC will not need to re-apply for a licence from the Regulator for up to 2 years. However if the organisation wishes to undertake dealings with a new type of GMO (that has not previously been approved by GMAC), they will need to seek a licence from the Regulator to do so.

The concept of a GMAC Advice to Proceed was developed to minimise disruptions flowing from the commencement of the new regulatory system for GMOs. A GMAC Advice to Proceed is a “deemed” license that operates for up to two years.

All organisations currently undertaking dealings with GMOs have been issued with a GMAC Advice to Proceed in respect of their dealings with GMOs. From 21 June 2001, the holder of the GMAC Advice to Proceed will effectively be a licence holder under the Act and the holder of the GMAC Advice to Proceed (and any persons covered by the GMAC Advice to Proceed) must comply with the Advice to Proceed as if it were a licence under the Act.

The conditions set out in the GMAC Advice to Proceed may include a condition that any applicable technical and/or procedural guidelines issued by the Regulator, including the Guidelines for the Transport of GMOs, must be complied with by people dealing with the GMO. If a condition to this effect appears in the GMAC Advice to Proceed then these Guidelines must be complied with in relation to the transport of the GMO.



**IMPORTANT NOTE**

If a licence issued by the Regulator (or an Advice to Proceed issued by GMAC) provides that transport of the GMO must be in accordance with the conditions contained in these Guidelines, then it will be the responsibility of the licence

holder (or holder of the GMAC Advice to Proceed) to make sure that people transporting the GMO are:

- covered by the licence; and
- aware of the relevant conditions for transport of GMOs contained in these Guidelines; and
- if necessary, have been properly trained to enable them to comply with the conditions of transport.

## CHAPTER 2

# CONDITIONS RELATING TO TRANSPORT OF GMOs

### Summary

This Chapter sets out the conditions for the transport of GMOs that must be complied with by:

- anyone undertaking notifiable low risk dealings with GMOs; and
- anyone undertaking licensed dealings with GMOs (unless otherwise specified in the particular licence granted by the Regulator).

The conditions have been divided into the following parts:

- |         |  |
|---------|--|
| Part A: | Conditions relating to informing people of the conditions for transport of GMOs              |
| Part B: | Conditions relating to transport of GM micro-organisms                                       |
| Part C: | Conditions relating to transport of GM animals excluding GM insects and GM aquatic organisms |
| Part D: | Conditions relating to transport of GM insects   |
| Part E: | Conditions relating to transport of GM aquatic organisms                                     |
| Part F: | Conditions relating to transport of GM plants  |
| Part G: | Conditions relating to compliance with relevant packaging and transport regulations          |

Detailed conditions against each of these broad headings are set out below.

The conditions have been drafted as outcomes based, and a concerted effort has been made to avoid overly prescriptive or unduly detailed conditions. While it is important that organisations are aware of the outcomes that the Regulator requires, it is also important that organisations maintain some discretion as to how they achieve these outcomes.

Guidance Notes have also been included under each of the conditions to provide some indication of the Regulator's expectations in relation to compliance.

The need for Guidance Notes was one of the major points arising from the recent consultations with IBCs and organisations.

## **Part A: Conditions relating to informing people of conditions of transport of GMOs**

### **Conditions:**

- A1 An Accredited Organisation or person that is:
- (i) the holder of a GMAC Advice to Proceed;
  - (ii) authorised to undertake notifiable low risk dealings; or
  - (iii) the holder of a licence issued by the Regulator;

must take all reasonable steps to ensure that anyone authorised by the Organisation to transport the GMOs, is aware of any conditions of transport that must be complied with.

- A2 The Accredited Organisation must have put internal procedures in place to ensure that anyone transporting the GMOs is made aware of the conditions relating to the transport of GMOs.

### **Guidance Notes:**

- It is very important that organisations that have approval from the Regulator to deal with GMOs, to ensure that anyone within their organisation (or undertaking dealings with GMOs on their behalf) is aware of relevant conditions applied by the Regulator.
- For example, if the Organisation is relying on a sub-contractor to transport the GMOs, the Organisations must take all reasonable steps to ensure that the sub-contractor is aware of the requirement to comply with these Guidelines. It is then the responsibility of that sub-contractor to comply with the Guidelines.
- By way of further illustration, if an Organisation is relying on a farmer to grow a GM crop under field trial conditions, the Organisation must make sure that the farmer is aware of all of the conditions that have been imposed by the Regulator (in respect of the management of the GM crop), including the conditions relating to transport of the

GM crop. If the organisation has fulfilled this obligation to inform, it will then be up to the farmer to ensure that the Guidelines are adhered to whenever he/she is transporting the GM crop.

- It is expected that organisations will develop internal processes to ensure that all relevant information is provided to people undertaking work with GMOs. For example, organisations would be expected to implement appropriate training, post notices regarding conditions in prominent places etc. As part of applications for licence, the Regulator will require a copy of such internal procedures. If necessary, based on the potential risks posed by the GMO, the Regulator may require additions or amendments to the internal procedures in order to ensure that people undertaking work with GMOs are made aware of the conditions that are applicable.

## **Part B: Conditions relating to transport of GM micro-organisms**

### **Conditions:**

- B1 Transport of GM micro-organisms must be undertaken in accordance with the following requirements:
- (i) the GM micro-organism must be wholly contained within a primary sealed container; and
  - (ii) the primary sealed container must be packed in a secondary sealed unbreakable container.
- B2 The secondary unbreakable container must be labeled to indicate that it contains GM micro-organisms, and the label must include the telephone number of a person to contact should the package be damaged or lost.
- B3 Accounting procedures must be in place to ensure that the same number of containers sent is delivered.
- B4 Following transport of the GMO, the primary sealed container and the secondary unbreakable container must be decontaminated, by whatever means necessary, to ensure that no residual GMO is retained, or the containers must be destroyed.

### **Guidance Notes:**

- A 'primary sealed container' is a container that is designed to wholly contain the GMO. For example, a sealed plastic tube or a petri dish sealed with parafilm.
- A secondary unbreakable container is an airtight container that is designed to hold the primary sealed container and to ensure that, should the primary sealed container break during transport, the GMO cannot escape the secondary unbreakable container. An example of a secondary unbreakable container is a sealed airtight plastic container such as a tupperware container.
- It is important that the containers used are appropriate for containing the particular GMO bearing in mind that the

purpose of the condition is to ensure that there is no accidental escape of the GMO during transport.

- These conditions must be complied with in any circumstances where a person wishes to move the GMO from a certified facility. Examples are carrying a GMO to the autoclave or other disposal site, or sending it from one certified laboratory to another certified laboratory.
- For example, one laboratory within a building may be certified by the Regulator as an area in which work with GMOs may be conducted. If a person wishes to move the GMO outside that facility, even if it is still within the building, they must comply with these conditions, particularly the requirement that the GMO must be contained in a primary sealed container, within a secondary unbreakable container.

## Part C: **Conditions relating to transport of GM animals (excluding GM insects and GM aquatic organisms)**

### **Conditions:**

- C1 Transport of GM animals must be undertaken in accordance with the following requirements:
- (i) the animals must be contained in a manner which will prevent the animals from escaping; and
  - (ii) a person with experience in handling the particular type of animal must take delivery of the animals.
- C2 Accounting procedures must be in place to ensure that all animals sent are delivered.

### **Guidance Notes:**

- With regard to the transport arrangements for GM animals, two principles are paramount:
  - the need to prevent the animals from escaping, especially with regard to reasonable contingencies such as accidents *en route*, so that they will not interbreed with feral populations; and
  - the need to ensure that the animals are properly identified and duly arrive at the intended destination. It is expected that the person taking delivery of the animals would be a competent biologist with experience in handling animals of the type transported.
- It is expected that the Organisation will develop all necessary internal procedures and protocols to ensure that these conditions are met.
- The Director of the Animal Resources Centre may be contacted for the purchase of animal boxes approved by the airlines for the transport of specific pathogen-free animals by air. These may be adapted for specific needs.

- The contact details for the Director of the Animal Resources Centre are as follows:

The Director  
Animal Resources Centre  
PO Box 1180  
CANNINGVALE WA 6155  
Ph: 08 9332 5033

- It should be noted that the requirements detailed above relate only to transport of animals that are GMOs as distinct from microorganisms (for example GM bacteria or viruses) that may be proposed to be used in animals. The transport of such micro-organisms must be in accordance with the requirements for transport of micro-organisms. If the animals contain GM micro-organisms additional precautions may need to be taken and advice from the Regulator should be sought.

## **Part D: Conditions relating to transport of GM insects, including live insects and insect cell cultures infected with genetically modified pathogens**

### **Conditions:**

- D1 Transport of GM insects must be undertaken in accordance with the following requirements:
- (i) the insects must be contained in a holding container, adequately sealed to prevent the escape of insects;
  - (ii) the holding container must be placed in another, wholly sealed unbreakable (outer) container for transport.
- D2 The wholly sealed unbreakable (outer) container must be labelled to indicate that it contains GM insects and/or their pathogens, and the label must include the telephone number of a person to contact should the container be damaged or lost.
- D3 Accounting procedures must be in place to ensure that the same number of containers sent is delivered.
- D4 The transport containers must be decontaminated by autoclaving following transfer of the transported insects into new containers.

### **Guidance Notes:**

- As detailed above, the insects must be contained in a holding container adequately sealed to prevent the escape of insects. This inner container is not required to be completely sealed (air-tight) as it is recognised that the container must be able to allow oxygen to reach the insects contained within. An example of an appropriate inner container would be a tube with a cotton wool stopper.
- This inner container (the holding container) must however be placed in another wholly sealed unbreakable

container, such as a tupperware container. This secondary container must be unbreakable (to ensure that even if there is damage to the container during transport, the insects cannot escape) and must be sealed to ensure that should the insects escape the inner holding container, they cannot escape the outer container.

- It is important that the containers used are appropriate for containing the particular GMO bearing in mind that the purpose of the condition is to ensure that there is no accidental escape of the GMO during transport.
- These conditions must be complied with in any circumstances where a person wishes to move the GMO from a certified facility. Examples are carrying a GMO to the autoclave or other disposal site, or sending it from one certified laboratory to another certified laboratory.

## Part E: **Conditions relating to transport of GM aquatic organisms**

### **Conditions:**

- E1 Transport of GM aquatic organisms must be undertaken in accordance with the following requirement:
- (i) the aquatic organisms are appropriately contained so as to prevent the organisms from escaping.
- E2 Accounting procedures must be in place to ensure that all aquatic organisms sent are delivered.
- E3 If:
- (i) the water used in the transport tanks has any potential to contain embryos, sperm, eggs or larvae of the GM aquatic animals; or
  - (ii) the organisms involve the use of infectious agents
- the tank water must be treated to ensure inactivation of viable GM material before disposal.

### **Guidance notes:**

- Aquatic organisms must be appropriately contained so as to prevent the organisms from escaping. The type of containment necessary (to prevent the organisms from escaping) will vary depending on the type of aquatic organism being transported.
- For example, in the case of fish, an appropriate transport container may be a tank with a lid or a sealed bag within an unbreakable container. In the case of certain crustaceans such as lobsters, it may be more appropriate to transport the organism in a sealed bucket. In any event the Organisation transporting the GMO must be satisfied that the organism is sufficiently contained to prevent the organism escaping including in the event of an unexpected accident en route. Organisations must consider various contingencies (which will vary depending on how far the GMO is being transported and how the GMO is being transported) and ensure that there are mechanisms in place to deal with any such

contingencies. For example, mechanisms should be put in place to ensure that even if the primary container is breached (as the result of an accident) a secondary “back-up” containment method is in place.

## Part F: Conditions relating to transport of GM plant material

### Conditions:

**Example:**  
A primary sealed container packed in a secondary unbreakable container includes a sealed intact plastic bag within securely closed skip

- F1 Transport of GM plant material must be undertaken in accordance with the following requirements:
- (i) subject to F3, all GM plant material must be transported in a primary sealed container which is packed in a secondary unbreakable container; and
  - (ii) the primary sealed container and the secondary unbreakable container must be labelled to indicate that it contains GM plant material and the label must include the telephone number of a person to contact should the package be damaged or lost.
- F2 If the GM plant material is to be transported as whole plants, any seed or pollen or vegetative propagules on the plants must be removed before transport. The whole plants may be transported in pots provided they are contained in a secondary unbreakable container labelled in accordance with F1(ii).
- F3 Accounting procedures shall be in place to ensure that the same quantity of GM plant material sent is delivered.
- F4 GM plant material includes seed or whole plants, crop stubble, and any other live or viable plant material.

### Guidance Notes:

- It is important to note that any equipment used in the transport of GM plants (for example, skips) must be appropriately cleaned to ensure that there can be no unintended dissemination of the GMO. Requirements for cleaning of equipment, including transport equipment, will generally be included as an explicit condition of licence and as such is not addressed directly in these conditions of transport.

## Part G: Conditions relating to compliance with relevant packaging and transport regulations

### Conditions:

- G1 All relevant packaging and transport regulations must be complied with for the transport of GMOs including, where relevant:
- the International Air Transportation Association (IATA), *Dangerous Goods Regulations*;
  - the Australia Post *Dangerous Goods and Packaging Guide*;
  - the *Australian Code for the Transport of Dangerous Goods by Road and Rail*.
  - local public health regulations (for the transport of infectious wastes).

### Guidance Notes:

- A number of State and Commonwealth laws apply to the transport of biological materials by air, rail and road.
- Key documents relating to the transport of biological materials (including GMOs) include:
  - the International Air Transportation Association (IATA), *Dangerous Goods Regulations*;
  - the Australia Post *Dangerous Goods and Packaging Guide*;
  - *Australian Code for the Transport of Dangerous Goods by Road and Rail*.
- **Please note that this list is not necessarily exhaustive. It is the responsibility of the sender to ensure compliance with ALL relevant packaging and transport regulations.**
- The IATA Dangerous Good Regulations (the IATA Regulations) are the most comprehensive and, in general, include the requirements of the other regulations.

- The IATA Regulations include operational requirements for airlines to accept and transport dangerous goods safely and efficiently.
- The IATA Regulations include a detailed list of individual articles and substances specifying the United Nations classification of each article or substance and their acceptability for air transport as well as the conditions for their transport.
- The IATA Regulations describe goods that:
  - have been identified as being too dangerous to be carried on any aircraft under any circumstances;
  - are forbidden under normal circumstances but may be carried with specific approvals from the States concerned;
  - are restricted to carriage on all cargo aircraft; and
  - can be safely carried on passenger aircraft provided certain requirements are met.
- In relation to goods that may be carried by air, the IATA Regulations prescribe minimum requirements that must be met in relation to:
  - packaging - to ensure the safe transport of dangerous goods by air.
  - packing Instructions - including a wide range of options for inner, outer and single packagings.
  - training - to ensure that all individuals involved in the preparation or transport of dangerous goods are properly trained to carry out their responsibilities. Depending on the job-function, this may entail only familiarisation training or may also include more detailed training in the intricacies of the IATA Regulations.
  - the proper declaration of dangerous goods by the shipper – to ensure that all links in the transportation chain know what dangerous goods they are transporting, how to properly load and handle them and what to do if an incident or accident occurs either in-flight or on the ground.
  - reporting of accidents or incidents - so that an investigation by the relevant authorities can establish the cause and take corrective action.

- For more information about the transport authorities that are responsible for the regulation of the transport goods (including GMOs), please refer to Appendix 1.

# APPENDIX 1: RELEVANT TRANSPORT AUTHORITIES

- **Post**

'Postal Guide' available from Australia Post

- **Air**

Civil Aviation Safety Authority  
GPO Box 2005  
CANBERRA ACT 2601  
Telephone (national enquiries): 131 757

Relevant Codes are:

- ICAO Technical Instructions for Safe Transport of Dangerous Goods by Air;  
and
- The International Air Transport Association (IATA), *Dangerous Goods Regulations*.

These documents are available from Hunter Publications, 58A Gipps Street, Collingwood, Victoria 3066 (telephone: (03) 9417 5361).

- **Sea**

Ship and Personal Safety Services  
Australian Maritime Safety Authority  
GPO Box 2180  
CANBERRA ACT 2601  
Telephone: (02) 6279 5023  
Facsimile: (02) 6279 5966  
or State offices of the Department.  
Relevant code:  
International Maritime Dangerous Goods Code.

- **Road and Rail**

Regulation Policy and Projects Section  
Road User Branch  
Department of Transport  
GPO Box 594  
CANBERRA ACT 2601  
Telephone: (02) 6274 7111  
Facsimile: (02) 6274 6721

or State Offices of the Department.

Relevant code:

- Australian Code for the Transport of Dangerous Goods by Road and Rail.