

Guidelines for the Transportation of GMOs

1) Transportation within the University Campus

The Office of Gene Technology Research (OGTR) must be notified whenever a GMO is transported between facilities. If the GMO has been approved as part of an application by the researcher to conduct a Notifiable Low Risk Dealing or a Dealing Not Involving Intentional Release, predictable transportation of GMOs between facilities (such as from a PC2 laboratory to an autoclave, or between a PC2 laboratory and a storage freezer) can be notified on the initial application to perform that work. For unpredicted transportation (i.e. ones not indicated in the initial application to conduct the research), a variation should be submitted to the GTRC, and approval received from the OGTR, before transport. If the GMO has been approved as part of an application by the researcher to conduct an Exempt Dealing, there is no need to notify OGTR.

Packaging for the transportation of Genetically Modified Organisms (GMOs) between facilities must meet the *Guidelines for the Transport of GMOs* as indicated in section 2).

2) Transportation off Campus by Road, Rail or Air

All packaging and paperwork for the transportation of Genetically Modified Organisms (GMOs) must meet the relevant transport codes, (eg road, rail, and air) whether the material is being self-delivered, or sent by courier via the Distribution Centre. See the following for information:

The Australian Code on the Transport of Dangerous Goods by road and rail

http://www.dotrs.gov.au/transreg/str_dgoodsum.htm

Australia Post – Prohibited and Dangerous Goods

http://www.auspost.com.au/statutorydocuments/generalpostalservices/_APT&C_Body-04.htm

Couriers

- Packages should be sent by accredited courier only. Please contact the Distribution Centre for details of accredited couriers available.

Note the package will need to be prepared by an accredited packer if going by air. A list of accredited packers can be found at the following web link

<http://www.uow.edu.au/research/rso/files/ethics/genetechreview/AccreditedIATAPackers.pdf>

Courier declaration forms for transportation by accredited courier are available from the Printery. A copy should be held by the Unit.

Packaging

Packaging should include the following essential elements:

- (a) An inner packaging comprising
 1. watertight primary receptacles(s);
 2. a watertight secondary packaging:

3. absorbent material in sufficient quantity to absorb the entire contents placed between the primary receptacle(s) and the secondary packaging; if several primary receptacles are placed in a single secondary packaging, they should be individually wrapped so as to prevent contact between them.
- (b) An outer packaging of adequate strength for its capacity, mass and intended use, and with a minimum external dimension of 100 mm.
- (c) Packages should be labelled to indicate that they contain GM micro-organisms, and the label must include the telephone number of a person to contact should the package be damaged or lost

Self-Delivery

Researchers intending to self-deliver a package or packages containing GMOs should complete the *'Notification of Intention to Self-Deliver GMOs by Road, Rail or Air'* form (*web link*) to be signed off by the Head of Department, and the recipient, and indicating transport mode and contents. A copy of the form should be held by the Unit and a further copy sent to the Distribution Centre for information.

Note the package will need to be prepared by an accredited packer if going by air.

The Office of the Gene Technology Regulator (OGTR) has issued *Guidelines for the Transport of GMOs* and these are available at: <http://www.ogtr.gov.au/pdf/handbook/appendix5.pdf> an excerpt of the guidelines that apply to the more commonly used GMOs is given below. For instructions on the transport of GM insects, GM aquatic organisms, and GM plants refer to the complete guidelines.

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

- 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.
- The secondary unbreakable container must be labelled 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.
- Accounting procedures must be in place to ensure that the same number of containers sent is delivered.
- 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.

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

- 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.
- 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.
- 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. Contact details are:

The Director
Animal Resources Centre
PO Box 1180
Canningvale WA 6155
Tel: 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

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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.

For further information or assistance please contact the Distribution Centre. **In the event of an accident on campus please contact the Occupational Health and Safety Unit, (02) 4221 3914, Internal Extension: 3914 <http://staff.uow.edu.au/ohs/>.**