

# Behavioural Requirements

## Physical Containment Level 2 Laboratory

Version 3.2 – Effective 1 March 2013

1. Persons undertaking dealings in the facility with GMOs requiring PC2 containment must comply with these Behavioural Requirements.

### **Non-GMOs, exempt dealings and PC1 dealings in the facility**

2. Persons undertaking work in the facility on non-GMOs, exempt dealings or dealings which may be undertaken in a PC1 facility must comply with these Behavioural Requirements unless:
  - (a) procedures are implemented to ensure that non-GMOs, exempt dealings or dealings which may be undertaken in a PC1 facility, are not cross-contaminated with GMO dealings requiring containment in a PC2 facility;
  - (b) the above procedures are documented; and
  - (c) the primary and any secondary container used to transport any organism out of the facility must be free of contamination with GMOs prior to being transported out of the facility.

Dealings which may be undertaken in a PC1 facility, and where subclauses (a) to (c) above are met, may be conducted in accordance with the Behavioural Requirements in this document or the *Guidelines for Certification of a Physical Containment Level 1 Facility*.

NOTE: Means of preventing cross-contamination could include physical separation of the work, or separation by working at different times and ensuring any contaminated surfaces are decontaminated prior to working with a different organism.

## **Doors & windows**

3. Except during the entry and exit of personnel, supplies and/or equipment, doors of the facility must be closed while procedures with GMOs are being conducted. Entrance doors into the facility must remain locked, or the facility must be otherwise secured, when facility personnel are not in attendance.
4. Dedicated “Emergency Only” exits must not be used to enter nor exit the facility except in an emergency.
5. Windows must remain closed and locked, or otherwise secured, while procedures with GMOs are being conducted or when facility personnel are not in attendance.

## **Containment equipment**

6. If any proposed dealings in the facility with GM micro-organisms will produce aerosols containing Risk Group 2 GM micro-organisms, then these dealings must be performed in either a biological safety cabinet or other equipment specifically approved in writing by the Regulator that is designed to contain aerosols.

NOTE: Procedures with GM micro-organisms such as centrifuging and vortexing in sealed tubes does not need to be performed in a biological safety cabinet, provided that the tubes are only opened in a biological safety cabinet.

7. Where any Class I or Class II biological safety cabinet is installed and used for procedures with GMOs, it must be used and decontaminated in accordance with the requirements of AS 2252.4.

## **Personal protective equipment**

8. The following personal protective equipment must be worn by personnel undertaking dealings in the facility:
  - (a) protective clothing to afford protection to the arms and front part of the body; and

NOTE: A rear-fastening gown is preferable.

- (b) disposable gloves, when dealing with GM viral vectors or GMOs which fit into the classification of Risk Group 2 organisms, as described in AS/NZS 2243.3.

NOTE: Consideration should be given to the wearing of appropriate forms of eye protection.

9. Personal protection equipment, with the exception of gloves, may be worn if moving directly to another containment facility, certified to at least PC2 by the Regulator, that is directly connected to the facility or is connected by a corridor, stairs or other space

that is not a public thoroughfare and in which there is negligible risk of the release of the GMOs or of cross-contamination should other personnel be encountered or contacted in the corridor.

## Decontamination

10. Decontamination must be undertaken in accordance with Section 3.1 of the Regulator's *Guidelines for the Transport, Storage and Disposal of GMOs* as in force from time to time unless otherwise approved in writing by the Regulator.
11. All decontamination procedures conducted inside the facility must be carried out by trained personnel.
12. GMOs, non-GMOs containing GMOs, or any wastes containing GMOs must be decontaminated prior to disposal if the method of disposal is not also the method of decontamination.
13. Work benches and surfaces where procedures involving GMOs have taken place must be decontaminated when the dealings are completed. Equipment directly used in procedures involving GMOs and equipment suspected to be contaminated must be decontaminated when the dealings are completed.
14. Equipment contaminated with or suspected to be contaminated with GMOs must be decontaminated before being removed from the facility, except if the equipment is being transported for the purposes of decontamination in accordance with the Regulator's *Guidelines for the Transport, Storage and Disposal of GMOs*, as in force from time to time, and other relevant guidelines issued by the Regulator.
15. Personal protective equipment contaminated with or suspected to be contaminated with GMOs must be taken off as soon as practicable and decontaminated prior to reuse or disposal. Protective clothing that is known to be free of GMOs may be washed using normal laundry methods. Gloves must be disposed of after use and prior to exiting the facility.
16. Persons who have been performing procedures in the facility that involve GM micro-organisms, or who have had hand contact with GMOs that could persist on the hands after exit from the facility, must decontaminate their hands before leaving the facility.

NOTE: This may include the use of soap and water, if appropriate. If wash-basins are to be used, the use of hand operated taps is not acceptable, as they are a ready source of contamination. Soap and other decontamination agents should be dispensed from hands free dispensers.

## Spills of GMOs

17. Documented procedures must be in place to decontaminate any spills involving GMOs inside the facility. The procedures must be made available to the Regulator if requested.
18. If a spill of GMOs or any material containing GMOs occurs inside the facility, the spills procedures must be implemented to decontaminate the spill as soon as reasonably practicable.
19. In the event of the escape, unintentional release, spill, leak, or loss of GMOs outside of the facility:
  - (a) efforts must be implemented as soon as reasonably practicable to locate and/or retrieve the GMOs and return the GMOs to containment or render them non-viable; and
  - (b) the incident must be reported to the Regulator as soon as practicable.
20. Any decontamination of GMOs must be in accordance with the requirements listed in the Regulator's *Guidelines for the Transport, Storage and Disposal of GMOs* as in force from time to time.

## Labelling

21. All containers of GMOs must be clearly labelled so as to indicate that they contain GMOs. Any unlabelled material must be treated as a GMO and handled in accordance with these requirements.

NOTE: Labelling enables the separation of GM work from non-GM work and enhances the control of GMOs within the facility.

## Removal and storage of GMOs

22. Transport and storage of all GMOs outside of the facility must be conducted in accordance with the Regulator's *Guidelines for the Transport, Storage and Disposal of GMOs*, as in force from time to time, and other relevant guidelines issued by the Regulator.
23. All cultures of GMOs being stored inside the facility must be sealed during storage to prevent dissemination of the GMOs.

NOTE: The type of container necessary to prevent the GMOs from escaping will vary depending on the type of organisms being stored.

## Standards referenced in this document

‘AS’ followed by a number or other identification is a reference to the Australian Standard so numbered or identified.

‘AS/NZS’ followed by a number or other identification is a reference to the Australian/New Zealand Standard so numbered or identified.

Refer to the most recent issue of the standards.

AS/NZS 2243.3	Safety in laboratories Part 3: Microbiological safety and containment
AS 2252.1	Biological safety cabinets Part 1: Biological safety cabinets (Class I) for personnel and environment protection
AS 2252.2	Controlled environments Part 2: Biological safety cabinets Class II - Design
AS 2252.4	Controlled environments Part 4: Biological safety cabinets Classes I and II – Installation and use (BS 5726:2005, MOD)
AS 2845.3	Water supply - Backflow prevention devices Part 3: Field testing and maintenance of testable devices
AS/NZS 3500.1	Plumbing and drainage Part 1: Water services

## Declaration

I hereby certify that I have read the document “Behavioural Requirements: Physical Containment Level 2 Laboratory”. I understand that all work in an OGTR approved PC2 facility must comply with these guidelines, regardless of whether genetically modified organisms are used or not. I understand that if I am found to be in breach of these guidelines my access to PC2 facilities at the University of New England may be removed.

Full name: \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_