

OGTR PC2 Facility Induction/Training Procedures.

Although some of these issues are addressed by the Facility Manager, e.g. signage, the information is provided so that authorised users can ensure that nothing is done, removed or undertaken that would render the facility non-compliant. Please read the UTas Microbiology Policy & Procedures. The Institutional Biosafety Committee (IBC) provides information on a UTas IBC website. A PC2 procedures DVD, approved by OGTR is available through this site from the Ludwig Institute. Records of training and induction should include all authorised users of the facility, staff, postgraduates and the class name of a group of students, if applicable. This same induction procedure is most appropriate for those facilities using organisms from the Australian Standard 2243 series and is very applicable to organisms from Risk Table Level 2 PLUS the amendment. Just delete the reference to OGTR for Risk Table Level 2 organisms that are not GMOs and the same procedures apply.

There are three types of PC2 Containment: 1. PC2 Australian Standards 2243 series. One of the Standards specifically refers to Microbiology Labs and has the Risk Table level 2. The Amendment is a separate document and many miss it. 2. PC2 OGTR Accredited Facility. These procedures provide for the biocontainment of a GMO of which the users of the facility are aware of and in some cases the GMO is less virulent than the original organisms. If the organism is from Risk Table Level 2, the OGTR Guidelines apply to the GMO but the Australian Standard PC2 applies to all the other work in the laboratory. QC2 is Quarantine Containment Level 2 Criteria 5.2. These procedures are designed to quarantine and in some cases, the organisms may be known but there is the potential risk for an unknown to be with the known organism. In which case the quarantine procedures are necessary.

Most Schools/Sections can generate their own induction/training procedures and in some areas the School induction covers the OGTR PC2 area. Where there seems to be hesitation in regard OGTR Monitoring Inspections and an IBC inspection is when the record of training is requested. If it is held centrally it can be difficult for PC2 staff to supply on request or even be confident to answer, that it is recorded. Therefore this document is provided that may be useful to use at the PC2 Facility level. As most people work hard to do the right thing, this lack of confidence can have an adverse effect on persons. This can be addressed. **The last page of these procedures, as a stand-alone document, is recommended for use and to be kept in the PC2 facility.**

Any questions please contact the IBC Secretary on Ext 7509.

You may ask who trains the trainer. In the past when the OGTR has undertaken IBC training at UTas, PC2 facility users have attended and we will continue this practice if numbers permit. When the new Regs come into effect there is the possibility of training and all PC2 users will be contacted. Records of training can be very useful.

Facilities

1. The facility must be labelled with the following adhesive signs as supplied by the OGTR:

(a) A Physical Containment Level 2 (PC2) sign on the outside of facility access door(s).

(b) A biohazard symbol on the outside of facility access door(s).

(c) A PC2 Facility Practice sign must be prominently displayed inside the facility. Additional signs can be downloaded from www.ogtr.gov.au

2. The facility must be a fully enclosable space contained within walls, doors, windows, floors and ceilings? (For example, two rooms with a corridor between them cannot be certified as a facility unless the corridor itself is an enclosed space with restricted access.)

3. All walls, floors, ceilings and benches smooth, impermeable to water, cleanable, and resistant to the cleaning agents and/or disinfectants used in the facility.

4. All the facility furniture, including seating, must be washable.

5. A wash basin, fitted with a basin mixer of the hands-free operation type, must be provided for hand washing within the facility.

6. Is the water supplied to the laboratory provided with back flow prevention? Contact the OH&S Unit/IBC Secretary is not known.

7. Eye wash facilities (either a plumbed eye wash facility or single-use packs of sterile eye irrigation fluids) must be provided within the facility.

8. The eye wash facilities must be used and maintained in accordance with the manufacturer's instructions?

9. Does the facility contain a pressure steam steriliser (autoclave) or have an autoclave that is accessible to facility users? (If the autoclave is not located in the facility, it is preferable that it be located within the same building as the facility.)

10. There must be designated storage or hanging provisions for protective clothing available within the facility. (Any anteroom, if provided, is part of the facility).

11. There must be a supply of disinfectants for decontamination purposes available in the facility.

12. The above-mentioned disinfectants must be clearly labelled with the contents and, where necessary, the expiry date?

13. The open spaces between and under benches, cabinets and equipment must be accessible for cleaning.

Personal Protective Clothing and Equipment

14. Protective clothing, to protect the front part of the body, must be worn by all persons performing procedures in the facility.

15. All persons must wear closed footwear.

16. Gloves must be worn for work undertaken in a biological safety cabinet.

17. Protective clothing must always be removed after completing laboratory procedures and before leaving the facility. (This requirement does not apply if entering another containment facility certified to PC2 by the Regulator, that is directly connected to the facility.)

Containment Equipment

18. Does the facility contain a biological safety cabinet, or other equipment specifically approved in writing by the Regulator that is designed to contain aerosols? (Only applicable if procedures that generate aerosols containing GMOs are to be performed in the facility.)

If the answer is "no", but a biological safety cabinet in another certified facility is used, please outline details of the location of that biological safety cabinet (i.e. room and facility certification number).

19. The installation, use and decontamination of the biological safety cabinet must be in accordance with the requirements of AS/NZS 2647: "*Biological safety cabinets - Installation and use*".

20. The biological safety cabinet must be tested at least every 12 months by a NATA accredited organisation and the cabinet must be labelled to show its test status.

Work Practices

21. All the requirements for a PC2 laboratory facility specified in the Certification Instrument issued by the Regulator must be complied with at all times, even if the work being performed in the facility involves organisms that are not GMOs.

22. Access to the facility must be restricted to authorised persons and/or authorised classes of persons. These authorised persons should be the same as those listed in the record of training.

23. Windows must be closed while laboratory procedures are in progress. (Not applicable to the windows that are fitted with intact flyscreens.)

24. All facility doors must be closed when laboratory procedures are in progress.

25. All facility personnel must be trained in the requirements of the OGTR PC2 Laboratory Facility Guidelines. *Even though authorised users may have undertaken School/Section induction, it is recommended that a record of PC2 training is kept in the facility. This provides much more certainty when monitoring occurs. A sample record is attached.*

26. Only trained personnel are permitted to clean contaminated equipment or surfaces, or handle hazardous material.

27. All facility personnel must indicate to the certification holder that they fully understand their training in OGTR requirements by signing a record of their training after completion and a record of those trained must be kept and available if requested. *Even though authorised users may have undertaken School/Section induction, it is recommended that a record of PC2 training is kept in the facility. This provides much more certainty when monitoring occurs. A sample record is attached.*

28. All procedures that generate aerosols containing GMOs must be performed in a biological safety cabinet, or other equipment designed to contain aerosols specifically approved in writing by the Regulator?

29. Procedures must be in place to report any unintentional release of GMOs from the facility to the Regulator as soon as practicable. E.g. Notification of an incident/accident available on the OH&S website but you are not the facility manager tell someone immediately.

30. All work benches, surfaces and equipment where procedures have taken place must be decontaminated immediately after any spills and when laboratory procedures using GMOs are completed.

31. All work surfaces and equipment, in relevant areas of the facility, must be decontaminated before maintenance is carried out. Do not just let a contractor into the facility. They must be supervised and do not permit tools to be placed on work areas.

32. All GMOs, organisms infected with GMOs, equipment or protective clothing contaminated with GMOs, and liquid and solid wastes containing GMOs, must be decontaminated by steam sterilisation (autoclaving), chemical treatment, incineration or any other method approved in writing by the Regulator.

(b) The chemical disinfectant treatment mentioned above must be in accordance with Appendix E of Australian/New Zealand Standard 2243.3:2002 *Safety in laboratories – Part 3: Microbiological aspects and containment facilities*.

(c) Is incineration performed in a high temperature, high efficiency, EPA-approved incineration facility?

33. Where a pressure steam steriliser (autoclave) is used for decontamination:

(a) Provisions must be made to allow for the penetration of steam into the container during autoclaving

(b) The coldest part of the load must be exposed to a minimum temperature of 121°C for at least 15 minutes.

(c) Measures must be taken to ensure that loads that have been processed can be differentiated from loads that have not (For example, autoclave tape).

(d) The temperature of each cycle must be monitored by use of one of the following means: a thermocouple and recorder; a maximum thermometer; a chemical indicator; spore strips; or readings from the autoclave panel.

(e) The effectiveness of decontamination by the pressure steam steriliser (autoclave) used by the facility must be tested at least every month.

(f) A notice must be posted on, or adjacent to, the autoclave indicating the result of the above-mentioned monthly test and the date of the test.

34. GMOs, and waste potentially contaminated with GMOs, that are being transported out of the facility, must be transported in accordance with the "*Guidelines for the Transport of GMOs*". Refer to IBC or OGTR websites.

35. Animals and plants not used in work being performed in the facility must be decontaminated by steam sterilisation (autoclaving), incineration or any other method approved in writing by the Regulator prior to removal from the facility.

36. If GMOs or organisms infected with GMOs stored outside the facility in a storage unit (freezer, fridge, controlled temperature room or other controlled temperature container) the following procedures must be followed. If there are GMOs that have in storage for a long time and have never been approved for use please refer to the storage guidelines on the IBC or OGTR websites.

(a) The storage unit must be locked when not in use or access restricted to the room or area where the storage unit is located.

(b) The storage unit must have a biohazard symbol posted on it

(c) The GMOs or organisms infected with GMOs being stored outside the facility must be double-contained.

(d) The primary container must be sealed and unbreakable.

(e) The primary container must be stored in an unbreakable secondary container and clearly labelled.

(f) The transport of material between the facility and the storage unit must be in accordance with the "*Guidelines for the Transport of GMOs*". Refer to IBC or OGTR websites.

(g) Gloves must be worn while transferring primary containers between the storage unit and the secondary container used for transport. Please be careful on the disposal of the gloves and ensure they are disposed of appropriately.

(h) Use the OH&S incident/accident procedures in place to report spills during storage outside the facility or transfer to the storage unit to the Regulator as soon as practicable. Tell the staff in your PC2 work area.

(i) Procedures in writing must be in place to decontaminate spilt material and the area.

37. All cultures must be clearly identified.

38. All cultures of fungi and other spore-dispersing organisms must be sealed during storage.

39. Eating, drinking, smoking, shaving and applying cosmetics are prohibited in the facility.

40. Food or drink intended for human consumption prohibited from being brought into or stored in the facility. Food cannot even be carried into or through a PC2 facility in a bag/briefcase/etc. Nor can it be carried through as facility to be consumed in a PC2 exempted office within a PC2 facility.

41. Long hair must be tied back or covered with a hair net at all times to avoid contamination when undertaking procedures.

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42. Mouth pipetting is prohibited in the facility.
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43. Reading/writing material and computers essential to procedures performed within the facility are the only such items to be used on work benches where procedures are performed.
44. Reading and writing material is prohibited from being used inside a biological safety cabinet.
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45. Where possible does the facility should provide and use dedicated reading/writing areas. Such an area can be defined with tape and a sign etc.
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46. Persons who have been performing procedures in the facility must wash or decontaminate their hands immediately before leaving the facility or before using any dedicated facility reading/writing areas.
47. The facility and equipment in the facility must be maintained so that the facility meets the "*Guidelines for Certification of Facilities/ Physical Containment Requirements*". Refer to OGTR website.
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48. Strategies must be in place to ensure that the facility is free of pests and is a record of the program and dates of specific activities kept and available if requested. Call the Cleaning Supervising who will arrange a program for the facility is required.
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Training- the following training requirements are listed by the Office of the Gene Technology Regulator (OGTR).

49. Are facility users trained in the following procedures:
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- a. familiarisation with the hazards posed by the organisms being used in the facility.
 - b. decontamination procedures.
 - c. procedures for dealing with spills inside and outside the biological safety cabinet and outside the facility.
 - d. procedures for the transport of materials inside and outside the facility.
 - e. communication systems- normal and emergency, and
 - f. licence conditions (where applicable)
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Licenses- if applicable- DNIR

50. Has the organisation, University of Tasmania and not the Principal Investigator, received written information signed by each person working on the licence that you have been informed of the following:

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- a. have been informed of the conditions of the licence,
 - b. have read the conditions on the licence,
 - c. understand the conditions imposed on the licence
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I have received and read this record of induction into the PC2 facility:

Name of FacilityRoom Number

Building.....Campus.....

Name (Print).....

Signed.....

Date.....

Name of Supervisor.....

Signature of Supervisor.....

Date.....

Microbiology Laboratory Induction Record Example
(Change it to suit each facility)

This record is to confirm that I have gone through an induction process to allow me to work without supervision in the microbiology laboratory, performing tasks consistent with my training.

Name _____

School or other University affiliation _____

Position _____

Inducted by _____

Date of Induction _____

Compulsory aspects of this induction include reading the Microbiology Safety Manual and being given a familiarisation tour of the PC2 Facility by e.g. Microbiology Safety Officer/Facility Manager.

Induction Checklist

Please tick or cross as applicable.

I have read through the Microbiology Safety Manual.	
I understand that this facility is a PC2 facility, and that all procedures must be carried out to a PC2 standard (see section 6 of Microbiology safety Manual)	
I understand that If I am working in the laboratory “out of hours”, that I should log in and out by phoning security.	
I have been shown how to use the autoclave safely.	
I have been shown how to use the gas isolation switches.	
I know how to access personal protective equipment within the laboratory (gowns, gloves, glasses).	
I have been shown how to use the Biological Safety Cabinet.	
I have been shown how to access the liquid nitrogen culture collection storage system safely.	

Signatures

Inductee _____

Inductor _____