

# OGTR Biocontainment Training Course for Auditors

**Brassey Hotel, Barton, 2 to 4 June 2015**

## **DAY 1 TUESDAY 2 JUNE 2015**

8:30-9:00 COFFEE/REGISTRATIONS

9:00-9:20 **Welcome and Introductions**

9:20-9:30 **Purpose of Workshop** (OGTR Management)

A brief description of the purpose of the workshop

9.30-10.30 **Session 1 - Principles of Biocontainment** (Tony Della-Porta)

*This presentation will cover primary and secondary barriers, aerosol containment, PC1 to PC4 containment levels and practices, and international standards and guidelines. This presentation will also cover the causes of laboratory infections and how engineering controls assist in the prevention of these infections.*

10.30-10.50 MORNING TEA

10.50-11.50 **Session 2 – General Compliance, PC2 and Upwards – What Third Party Assessors for QAPs look for** (Neil Walls)

- What Inspectors look for

- Common failures

*This will cover the experiences of a Third Party Inspector and give examples of issues encountered during inspections. This session will also point out issues which may be found by OGTR auditors in the future.*

11.50-12.40 **Session 3 - Air Handling Systems** (Neil Walls)

*The requirements of air handling systems for PC2, PC3 and PC4 laboratories and animal facilities. This presentation will include details on air flow rates, conditioning, directional air flow, pressure zones, duct systems and HEPA filtration systems.*

12.40-1.20 LUNCH

1:20-2.20 **Session 4 - Air Tightness, Air Pressures, Leakage and Testing** (Neil Walls)

*The standards and authorities require that a PC3 or PC4 facility must be able to support gaseous decontamination. This requires the facility to be sealed to a very high standard. This session looks at how this is achieved and measured. Correct penetration of electrical, hydraulic, air handling and other services is critical to the sealability of biocontainment facilities. We will describe and demonstrate penetrations that are utilised in biocontainment facilities and describe how testing is performed.*

## **DAY 1 TUESDAY 2 JUNE 2015      continued**

- 2.20-3:00      **Session 5 - Waste Treatment Principles and Issues**  
(Tony Della-Porta)  
*This will cover the treatment waste and decontamination. It will cover autoclaves, disinfectants, sterilisation, and decontamination.*
- 3:00-3.20      AFTERNOON TEA
- 3.20-4.10      **Session 6 - Laboratory Furniture and Equipment, including Biological Safety Cabinets** (Tony Della-Porta)  
*This will give an overview of the usual equipment found in containment facilities and some of the requirements of this equipment including biological safety cabinets.*
- 4.10-4:50      **Session 7 - Case Study 1: Identify what can go wrong (GROUP EXERCISE - Tony Della-Porta & Neil Walls)**  
*In this group exercise participants will each be issued a set of photographs to discuss in table groups. Groups will present their findings based on faults that should be picked up by third party assessors.*
- 4.50-5.10      Wrap up, questions & discussion

## **DAY 2 WEDNESDAY 3 JUNE 2015**

- 9.00-9:40      **Session 8 - Solid and Carcass Waste Treatment** (Neil Walls)  
*Some waste includes a mixture of solids and liquids, such as animal waste material and infected carcasses. A number of methods of dealing with this difficult waste material will be discussed in line with DAFF Biosecurity approved methods.*
- 9.40-11:00      **Session 9 - Animal, Invertebrate and Plant Facilities** (Neil Walls)  
*This will detail the requirements for both small and large animals, for plants and for invertebrates. The use of ventilated animal isolation cage systems will be discussed, with discussion of the two main systems currently being used in Australia and the differences in IVC containment and design. The relationship between these systems and the main air handling and waste treatment requirements will also be discussed.*
- 11.00-11.30      MORNING TEA
- 11:30-1:00      **Session 10 - Case Study 2: Examination of microbiological incidents in contained laboratory facilities and the identification of the causes (GROUP EXERCISE)**  
*Participants will work in groups to identify issues related to an incident that occurred in a USA food safety laboratory (PC2)*

## DAY 2 WEDNESDAY 3 JUNE 2015 continued

1:00-1.50 LUNCH

1:50-2.30 **Session 11 - Power, Fire Services, Laboratory Gases, Communications and Security** (Neil Walls)  
*These services often receive less attention within higher containment facilities. Although their functions are often similar to requirements of normal laboratory facilities, there are important differences as well as additional requirements for security, monitoring, control and indication.*

2.30-3.10 **Session 12 - Building Monitoring and Control Systems** (Neil Walls)  
*Neil will talk about the principles of control systems for biocontainment*

3.10-3.20 AFTERNOON TEA

3.30-4.30 **Session 13 - Liquid Waste Treatment** (Neil Walls)  
*There are a number of methods of dealing with potentially contaminated liquid waste. These vary greatly in effectiveness against different risk organisms and volume capacity. This session will examine current technologies that are available in line with approved methods. It will also introduce some new methods that are being considered in this growing industry and issues related with servicing and revalidation of this equipment.*

4.30-5:30 **Session 14 - Gaseous Decontamination** (Tony Della-Porta)  
*This introduction will cover the types of gaseous decontamination processes likely to be used in a biocontainment facility. It will cover in some detail formaldehyde, vaporised hydrogen peroxide and chlorine dioxide. Safety considerations will also be covered.*

5:30-5.40 Wrap up, questions and discussions

## **DAY 3 THURSDAY 4 JUNE 2015**

### **Visit to Facilities**

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|--------------|---|
| 9:00-9:15    | Assemble at OGTR for transport to facilities  |
| 9:45-12:30   | Visit to CSIRO Black Mountain site to inspect PC2 plant and invertebrate facilities |
| 12:30 – 1:00 | Return bus trip CSIRO to Brassey Hotel  |
| 1:00-2:00    | LUNCH   |
| 2:00-4:30    | <b>Session 15 – Discussion of draft Guideline and any remaining issues</b>          |