

## APPENDIX: CRUCIAL INFORMATION

### IMPORTANT CONTACT NUMBERS

| Service   | Telephone  | email   |
|---|--|---|
| Department of Wellbeing, Safety & Health switchboard  | 0113 34 34201  | <a href="mailto:radiation@leeds.ac.uk">radiation@leeds.ac.uk</a>  |
| Ian Haslam<br>(Head of Radiation Protection)  | 0113 34 34203<br>07800 963148 (emergencies)                    | <a href="mailto:radiation@leeds.ac.uk">radiation@leeds.ac.uk</a> , or<br><a href="mailto:i.k.haslam@leeds.ac.uk">i.k.haslam@leeds.ac.uk</a> |
| Andrew Cowling<br>(Radiation Protection Manager)  | 0113 34 34202<br>07506 707342                                  | <a href="mailto:radiation@leeds.ac.uk">radiation@leeds.ac.uk</a> , or<br><a href="mailto:a.cowling@leeds.ac.uk">a.cowling@leeds.ac.uk</a>   |
| Security Services   | 0113 34 32222 (emergencies)<br>0113 34 35494 (non-emergencies) | <a href="mailto:security@leeds.ac.uk">security@leeds.ac.uk</a>  |
| Estate Services helpdesk  | 0113 34 35555  | <a href="mailto:eshelp@leeds.ac.uk">eshelp@leeds.ac.uk</a>  |
| Environment Agency<br>incident hotline (24 hr service)<br><b>The Environment Agency must only be approached through the Radiation Protection Service.</b> | 0800 807060  |   |

### EMERGENCY EQUIPMENT

|   |  |
|---|--|
| <b>Equipment location</b>                 | <b>Radiation Protection Service: office</b><br><b>Department of Wellbeing, Safety and Health</b><br><b>Room 2.04, 5-9 Willow Terrace Road</b><br>[Accessible 24/7 by Service staff and Security Services]  |
| <b>Item</b>                               | <b>Contents</b>  |
| Black Peli Storm Case (large)             | <b>Hand held monitoring kit</b><br>1 x Mini 1000 minirad (dose rate monitor)<br>1 x Mini Instruments type 900D (dose rate monitor)<br>1 x Mini Instruments type 900EP15 (beta detector)<br>1 x Mini Instruments type 900 / 44B (x-ray, gamma & EC detection)<br>1 x Mini Instruments type 900 / 42 (x-ray, gamma detection). |
| Black iSeries SKB Waterproof Case (small) | <b>Wide area dose rate monitoring system</b><br>1 x Radcal Accupro & 0.68 cc ion chamber   |
| Silver case                               | <b>Leak test / tritium monitoring kit</b><br>Lab Logic wipe papers & fluid<br>Glass fibre filters<br>Nitril gloves<br>Overshoes  |

|  |   |
|--|---|
|  | Disposable contamination suite<br>Paper role / tissues  |
| Dacoma Spill Responder shoulder bag (yellow) | <b>50 litre spill kit</b><br>4 x Bunds<br>2 x Absorbent pillows<br>Absorbent pads<br>Yellow & blue radioactive waste bags |

|   |   |
|---|---|
| <b>Equipment location</b>   | <b>Radiation Protection Service: laboratory</b><br><b>School of Food Science &amp; Nutrition</b><br><b>Room G.06, Willow Terrace Road</b><br>[Accessible 24/7 using pass card held in Service office] |
| <b>Item</b>   | <b>Use</b>  |
| Lab Logic single cell portable liquid scintillation counter                   | For the counting of surface wipes, particularly in the detection of tritium and carbon-14.  |
| Bicron G2 2" x 2" NaI crystal scintillation detector & OI PCA-P-Plus MCA card | To perform spectral analyses on unidentified radioactive samples.   |
| Bicron G2 2" x 2" NaI crystal scintillation detector & Bicron labtech scalar  | To perform activity analyses.   |
| High standard radiochemistry laboratory                                       | Fume cupboard, high performance furniture & fittings, radiation safety equipment & shielding suitable for radiochemistry analytical work.   |

## INSTRUCTIONS FOR THE FIRE SERVICE (& SECURITY SERVICES)

### HASS radiation source store (Worsley Building)

- 39) Security Services know the location of this facility, which they keep under continual surveillance.
- 40) HASS sources are held in a secure area within a purpose built relatively isolated source store. The sources themselves are encased in <40 cm diameter lead pots or similar.
- 41) In the event of a **short fire** these would not be expected to be seriously damaged. The instruction is to **fight the fire**.
- 42) In the event of a **prolonged fire** of high intensity it is highly unlikely the sources would be seriously damaged. The instruction is to **fight the fire**.

### All radiation Supervised Areas across campus (the highest risk category permitted)

- 43) Radiation laboratories identified as being Supervised Areas only contain **small quantities** of radioactive materials, and these will be stored in fridges or freezers. Most of these will be sited underneath the lab benches.

- 44) In the event of a **short fire** the fridges & freezers may be damaged or may melt. Radioactive materials would be expected to become incorporated into the fabric of the fridge / freezers. The instruction is to **fight the fire**.
- 45) In the event of a **prolonged fire** of high intensity it is highly unlikely the sources would boil off inside the melting fridge / freezers and escape in the smoke. The risk of radiation exposure is low and normal precautions for fighting fires in smoke filled environments will provide adequate protection to fire fighters. The instruction is to **fight the fire**.

## INFORMATION FOR SECURITY SERVICES

### Entering & searching ionising radiation laboratories

#### *Supervised Areas: unsealed radioactive materials*

- 46) Radioactive substances in the form of liquids and powders are used in Supervised Areas. These areas can be recognised by the following types of sign:

#### Caution sign



Caution – radiation  
Supervised Area  
Low risk  
Unsealed sources



Access controlled  
In an emergency  
(e.g. fire alarm, flood)  
this lab may be entered  
[www.leeds.ac.uk/rps](http://www.leeds.ac.uk/rps)

Lab:  
For access contact:  
Radiation Safety Coordinator:

- 47) Labs bearing the '**caution**' sign may be entered by any member of staff in order to take emergency or preventive action, e.g. to investigate a fire, carry out emergency plumbing or electrical work, to turn off running taps, investigate floods, etc.
- 48) When not in use all radioactive materials will be stored in cupboards, fridges and freezers, and will not be out on benches. Although care must be taken when opening fume cupboards.
- 49) The level of risk is low.
- 50) All rooms are checked regularly to make sure they are safe and there is no contamination on floors, in sinks, etc.

## Warning sign



Warning – radiation  
Supervised Area  
Moderate risk  
Unsealed sources

RESTRICTED AREA  
Unauthorised entry  
is strictly forbidden



Lab:  
For access contact:  
Radiation Safety Coordinator:

- 51) Labs bearing the '**warning**' sign may be entered by an authorised person only. Authorised persons include Estates Services engineers, plumbers, etc. and Security Services personnel who need to take emergency or preventive action, e.g. to investigate a fire, carry out emergency plumbing or electrical work, to turn off running taps, investigate floods, etc.
- 52) The reason for the higher level of restriction is on security grounds and not for reasons of radiation safety.
- 53) When not in use all radioactive materials will be stored in cupboards, fridges and freezers, and will not be out on benches. Although care must be taken when opening fume cupboards.
- 54) The level of risk is moderate. This means that plumbers should take extra care if dismantling sink drains or tapping into waste water systems.
- 55) All rooms are checked regularly to make sure they are safe and there is no contamination on any accessible surfaces.

### **Entering and searching x-ray laboratories**

- 56) X-ray systems of the type used at the University are inherently safe and do not present any risk of radiation exposure. If access is restricted it is not for reasons of radiation safety.
- 57) In the event of flooding care should be taken as many x-ray systems are always powered up, and in an emergency scenario there could be a risk of electrocution. If at all possible power should be interrupted if flooding is suspected.