

Our Ref: RSA/E/20086  
Your Ref:

Radiation Protection Officer  
University of Dundee Safety Services  
3 Cross Row  
Dundee  
DD1 4HR

If telephoning ask for:  
Louise Brown

28 May 2010

**FAO Martin Rollo**

Dear Martin

**Radioactive Substances Act 1993: University of Dundee - Routine Inspection  
Certificates RSA/B/0070179, RSA/C/0070130 and RSA/C/0070092**

I write with regard to my inspection of compliance with the requirements of the certificates held by the University of Dundee under the Radioactive Substances Act 1993, over the period 18-20 May 2010. I am pleased to report I found the University to be satisfactory. I note below some of the observations made during my visit which may help improve or more clearly demonstrate compliance, noting that some of these actions have already been identified and amended at the visit or since the inspection. It is recognised that many of the issues highlighted below will be resolved in the course of ongoing audits and checks as part of the University procedures for managing radioactive substances and as such will be inspected at the next SEPA visit. Where a specific response is required, this is indicated in the text below.

**JBC Level 4**

- In order to aid source identification, all users should be clear of the procedure for **labelling sources or their immediate containers**

**JBC Mezzanine**

- For clarity and cross referencing, it may be helpful if a **consistent procedure is adopted for identifying sources which have been disposed of** (eg sometimes arrows are used, sometimes a new entry is made, sometimes a total is given at the bottom).

**JBC Level 2**

- A number of sources in the hot room fridge/freezer have been unused for several years. **Audits of the sources should continue to be undertaken on a regular basis with a view to disposing of any excess sources disposed of.**

**WTB Mezzanine**

- Consideration should be given to whether **low-level bench signing/RPS/RPO contact details could be moved, from the metal supports above the sinks, to avoid confusion with the designated sink.**

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Chairman  
David Sigsworth

Chief Executive  
Dr Campbell Gemmell

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Redwood Crescent, Peel Park, East Kilbride G74 5PP  
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### WTB Level 3

- Contamination monitoring results should be completed in full.
- It was noted the work carried out in this lab may be moved to another location in future due to reorganisation of lab areas. If the lab is no longer used for radioassay work, please fully decommission, sending a copy of any report to SEPA.

### WTB Level 2

- Again, the procedure for indicating sources which have been disposed of should be clarified.
- Internal source transfer paperwork (eg to Carnelly) should be exchanged between the two labs as soon as possible, to ensure records are kept up to date.

### WTB Level 1

- The area (room 1 L2 27) should be checked to ensure that equipment no longer used for work with/storage of radioactive sources is decommissioned and free from radioactive warning tape.

### MSI Level 2

- Audits on old/unused samples to be carried out regularly and excess samples/sources to be disposed of as soon as practicable.
- Consideration should be given to whether the sink in the open lab area is still required for disposal of radioactive wastes. If not, it should be monitored to ensure it is free of contamination and decommissioned.
- As before contamination monitoring results should be completed in their entirety, with initial results then details of actions taken

### JBC Level 1

- Samples which are kept for extended periods (eg for reanalysis) should be minimised where possible, or a storage facility made available if the numbers .

### MSI Level 1

- Audits on old/unused samples to be carried out regularly and excess samples/sources to be disposed of as soon as practicable
- RNA monitoring sheets should be completed after monitoring has been undertaken
- Where samples/stocks are stored in fridges other than the main fridge, these should be labelled appropriately.

### College of Life Sciences, Carnelly Building

- Ensure paperwork trail internal transfer of sources is complete (see WTB2)
- On balance, it was considered current practice of monitoring the sink only during assurance monitoring some time after the experiments were complete was adequate, provided that (i) no contamination of the surrounding monitored areas (taps, drain board etc) is observed, (ii) the sink is well rinsed after final use, and (iii) the sink remains unused other than for these experiments.

### DEEP, Jute Shed

- Amend monitoring procedure to make more explicit what is monitored in the two monitoring areas.

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### **Geography, Frankland Building**

- Monthly records indicate a running total of “-6” kBq of stock held (Column F). The spreadsheet formula for calculating the stock held should be checked.

### **Forensics, Fleming Gymnasium**

- An appropriate route for disposal of the GC and incorporated Ni-63 source should be identified as soon as possible.

### **Dental School and Hospital**

- An unidentified standard/sample (C247-67) is held with the counting standards for the scintillation counter. This does not appear to be included on the inventory of sealed sources. Please identify the source and include on the RIMS list of sealed sources, and/or dispose as appropriate.

### **Radioactive Waste Store, JBC basement**

- The labelling system should be revised to ensure that either the correct labels are used for LLW/VLLW bags, or that single-colour labels are used and VLLW/LLW status identified by the waste manager

I attach for information a copy of your Operator Performance Appraisal which I describe in brief below.

SEPA is required to direct resources to where they are most needed and where they will be most effective in meeting its environmental objectives. SEPA has adopted a risk-based assessment methodology to determine inspection frequencies for licenses, authorisations and consents (where inspection is needed). The system used for RSA premises, i.e. those registered and authorised under the Radioactive Substances Act 1993 is called Operator Performance Assessment (OPA).

The objective of the OPA score is to identify which sites are poor performers in order that regulatory effort can be targeted appropriately. Comparison of overall site and component scores may provide valuable information as regards trends, deteriorating or improving performance year on year. The inspecting officer must use his or her own judgement, based on a thorough knowledge of the environmental issues pertinent to the keeping and use of radioactive material and/or accumulation and disposal of radioactive waste, to make an informed decision on the score to be awarded.

The attributes have been selected by an examination of the conditions and limitations within the certificate templates for registration and for authorisation to accumulate and dispose of radioactive waste. They are essentially broad categories into which the conditions will generally fall. It should be noted that where the term “radioactive substance” is used, it includes both radioactive material and radioactive waste, as appropriate.

Inspection of registered/authorised premises will result in all or some of the features of the 6 attributes being assessed. Each attribute should be given a score out of 5, 1 being the worst and 5 the best. It is recognized that all of the attributes will not be equally represented across the different types of premises; however, the attributes are sufficiently generic to allow them to be used effectively.

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Radiation Protection Officer  
University of Dundee

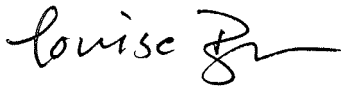
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- A score of 3 or above is considered to be **satisfactory** and indicates that the operator is compliant with all relevant licence conditions relating to that attribute;
- If the operator scores one level 2 on any attribute, the OPA assessment shall be considered **satisfactory** provided all other attributes are scored at level 3 or above;
- If two or more attributes are scored at level 2 or below, then the assessment is considered **unsatisfactory**; and
- A score of 1 against any attribute means that the overall assessment is **unsatisfactory**.

An assessment of your performance has been carried out and the outcome was satisfactory. The results have been recorded in the attached form.

I would be grateful if you would also pass on my thanks to your colleagues in all departments for their assistance during the inspection. Should you have any queries on any of the issues raised above, I can be contacted directly on 01355 575660 or by email at [louise.brown@sepa.org.uk](mailto:louise.brown@sepa.org.uk).

Yours sincerely

A handwritten signature in black ink that reads "Louise Brown". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Louise Brown  
RS Specialist

Enc. OPA 2010

## RADIOACTIVE SUBSTANCES OPERATOR PERFORMANCE ASSESSMENT

Form Ref ERA-F-06		
Radio Active Substances Operator Performance Assessment		
Licence No	Location Code	Officer / Team Area
RSA/B/0070179 (s13/14) RSA/C/0070130 (S7 open) RSA/C/0070092 (S7 closed)	331191	Louise Brown
Site Name	Site Address	Date of Assessment
University of Dundee	University of Dundee Nethergate Dundee DD1 4HN	18 May 2010 - 20 May 2010
Overall Comments:		
The university is generally in compliance with its requirements under RSA93. Minor recommendations have been made to aid clarity in demonstrating compliance.		
Attribute	Score 1-5 1 = Poor 5 = Excellent	Comment / Explanation
1. Radioactive substance security	4	All areas have appropriate levels of security (swipe card entry to all labs except teaching labs/keypad access to supervised areas/lockable storage areas). HASS security meets CTSA requirements.
2. Knowledge & implementation of licence requirements	4	Licence requirements implemented satisfactorily. Good knowledge of requirements demonstrated by RPS's.
3. Recording & Use of Information	4	Records are well-kept electronically and on paper, and used to demonstrate compliance with RSA93
4. Facility Management	3	Premises and associated equipment satisfactory.
5. Radioactive substance management	4	Satisfactory RS management observed
6. Incidents complaints & non compliance events	3	None reported Procedures amended to prevent accidental sealed source disposal following EN in 2008.
Operator Performance Rating (6-30)	22	
Satisfactory / Unsatisfactory	Satisfactory	

Officers signature	Line Managers Signature
