

University of Dundee

RADIATION SAFETY SUB-COMMITTEE

A meeting of the Radiation Safety Sub-Committee was held at 10am on 5th December 2007 in River Room 3, Floor 9, Tower Building.

Present: Dr David Hewick (DH) [University Radiation Protection Adviser & Convener]
Ms Lisa Grayson (LG) [Minutes]
Ms Letty Gibson (LMG)
Mr Martin Rollo (MR)
Mr Damian Leddy (DL)
Dr David Sutton (DS)
Ms Aileen McLaren (AM)
Dr Nick Helps (NRH)
Ms Allison Bridges (AB)

Apologies were received from Ms Julie Smyth (JS) and Ms Sheila Sharp (SS).

MINUTES

Action

1. Minutes of the meeting on 15th May 2007/Matters Arising

The Minutes were approved.

Matters Arising:

Item 9a: DH reported that attendance at the November New Users' Course had improved compared to that for the May 2007 course but there will still 15 no shows out of 49 invites. Reminders are being sent out and RPSs have been asked to encourage new users to attend.

Item 9b: LG pointed out that the email clarifying the wipe test guidance had not yet been issued. DL said he would issue the email as soon as possible.

DL

All other matters arising from the previous minutes were covered under the 5/12/07 agenda.

2. Composition of the Committee

a) DH welcomed LMG to the Committee.

b) DH pointed out that a vacancy still exists for a member of CLS staff but added that there is no urgency to fill this.

3. New Items for the Agenda

See Item 9.

4. Main Campus

a) Scintillation Counter

DH informed the Committee that a scintillation counter containing an exempt 152Eu source had been inadvertently disposed of during extensive refurbishment of the Medical Sciences Institute. SEPA has been informed and a full internal investigation has been carried out. SEPA has informed the University that they will be issuing an Enforcement Notice in due course. In the interim, Safety Services are reviewing procedures to prevent a recurrence. The following key requirements have already been identified:

- i. Scintillation counters (and other sealed source containing equipment) that are in use will be labelled up with a '6 monthly check' label that the RPS has to

date and initial.

- ii. Scintillation counters (and other sealed source containing equipment) that are in storage will be labelled up with a 'monthly check' label that the RPS has to date and initial.
- iii. Procedures relating to supervision and instruction of contractors carrying out refurbishments will be drafted/reviewed.

DS asked why the new labels were necessary. MR explained that this was to ensure the counters were physically checked. DH pointed out that where loose sealed sources (i.e. those not contained within equipment) were kept, the drawer or cupboard in which they were stored should be labelled. LG asked if this applies to calibration/normalisation standards for scintillation counters. DH said it did not and that logging such standards on the Sealed Source Database was adequate.

b) Single-Site Licence

After some debate with SEPA, DH has secured an adequate tritium gas limit to accommodate the work on WTB Floor 1.

DH informed the Committee that he expects SEPA to grant a variation to the single-site licence that will acknowledge the 10 fold relaxation on the amounts of tritium and ¹⁴C waste that can be disposed of as VLLW. Until the variation is official, Safety Services are storing all waste that it will apply to. MR estimated that there is 12 months worth of storage space remaining. DH was given a 6 to 12 month timescale by SEPA, 6 months of which has already elapsed. DH to give an update at the next meeting. DS commented that other institutes across the country could be experiencing similar problems and agreed to raise the issue with the Scottish Non-Nuclear Industries Liaison Group (formerly known as the Scottish Small Users Liaison Group).

DH

DS

c) HASS Registration

The matter of financial provision to cover the final disposal of high activity sealed sources was discussed. DH announced that David Duncan had written a letter confirming that £30k will be available to cover the disposal of the CLS gamma irradiator. DS pointed out that the Medical School irradiator contains a higher activity source and, at today's prices, disposal would cost between £50k and £60k. SEPA have asked DS for further information on financial provision for final disposal. Peter Evans (Secretary for the College of Medicine, Dentistry and Nursing) has written to SEPA but there appears to have been some breakdown in communication. DS has asked to be copied in on all correspondence. SEPA have taken legal advice and are now asking for a binding, indelible contract that guarantees funds will be available to cover disposal costs. Both DH and DS agreed that this totally unrealistic. DH has written to RPAs at other Scottish Universities to get their perspective on this but has yet to receive a reply. DL explained that the Scottish Executive will make the final decision on this in the near future. DH/DS to keep Committee informed.

DH/DS

d) James Black Centre (JBC), New Stores

DH confirmed that the JBC Stores are now fully operational. MR confirmed that the ductless fume hood for ¹²⁴Sb dispensing will be transferred from BSI to the new stores today (5/12/07).

e) Scintillation Waste Stores

DH explained that, under the new Single Site licence, radioactive and non-radioactive materials cannot be kept in the same store. Therefore, all CLS scintillation waste is now being stored at the west end of MSI and the small WTB store room is now being used for yellow bins. AB asked if DSTT staff had been made aware of this and MR confirmed that they have.

5. MRC Unit

NRH informed the Committee that GE Healthcare is to cease supplying short half-life radioisotopes. This has forced MRC/DSTT to switch to Perkin Elmer (PE) for ³²P and ³³P. Unfortunately, an initial order for 1mM ATP ³²P (required fortnightly) took 3 weeks to arrive. AB assumed this was due to the order getting lost in PE's system. LMG added

that there had been delivery problems in other areas of CLS and she had already met with the local PE representative to discuss this and had recently arranged a follow-up meeting. DH asked if 33P was being delivered on time. NRH confirmed that it was. AB added that GE Healthcare had also stopped supplying 86Rb and 22Na. DH asked if any companies other than PE could supply these radioisotopes. AM suggested trying MP Biomedicals.

6. Medical School

- a) HASS Registration
Already covered under Item 4c.
- b) Centre for Clinical Research
DS confirmed that construction is complete but the CCR is currently unoccupied. DS has done all he can at this stage in terms of regulatory issues relating to the PET CT and PET MR facilities. Operational dose measurements, as opposed to theoretical calculations, are now required.
- c) Translational Medicine Research Centre
This project is still in the construction phase and on schedule. TMRC do not use radioactive substances at present. DS pointed out that, should this change in future, a clear decision would have to be made on who takes responsibility for radiation protection, i.e. the University or Wyeth.
- d) Laser Safety
There have been no significant developments since the previous meeting. DL, MR and JS are continuing to work on documentation.
- e) The 6 monthly Medical School radiation protection summary had already been distributed by email. There were no additional comments on this report.

7. RPS Matters

- a) New RPSs
Dr Jackie Heilbronn has recently assumed the role of RPS on MSI Floor 2. She will undergo a mentoring period of 4 to 6 months with LG.

Dr Stephen Rae is acting RPS on JBC Floor M while Dr Louise McGreavey is on maternity leave. Dr Rae received training from LG, LMG and MR.

Ms Sally Lorimer is providing maternity cover for the Division of Pathology and Neuroscience RPS for one year. Ms Lorimer shadowed SS prior to her appointment.

- b) RPS Training
DL reported that he, MR and JS are continuing to work together on RPS training. However, there will be differences between the Ninewells and Main Campus approach. The Main Campus RPS training will primarily consist of a one to one tutorial from MR or DL and an extended apprenticeship, or mentoring period, with an experienced RPS. The Ninewells RPS training will focus on organised training sessions/classes and conclude with a multiple choice test. It was noted that JS has put a considerable amount of time and effort into the development of RPS training. DS asked if the development is complete and the new training packages/approaches ready to implement. DL said they still had to be finalised. DL to give an update at the next meeting.

DL

8. Waste Disposal

- a) Costs (see Appendix A)
DS clarified that the drop in Ninewells' disposal costs occurred after switching to a "charge by volume" system, as a result of contract renegotiation, and not a "charge by activity" system as recorded in the previous minutes. DS fears that the contractor may be undercharging and when/if this comes to light the costs will increase again.

DH confirmed that JS has supplied him with a break down of Ninewells' disposal costs, as requested at the previous meeting. DH asked if JS could continue to do this for 2008 to allow him to compare charges for the Main Campus and Ninewells in

detail. DS said he would relay the request.

MR noted that the difference in the volume of scintillation waste being generated at the two sites is significant with the Main Campus disposing of 200 drums and Ninewells disposing of only 11 drums over the same period.

b) New UK LLW Policy

DH informed the Committee that the slow implementation of this Policy may lead to a shortage of storage space for solid waste in MSI/WTB/JBC. Safety Services will continue to closely monitor the situation.

9. Additional Agenda Items

a) DH intended to discuss the most recent HSE Inspection report but the report has not arrived.

b) DH informed the Committee that MR has been compiling a portfolio for submitting to SEPA in order to become a Qualified Expert (QE). Having a QE on site to deal with radioactive waste is a condition of the new Single Site Licence. MR expects to have QE status before the next meeting.

10. Date of Next Meeting

The next meeting of this Committee will be held in the same venue, if possible, on Wednesday 14th May 2008 at 10am.

Appendix A

Annual Campus/Ninewells Radioactive Waste Disposal Costs

Campus [calendar year]		Ninewells [financial year]	
Year	Cost [£]	Year	Cost [£]
2002	20,508		
2003	12,684	2002/3	20,961
2004	12,122	2003/4	22,547
2005	6,399	2004/5	20,250
2006	9,589	2005/6	20,545
2007	6,262 +2,100?	2006/7	2,171

Year 2006 for the Campus includes the cost [£4,302] of disposing of 4 radium sources [two of which came from the Medical School].

Year 2007 for the Campus includes an estimate (?) for a pick-up on 26.11.07.