# **University of Dundee**

## **RADIATION SAFETY SUB-COMMITTEE**

A meeting of the Radiation Safety Sub-Committee was held at 10am on 19<sup>th</sup> May 2004 in River Room 3, Floor 9, Tower Building.

Present: Dr David Hewick (DH) [University Radiation Protection Adviser & Convener] Miss Allison Bridges (AB) Miss Lisa Grayson (LG) [Minutes] Dr Bob MacKintosh (BM) Mr Martin Rollo (MR) Mrs Sheila Sharp (SS) Mr Ewan Starke (ES) [deputising for Prof Brian Eddy] Dr David Sutton (DS) Dr Pete Taylor (PT)

Apologies were received from Sandy Chudek (SC), Aileen McLaren (AM) and Julie Smyth (JS).

## MINUTES

1. <u>Minutes of the meeting on 4<sup>th</sup> December 2002/Matters Arising</u>

The Minutes were approved.

### **Matters Arising:**

- a) Three SLS Radiation Protection Supervisors attended the Radman Associates RPS Refresher Training Course in March 2003. ES commented that he has not attended a Radman course and would like the opportunity to do so. DH to email Brian Eddy informing him where to get information on training courses for ES if required.
- b) PT asked what the radioactive waste disposal costs for 2003 amounted to. DH did not have the exact figures but estimated the cost to be very similar to that for 2002.
- 2. <u>New Items for the Agenda</u>
  - a) Medical School Issues: Julie Smyth's change of job; Clinical Research Centre. See item 5.
  - b) RPS Matters: badging policy; appointment system; discipline system. See Item 8.
  - c) ACPOS: see item 9.
- 3. <u>Composition of the Committee</u>

DH explained his selection of Committee members was designed to give fair representation across the Main Campus and Medical School. He stressed the importance of including members of Academic Staff in order to get their perspective on radiation safety related issues.

No comments were forthcoming from the Committee and the new composition was approved.

4. MRC Unit

BM reported that the new MRCPPU/DSTT radioisotope management system is running smoothly and no major problems have arisen since SEPA's last visit. AB deals with the daily running of the system and, with better cooperation from the staff, is achieving a high level of control.

DH commented that the internal audit of MRCPPU/DSST went well.

- 5. Medical School
  - a) Three existing departments have merged to form the Division of Pathology and Neurosciences. SS is the RPS for this Division and Graham Ogg fulfils the role of Deputy. An initial audit revealed serious deficiencies in existing radioisotope management systems and it took a considerable amount of time and effort to rectify the problems and implement a common, workable system across the Division. SS reported

that the exercise was a success and the new system is now running smoothly.

- b) DH summarised DS's latest report on radiation safety management in the Medical School. All requirements are being satisfied and there are no major problems to report, barring one case of overexposure in the Biomedical Research Centre. Finger badge results showed one worker had acquired a dose of 70mSv over a four month period. The incident was investigated and deemed to be down to total incompetence on the part of the individual involved. This person is no longer working with radioisotopes.
- c) DH asked DS for clarification on Julie Smyth's change of job and expressed concern over continuity of service. DS explained that the University pays for radiation protection services, as stipulated in the contract, and not a named individual. Julie will now specialise in diagnostic radiology physics and radiation protection in a healthcare environment. A new person will be appointed to take on her old duties. The post will be advertised shortly and applicants will be expected to hold a higher degree, be adequately trained and have at least three years postgraduate experience. DS assured DH that the current level of service will be maintained.
- d) Construction of the Clinical Research Centre is due to begin this summer and be complete within six to nine months. DH is keen to find out if additional resources will be required to cover radiation safety management in this new facility. DS is unable to estimate what the resource implications might be because the main players have not yet decided exactly what research activities will be carried out in the facility. However, it is clear that radiation protection services will be required to some degree and there will be cost implications for the University.

### 6. Main Campus

a) Single Site Licence

DH informed the Committee that he has applied to SEPA for single a site licence to cover the entire Main Campus. The application was submitted on January 21<sup>st</sup>. One week later, Anne Anderson asked for the associated spreadsheets. There has been no contact since. DH predicts that it could be the end of 2004 before the licence is officially granted and he expects some queries and requests for additional information. Fortunately, SEPA agreed to levy only the single site licence fee for 2004, rather than the eight annual subsistence fees for the existing multiple licences. This will result in significant savings, now and in future years, especially in light of SEPA's ever increasing charges.

#### 7. Waste Disposal

#### a) Redundant Sealed Sources

DH drew attention to the tenfold increase in the disposal cost for Radium 226. Disposal of a 0.37MBq scintillation counter sealed source now costs approximately £6000. Currently, there are four Ra-226 containing counters in the University. None of these are to be classed as redundant until the issue of disposal cost financing is resolved. DH has raised this issue at the Scottish Small Users Liaison Group and asked for an audit of all Ra-226 containing counters in Scotland with a view to estimating the total, future disposal cost. DS commented that JS is currently updating the list of sealed sources at Ninewells. SS informed the Committee that Packard will dispose of any sealed sources they supply, providing an agreement is made at the time of purchase. Committee suggested that all purchases of sealed sources (and equipment containing them) should include a contract for disposal at the end of the source's/equipment's life. This could avoid unexpected and considerable expenditure in the future. Concern was voiced over the 70TBq Caesium irradiator in WTB: no consideration was given to the cost of disposal at the time of purchase.

#### 8. <u>RPS Matters</u>

a) Resources Questionnaire

In an email to DH, JS referred to Medical School RPSs as being "already overstretched". This prompted DH to draft a questionnaire designed to establish whether RPSs have the time and resources to carry out their role properly. Committee agreed this was a good idea. DH to issues questionnaire as soon as possible and produce a summary of the responses for analysis at the next meeting.

b) Badging Policy

DH identified significant differences between the Medical School and Main Campus in terms of numbers of whole body/extremity dosemeters issued. On the Main Campus approximately 30% of registered workers have been issued with whole body badges and 30% with finger badges. At the Medical School these figures drop to 7% and 13% respectively. This discrepancy is puzzling because the same criteria are applied at both sites. MR commented that up to half of the Main Campus finger badges are returned

unused. Due to the time, effort and expense invested in the personal dosimetry system, DH suggested a review of finger and body badge usage on the Main Campus. MR commented that two previous attempts to do this have failed. LG said that an official, co-ordinated effort may get the desired response. MR and LG to organise within the next couple of months.

c) Appointment System

DH would like to replace the current Main Campus RPS appointment system (i.e. offer of appointment via letter from the University Court) with one similar to the NHS system where a list of appointments is put before the Radiation Safety Committee and, if accepted, passed up for final approval by a higher committee. Prospective RPSs will be nominated by their Head of Department/Unit and have agreed to take on the role. Appointments would be confirmed by furnishing the new RPSs with a copy of the relevant minute and a list of duties. DS said that he preferred the current Main Campus system, but DH thinks it is overly onerous and outdated. There were no objections from the Committee.

d) Discipline

SS has implemented a mechanism within the Division of Pathology and Neurosciences to ensure monthly returns are promptly submitted. Groups are prohibited from ordering radioisotope if they fail to submit their returns within two weeks of the end of the month. The Head of Division gives this system his full backing and, since its introduction, there has never been cause to exercise the power; the threat is enough to guarantee full co-operation. LG commented that such a system would not be well received within the School of Life Sciences. Main Campus Groups get four weeks to submit their monthly returns before MR starts to issue email reminders. PT suggested that this is reduced to two weeks. MR thought the current situation on the Main Campus was acceptable, although he did admit that there could be a problem in the event of an unannounced SEPA Inspection. LG pointed out that one Life Sciences Group was almost two months behind with their returns. DH asked Martin to deal with this and both agreed to reduce the submission time to two weeks. MR to inform Main Campus RPSs. LG asked MR to include Ian Leith on the mailing list to ensure he is aware of all late submissions from Life Sciences.

#### 9. Additional Agenda Items

a) Associated Chief Police Officers in Scotland (ACPOS) Guidance

DS brought the ACPOS guidance relating to the security of radioactive material to the attention of the Committee. This has potentially serious implications for facilities housing high dose irradiators. Special Branch has already inspected facilities at Ninewells. The Main Campus Caesium 137 irradiator falls into the highest risk category and would therefore demand the most stringent security measures. However, Special Branch has not yet contacted DH to arrange a visit. DS stressed that the ACPOS guidance is not legally binding, at the moment, but this may change in the near future and it is, therefore, worth bearing in mind. DH did not think any action was required at present.

b) Non-Ionising Sources

SS was assigned the role of Laser Protection Supervisor (LPS) by her head of unit after DH's email on laser safety was circulated in early April. SS complained about the lack of information and training on laser safety and the duties of the LPS. DH said the email had been sent to SS (and other Medical School departments) in error and that Medical Physics were contracted to deal with non-ionising radiation safety in the Medical School. DS advised SS to contact JS for clarification. JS has carried out risk assessments on all non-ionising sources in the Medical School. DH indicated that being an RPS did not automatically qualify somebody as being suitable for taking on the role of LPS and that, on the main campus, no RPS was also an LPS.

c) SS also complained about not being kept informed with regard to the disposal of sealed sources and associated costs. The Ra-226 issued came up at the University Safety Committee meeting and was reported back to her Head of Division without her knowledge. When queried on the subject, SS was unable to give any additional information. DH said this was regrettable but the Ra-226 disposal costs only came to light just prior to the last Safety Committee meeting and, unfortunately, there was insufficient time to give the RPSs this information.

#### 10. Date of Next Meeting

The next meeting of this Committee will be held in the same venue (if possible) on Wednesday 8<sup>th</sup> December at 10am.