

WTCHG Radiation Protection Audit and Meeting

Tuesday 19 September 2017 10.30-13.30

Present: Dr Z Bencokova (ZB); Mark Bradley (MB); Gill Jenkins (GJ); Dr J Brown (JB), Dr Ross Chapman (RC); Dr M Challen (MPC), Cornelia Cazez (CC)

The following matters arising were discussed before and during the audit and radiation labs tour:

U compounds users' registration

Only two people are preparing solutions from U salt stock pots. Both must be registered for U salts work.

MB to advise if all U users must be registered. MB to calculate the exposure risk from the aliquot concentrations used in the EM staining protocols. Then the EM guidance to be reviewed if changes of registration rules for low risk users.

All U compound users should have training records.

The fume hood where the U stockpots are opened must be monitored after each powder dispensing operation, result must be recorded on a monitoring sheet and dispensing work must be done in a drip tray.

All U stock pot record sheets must be updated to reflect the actual levels.

EM registration

Only support staff doing maintenance tasks on EM microscopes to be registered.

The general EM users do not need to be registered.

Deregistration of non-active radiation users

GJ and MB admitted that we can decide to deregister people that have not been using the radiation for more than 3 years. It is a common practice in other OU labs. If deregistered workers want to restart radiation work, they would need to register again, go to the lecture and start a new training plan.

ZB reported that the WTCHG RPSs are happy to deregister 'dormant' workers, register them and get them onto the refresher training when they wish to restart a protocol.

This approach can help to tidy up the register of active radiation users, keep their training records up to date and update protocols regularly.

Consolidation of the radiation labs.

Decommissioning of CCMP controlled area 10.21.

MB is not concerned about the decommissioning of the CCMP room 10.21. 3H, 32P, 51Cr, 35S was used in this room. ZB needs to follow the guidance for decontamination / decommissioning of radiation laboratories.

MB suggested that Simon Haycox (Radiation Safety Assistant) to come to do the final decommissioning checks of 10.21.

The local limits would be transferred as follows:

- 51Cr protocols and stock limits to be transferred into CCMP 20.15.
- 3H, 32P, 35S protocols and stock limits to be transferred into Lab1 00/076. Liquid scintillation counter to be moved from the CCMP into the vicinity of the Lab1 00/076.
- 125I taken off the WTCHG local limits permit. MB/ZB to check with Benedikt Kessler if he has any plans to use 125I and he wish to have the 125I limit to be

transferred into NDMRB. There is a 125I scintillation counter that would become redundant if we cease to support the 125I facility.

Decommissioning of equipment (Torrex in Level 3):

Torrex is rather old X-ray generator in the level 3 sourced second hand by the Ludwig Institute. ZB does not have it on the current WTCHG radiation equipment list, but it appears that it was 'donated' to the WTCHG when Pierre was the SRPS. The generator was originally brought in for animal experiments, but it was discovered that the beam is not aligned properly. People in the Ludwig and WTCHG lost interest in the machine. The machine is now obsolete and no spare parts are available.

MB can ZB help with the disposal of the Torrex. It contains heavy metals, it would need to go through the Hazardous WEEE (via Frances Russell?).

MB might find a suitable X-ray set to replace the Torrex if the WTCHG groups are interested to have another X-ray generator in the Level 3.

Decommissioning of equipment (X-ray in STRUBI)

The X-ray set in the STRUBI is not used anymore. To be decommissioned after agreement with the STRUBI PIs. KH to talk to PIs and update ZB.

MB knows a lab looking for this kind of X-ray set.

2017 New Local Rules – DRAFT

- General Local Rules (*updated*)
- Local Rules for Use of U salts (*new content*)
- Faxitron Local Rules (*new content*)

The new local rules have been drafted. ZB sent the draft to MB and GJ to clarify few details (registration of U compounds users, decommissioning of 125I activities) before having the local rules finalised and published for 2017.

Existing approved protocols and new protocols

RPS to review protocols and send to ZB. Only JB sent new versions of protocols. Please send updated protocols to ZB, place signed and dated reviewed protocols into the radiation labs. Add EM staining protocols and RAs for use of U compounds to be sent to ZB to publish on intranet.

Training records

Radiation training records are kept in the ZB's office. ZB will check if the training records for all active registered workers are present and complete. If you train your radiation users, please update records. Also all refresher trainings to be recorded.

Contingency plans rehearsal for all radiation workers

After publishing the new local rules, ZB will be sent them to all active registered radiation users with emphasis to read the Contingency plans. ZB to organise rehearsal during the next RPS meeting in December 2017, MB can lend us the 'fake' contamination monitor to mimic a spill. All RPSs and active radiation workers will be invited to attend.

Audit of equipment in radiation rooms

The redundant or old equipment was commented by MB/GJ during the lab inspection. ZB to organise clear-out of old redundant equipment and decluttering of the radiation rooms, especially room 00/76 Lab 1 after Tomlinson group leaves. Lab-Support to check that the

working order of the essential equipment used for active protocols. Groups to label group owned equipment. PAT test failed, redundant and obsolete equipment will be monitored, swabbed and disposed, ZB to agree with RPSs for group owned equipment.

Inspections

MB does not know when the next EA Inspection is going to be scheduled. We are not priority site for EA.

Trainings

- **Safe Use of X-ray Generators, Sealed Sources & Accelerators**

Make sure all X-ray set users have been registered and have attended the course.

Next course is scheduled for *Wednesday 8th November, 14:00 - 16:00, Lecture Theatre, Medical Sciences Teaching Centre, South Parks Road,*

ZB to check with RC who is using the Faxitron.

- **X-Ray Users RPS** ZB, RC, MPC signed to attend.

AOB

- New Radiation warning signs for supervised areas supplied by GJ.
- MB/ZB to organise the annual leakage tests of the Faxitron and the μ CT scanner (CVMed). The annual leakage tests of calibration 125I sample to be ceased if the 125I sample is disposed or transferred to the NDMRB.
- Check if people going to Bessy are classified workers. MB to check with OH.
- RPSs and ZB to update training records and registration. Keep filed only active radiation users.
- Karl Harlos was not on the RPS list. The X-ray set has not been disposed by the STRUBI. Check if he was deregistered.
- MB to organise an update/refresher RPS meeting in spring 2018. Date to be confirmed.
- RPSs to make sure the dose rate and contamination monitoring is performed and the results are recorded.
- MB to clarify how is the information about received exposure made available to dosimeter users. Are negative results reported to wearers or do we inform the wearers when issuing dosimeters that only positive exposure result would be reported back to wearers? MB to clarify.