



To Radiation Protection Supervisors and Departmental Administrators
From David Plumb, Radiation Protection Adviser
Date 12 June 2012
Subject Updated information – Ionising Radiations
Our Ref S/RPSS/12/217/DP/em

Further to the memo circulated in April, some additional items are drawn to your attention:

1. Phosphorus 32 – purchasing from Perkin Elmer – Lead or not-Lead!

You may have seen a recent circulation from Perkin-Elmer relating to the supply of Phosphorus-32 nucleotides.

The discussion continues as to whether those ordering these materials should specify lead-lined pots or lead-free pots. P-E confirm in their circulation that they supply pots larger than “1.5 mCi” i.e. 55 MBq - in lead lined format, with smaller pots available in either option. The P-E advice is very much to order the smaller quantities in the non-lead option, but does not indicate that you should also consult your Radiation Protection Specialist (RPA) in order to confirm or otherwise the advice that P-E are offering. The P-E Lead option now attracts a significant additional financial premium. Whilst not questioning P-Es calculated extremity doses as set out in the circulation – very small from the smaller pots – the circulation does not *fully* address the international ALARP principle as reflected in the UK legislation (Ionising Radiations Regulations 1999).



Our advice remains – as discussed at the 2010 RPS update – order in lead, OR to avoid the financial premium - hold a stock of P-E lead lined P32 type pots in the user labs in your department – then order in non-lead- and transfer the inner dense plastic container to the lead lined pot. NOT FORGETTING to transfer /relabel the new pot as necessary with product and departmental unique id numbers – and remove labels from the non-lead pot, monitor and dispose of that pot in accordance with departmental requirements! Remember that direct handling of

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ANY P32 complete stock pot or inner plastic vial must be avoided where practical, or the time of handling kept to the minimum possible.

2. Dosimetry Service – body badge clips



The removable clips fitted to the 'new' whole body badges may, in time, become damaged or 'lost'. The Safety Office, 16 Mill Lane, holds a small stock of spare clips – contact Jane Ghosh (jane.ghosh@admin.cam.ac.uk) if you need one or more replacement clips. For departments on the Addenbrooke's Site is probably quicker for you to contact CPRMS directly and collect your replacement clips from them!

3. Employee or Member of the Public?

The question arises from time to time, as to how 'visitors' to a department should be managed in terms of their exposures to ionising radiations.

If visitors are paid 'employees' (P-60 recipient) – of this University or another organisation, and their employer is a user of ionising radiation, and/or is aware that the work their employee undertakes whilst 'visiting' involves ionising radiation, then the 'employees' dose limits are as those enforced for your departmental staff – and the provisions/control measures of the relevant risk assessments are those that should be applied to their work. The general provisions of 'co-operation between employers' for safety management issues (not restricted to ionising radiations!) must also apply.

However, if these visitors are more accurately described as 'members of the public' – unemployed persons, work experience persons unpaid workers, vacation or gap students or 'young persons' (<16 years), then *in general*, the lower dose limits as set out in IRR 1999, and as applied to members of the public should be enforced. – And risk assessments revisited/revised in order to confirm the acceptability of a specified procedure for these persons to undertake.

Further information must be obtained from the RPAs at the Safety Office in the event that you believe that 'members' of the public' will be involved in the use of ionising radiations in your department.

4. Orders – verification of purchases

You may be aware that the Procurement Office of the University are involved in a national project that will give authorised persons direct access to the ordering history across departments of several specific categories of certain hazardous or restricted goods – including radioactive substances, provided these goods are ordered through the electronic "*market-place*" system.

Whilst the Safety Office has no intention of acting in a 'Big Brother;' sense in this area, this retrospective reported purchasing format, is a step towards some unified and hopefully straightforward departmental electronic authorisation process that could be applied to "licensed" goods – the ultimate aim of the national project. Whilst this outcome may be not happen in the near future, it would be very useful if Departments forwarded to David/Libby the names of any companies (other than the usual P-E, M-P, and Hartmann) from whom ra materials are purchased.

The reporting system only works if the supplying companies actually 'populate' their product categories with the appropriate electronic code/flag, which then feeds a response back to the authorised location when the product is ordered. Procurement are aiming to encourage all suppliers of hazardous or restricted goods (or as many as possible!) to populate their catalogues with the electronic tags.

Stop Press....Environment Agency Inspection (radioactive substances)!

We have been informed that an inspection, by the EA, of some departments on the Central site areas of the University (including the New Museums Site, Downing Site, Tennis Court and Lensfield Roads) will take place on Thursday 12 July 2012. Departments concerned will be contacted individually and informed of the time of Inspection, together with advice on preparing for an EA Inspection.

And finally.... A Reminder! – The RPS Update Meeting next year will take place on the morning of Thursday 21 March 2013. Further details and a 'booking form' will be circulated before Christmas! Attendance at RPS update meetings is of course, a condition of your appointment, by your Head of Department, as a University RPS.

