



NDT MainCal Limited  
www.maincal.com

# Radiation Protection Services



Unit 2 Dale Road • New Mills • High Peak • Derbyshire • SK22 4NW  
Tel: 01663 742549 • Fax: 01663 746837 • Email: rpa@maincal.com

---

November 2005

## RADIATION PROTECTION NEWSLETTER

### To all our RPA customers:

NDT MainCal would like to thank all of you for your continued support over recent months. We are particularly pleased about the interest shown in our RPS training courses. We have delivered 15 courses so far this year at locations all round the UK, and have a number of other courses booked. Feedback from the training has been very positive, with trainees and their companies recognising the benefits of training on-site, based on their own equipment and procedures. As a company we are moving ever forward and look forward to an exciting 2006! We hope you will find the information in this newsletter interesting and beneficial.

### HASS Has Arrived!

For those of you who use radioactive sources, this is what you've been waiting for (or in most cases, dreading!). In October, the Environment Agency issued interim guidance on the new High Activity Sealed Sources (HASS) regulations. If you haven't done so already, you need to download a copy from the EA website (SEPA in Scotland) – or easier still, follow the link on our website [www.maincal.com](http://www.maincal.com). On our dedicated HASS web page you will also find a summary of the HASS requirements and a link to the EA download page for the relevant application forms.

### HASS F.A.Q.'s

#### Is my source a HASS?

If the source is used for industrial radiography, then more than likely yes. The thresholds for considering sources to be HASS are given in Annex 1 of the EA guidance document, but for an Ir-192 source the threshold is only 10 GBq (0.27 Ci). Co-60 is 4 GBq (0.11 Ci) and Se-75 is 30 GBq (0.81 Ci). Anything above the thresholds given in the guidance are HASS. (Incidentally, if you're struggling to understand the table in Annex 1, it's in scientific notation; in other words 1E+10 means  $1 \times 10^{10}$  or 10 GBq, 3E+11 means  $3 \times 10^{11}$  or 300 GBq and so forth).

#### When do I need to comply?

If you intend to purchase a new HASS manufactured or placed on the market after 1 January 2006 you will need to have your HASS licence in place *before* you obtain it. *If you intend to exchange your industrial radiography source early in the new year, this means you need to apply for your HASS licence NOW!* If you have an existing HASS, i.e. one first manufactured or placed on the market before 1 January 2006, you have until 1 January 2008 to have a HASS licence in place; you should apply before September 2007.

### **How do I apply for a HASS licence?**

In most cases, your HASS licence will be a variation to your existing RSA93 licence. You need to complete EA form RSA1 for fixed sources or RSA2 for mobile sources.

### **What about disposal?**

There has been a fair amount of controversy about the provision for disposal of disused sources, which the regulations specify. For shorter life sources such as Ir-192 and Se-75 it would appear to be acceptable to have a 'take-back' agreement with the source supplier, where the cost of return is included in the selling price. Any such agreement must be in writing. For longer life sources such as Co-60 a quotation should be obtained for disposal of the source. This figure can be used to support the requirement for the financial provision, which basically will have to be a 'ring-fenced' fund or a written guarantee by a third party. Further guidance on this has been produced by DEFRA. You can get it by following this link:

[www.defra.gov.uk/corporate/consult/hass-regs-directions/hass-eaguidance.pdf](http://www.defra.gov.uk/corporate/consult/hass-regs-directions/hass-eaguidance.pdf)

If you've had a source in storage for some time and it is unlikely that you will use it, our recommendation is to think seriously about disposing of it as soon as possible. On 1 January 2008, the requirements for management of disused sources will apply to existing HASS and you will then be faced with mandatory disposal.

### **What about security arrangements?**

You need to obtain a copy of the booklet '*Requirements for Radioactive Sources*', produced by NaCTSO. To obtain this document, contact the Counter Terrorism and Security Adviser (CTSA) at your county police headquarters. You'll need to do this before you fill in your application form for HASS because some of the security information needs to be included.

The above are just a few of the key issues. We will of course be guiding our customers through the HASS jungle as we make our visits. Until then please contact us if you need any guidance and we will endeavour to help in any way we can. We are also developing a training course for the competent person managing HASS within your company. More details on this soon.

## **Transport of Radioactive Materials**

Still on the subject of radioactive sources, we recently learned that the Department of Transport are in the process of auditing 'small users' who transport radioactive materials, to check on compliance with the RAMRoad 2002 regulations. The RMT division of the DoT have informed us of some common areas of non-compliance, so we thought it would be useful to share them with those of you that are affected:

- 1) Quality assurance programme (Regulation 18): This requires that all transport containers are inspected and maintained in good condition. A company that transports sources should ensure that they have containers serviced periodically and that there is a documented check carried out on them before they are transported. This is often achieved by a site radiography equipment checklist that is completed before travel to site.
- 2) Radiation protection programme (Regulation 24): This requires a company to have a documented system for transporting radioactive material and evidence that it is being adhered to. What this means in practice is that you need a written procedure for transporting sources, including loading the vehicle, conditions of transport, driver requirements etc. This is often included in the local rules but may be a separate document. The evidence that the programme is being adhered to can be, among other things, comments of the RPA so we will be looking at transport closely on our forthcoming visits. It is also strongly recommended that the senior RPS carries out an audit of transport periodically to make sure that all the transport requirements are being followed.
- 3) Transport documents and labelling of containers (Various sections): In site radiography, it is commonplace to transport type A quantities of material in containers that are marked up by the manufacturer as type B(U). Strictly speaking, what you should do is cover the Type B(U) label with a type A label so that the container label correctly describes the consignment. Also important is that the transport document indicates a type A consignment with the correct UN number (3332 for special form material).

### **HSE Clarification on 28-Day notification**

HSE have clarified a misunderstanding by some regarding the need to give 28-day notification before using certain items of equipment. It seems that owners of X-ray equipment such as security scanners and low-energy X-ray cabinets have assumed that the 28-day notification is not necessary because the external dose rate at 0.1m from any accessible surface is  $<1\mu\text{Sv/h}$ . This is a misinterpretation of schedule 1 of IRR99 which lists exemptions to the notification requirement. In paragraph 1(d)(ii) of the schedule it states that such equipment is exempt, however in the preceding paragraph 1(d)(i) it states that this only applies if the equipment is of a type approved by the HSE. No X-ray equipment has type approval and therefore all X-ray cabinets and enclosures require 28 day notification to be given before first use. The same thing applies to equipment that contains radioactive sources above the activity threshold for exemption but with a similarly low external dose rate. The only type approval for such equipment is for certain types of smoke detectors and tritium light sources. Anything else requires notification.

28 Day notifications should be submitted to the HSE office that covers the area where the equipment is installed. There is no standard form for this type of notification. A letter giving the details contained in IRR99 Schedule 2 should be sent in.

## **Euratom Safeguards Requirements**

As we have mentioned previously, there have been changes in the requirements for reporting of Depleted Uranium (DU) source containers under the Safeguards regulations, which are administered in the UK by the DTI in London. We attended a recent seminar to explain the changes and requirements, and there is another one later in November which we will also be going to.

In as small a nutshell as we can manage, the process goes like this:

If you keep one or more DU source containers, you need to apply for 'Derogation' – This is basically an exemption from the more onerous bits of the legislation that apply to large users of nuclear materials. To do this you need to do the following:

- Fill in a Derogation Application Form
- Fill in a form giving details of your company and your use and control of DU (called a BTC form)
- Provide a listing of the DU that you hold (called a PIL)

Once derogation has been granted, all you need to do is send in a report once per year to indicate that you still hold the material. (Unless you acquire or dispose of a container, then you need to tell them straight away).

The good news is that if a DU container is temporarily shipped to you (such as a transport container) it remains the owner's responsibility and it doesn't have to be reported. Likewise the temporary movement of a container to site is not reportable. The owner is, however, required to keep their own internal records of the shipment and return.

All the necessary forms and information are available from Ms. Minder Louie at the DTI

Email: [Minder.Louie@dti.gsi.gov.uk](mailto:Minder.Louie@dti.gsi.gov.uk)  
Tel 0207 215 4570

If there's anything further to say on the subject after the November seminar, we'll let you know.

*Our very best wishes to all of our customers*



Simon Wright  
PRINCIPAL RPA



Steve Boocock  
ASSISTANT RPA