

Changes to Radioactivity Legislation

This article is of particular importance to schools that own radioactive sources with activities greater than 200 kBq, for example a 370 kBq caesium-137 sealed source.

It doesn't seem that long ago (because it wasn't) that SSERC was getting in touch with all local authorities and independent schools to help them with the registration process that the HSE's new Ionising Radiation Regulations 2017 (IRR17) requires. Now there is another change in the law but this time it is environmental rather than health and safety legislation that is affected. Confusingly, both sets of rules use the same terms to mean different things.

The Legal Background

The new rules are called the Environmental Authorisations (Scotland) Regulations 2018 (EASR2018). These replaced the Radioactive Substance Exemption Order (Scotland) 2011 on September 1st of this year. Under the 2011 legislation, all school sources were either classed as out of scope or exempt. The term "exempt" could be confusing. Exempt sources were not "exempt" from any legal restrictions. Rather, you were exempt from telling SEPA, the Scottish Environment Protection Agency, that you had them.

Under EASR2018, most school sources are covered by General Binding Rules. There is only one significant change in procedure that we will come to shortly. One source that schools are currently permitted to hold comes into a new category called Notification. The term "Notification" is also used in IRR17 and was used in previous HSE legislation. In all cases, it has a different meaning. If this seems tortuous, do not worry.

What you must do

- If you have a 370 kBq caesium-137 sealed source, inform SSERC via rpa@sserc.scot;
- SSERC will then notify SEPA.

The source will almost certainly be similar to the one shown in Figure 1. There is a small chance that you own one of the Frederiksen 370 kBq caesium sources with a clear acrylic handle (Figure 2). We must know about these too [1]. The new law applies to any sources with an activity greater than 200 kBq. The caesium sources are the only ones that should be in schools. If you have others, please get in touch.



Figure 1 - Most Cs-137 370 kBq sources will be similar to this one.

Notification is done school-by-school rather than on a local authority basis, but kudos to SEPA for allowing it to be carried out by an external agency. This can therefore be done by SSERC as part of your RPA service.

When you must do it

Please tell us as soon as possible. Notification must take place by March 2019 and will be required every 3 years. Again, SSERC will handle this. We will know of any disposals or transfers of sources to new sites that take place between notifications because these are things that you are obliged to tell us.

Changes to disposal practices

The only other change, the one we alluded to when General Binding Rules were mentioned above, concerns disposal of sealed sources. Under the previous environmental legislation, all sealed sources permitted in Scottish schools except for the Cs-137 370 kBq source could be disposed of to dustbin (note that a protactinium generator does not qualify as a sealed source). EASR2018 is slightly different. To avoid sealed sources being recycled along with scrap metal, disposal to dustbin can only take place if you know that the source will end up in landfill. >>

Health & Safety

We do not publish guidance online about disposal other than to ask that you get in touch with us. It is fairly rare that someone wants to get rid of an expensive-to-replace item that enhances a fascinating part of the curriculum, but it does happen. If you have made a disposal before, you will find that we will now ask you to take the following additional steps:

- Check that waste that cannot be recycled will go to landfill;
- Embed your waste source in mortar before disposal.

By grouting your waste source, even if rubbish is sorted by hand for recycling, your source will not end up being identified as scrap metal. Full instructions will be given by SSERC should you have to make a disposal.

We do not feel that these changes will cause significant problems for schools. As ever, if you have a query regarding the keeping or use of radioactive materials or would like to buy a source, email rpa@sserc.scot. <<

Reference

- [1] Note that your RPA no longer permits this type of Frederiksen sources to be bought by member schools but if you have any, keep using them subject to their passing an annual leak test.

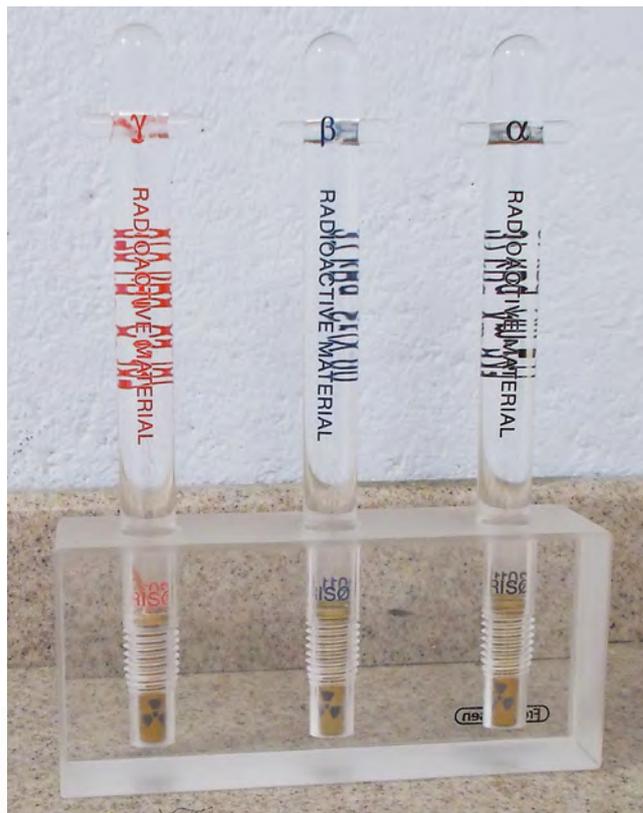


Figure 2 - Three Frederiksen sources.