



Radioactive Waste

Radioactive waste disposal is arranged by the University Radiation Protection Service (RPS). It is collected on a regular basis by RPS and stored until it is removed from the University for ultimate disposal. Enquiries should be directed to:-

University Radiation Protection Service,

Kelvin Building

Ext. 4471,

Fax 4801

E-mail James.Gray@glasgow.ac.uk

Solid radioactive waste.

Solid radioactive waste must not be disposed with normal laboratory refuse. In areas where there may be a risk of contamination, all laboratory waste must be checked with a monitor to determine its disposal route. Non-contaminated bench coverings etc can be disposed through the normal waste stream providing all radiation warning signs are removed.

Radioactive waste bins should be emptied regularly and the contents sealed in a plastic bag labelled with the approved RPS label. This label must be completed to show the management unit and laboratory of origin, date, isotopes present and their estimated activity. Once full, the bag should be removed to a central facility, usually the main radioactive dispensary that services the management unit, and placed in a red metal drum.

The limit for each red drum is as follows:

For tritium and ^{14}C it is 40MBq; for iodine's it is 20 MBq; for all others having a half-life < 365 days it is 20 MBq and 4MBq for radionuclides with a half-life >365 days.

The total amount of radioactivity should be recorded on a single label firmly tied to the top of the drum.

By prior arrangement, RPS collects radioactive waste from agreed storage locations between 1330 hrs and 1500 hrs every Tuesday. Any radioactive waste left at these points and not correctly labelled will not be uplifted. It is essential that waste is safe for handling and that there is no risk to the operator from sharp objects such as needles, pipette tips or glassware.

There are special arrangements for the disposal of radioactive animal waste and waste that also poses a hazard as a result of its chemical or infectious properties (see also 'Liquid Radioactive Waste' below). This waste must not be included with the normal radioactive waste stream. RPS must be notified prior to the production of this type of waste as special arrangements may need to be made for its disposal.

Liquid radioactive waste.

Aqueous radioactive waste may only be disposed via sinks specifically designated for this purpose. Each management unit has an authorised limit for the total amount of waste which may be disposed per calendar month. The cumulative total from all the designated sinks in a management unit must not exceed this limit. For this reason, it is essential to maintain an up to date disposal log at each sink.

Disposal of radioactive organic solvent waste is very difficult and expensive. Experiments should be designed to keep this waste to a minimum. It is also important to separate chlorinated and unchlorinated (flammable) solvents. RPS will not remove waste if there is any doubt as to the content of the drums or the precise nature of the waste.

Scintillation Vials

RPS does not provide plastic drums for the disposal of vials containing biodegradable scintillation cocktail, these must be provided by the individual laboratory. There is no need to empty the vials prior to placing them in any disposal drum. Plastic drums containing vials will be uplifted along with solid radioactive waste. ***On no account will RPS accept vials containing solvent scintillate.***

Disposal Costs

Management units will be charged for the disposal of radioactive solvents. Further information on charges can be obtained from RPS