RADIOACTIVE WASTE DISPOSAL

This table provides a general guide to the waste disposal routes available in radiation laboratories. All disposals must be authorised by the Radiation Protection Service who will issue activity limits to research groups. Additional conditions on waste disposal are written into the Local Rules.

<table>
<thead>
<tr>
<th>Which waste route should I use?</th>
<th>What can I dispose of?</th>
<th>What are the main limitations and conditions?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aqueous</strong></td>
<td>• Aqueous radioactive materials.</td>
<td>• Beta and gamma emitting radionuclides only.</td>
</tr>
<tr>
<td></td>
<td>• Redundant radioactive sources and stock solutions.</td>
<td>• Disposals should be made into copious quantities of running water in a Designated Sink.</td>
</tr>
<tr>
<td></td>
<td>• Laboratory washings.</td>
<td>• Record all disposals accurately (see local procedures).</td>
</tr>
<tr>
<td></td>
<td>• Small volumes of water soluble scintillant fluids such as Ecoscint – by prior agreement only.</td>
<td>• In general, water soluble scintillant fluids must be disposed of via the organic route (below).</td>
</tr>
<tr>
<td><strong>Solid</strong></td>
<td>• Radioactive or contaminated items only.</td>
<td>• Beta and gamma emitting radionuclides only.</td>
</tr>
<tr>
<td>Waste should be placed in the yellow radiation sacks provided by the Radiation Protection Service.</td>
<td>• Waste radioactive materials.</td>
<td>• No alpha emitting radionuclides.</td>
</tr>
<tr>
<td></td>
<td>• Laboratory consumables contaminated during use.</td>
<td>• Limit of 10 MBq of radioactivity per bag.</td>
</tr>
<tr>
<td></td>
<td>• Contamination from spillages etc.</td>
<td>• Special dispensation to be sought from the Radiation Protection Service to permit the disposal of activities in excess of 10 MBq/bag.</td>
</tr>
<tr>
<td></td>
<td>• Contaminated packaging materials.</td>
<td>• Record all disposals accurately on RSID and mark the bag with the RSID bag number.</td>
</tr>
<tr>
<td></td>
<td>• Trefoils, hazard warning tape, radiation signs.</td>
<td>• All waste bags should be sealed and transferred to the departmental waste collection area by the end of each month.</td>
</tr>
<tr>
<td></td>
<td>• Redundant plastic / Perspex source pots.</td>
<td></td>
</tr>
</tbody>
</table>
| Uncontaminated solid waste – normal laboratory waste | Packaging materials used in the shipment of radioactive sources. | No radioactivity.  
No trefoils, hazard warning signs, radiation signs.  
A monitor should be used to confirm that waste is not contaminated. |
| This category is for non-hazardous non-offensive waste, which should be disposed of as normal laboratory waste.  
- Packaging materials used in the shipment of radioactive sources.  
- Laboratory consumables.  
- Gloves, disposable or redundant lab coats.  
- Paper, tissues, Benchkote etc. |  
- Prepared uranium / thorium compounds.  
- Other specified alpha emitting radionuclides.  
- Radioactive sediments, soils and other mineralogical samples.  
- Contamination from spillages.  
- Laboratory consumables, gloves, paper, Benchkote, etc. (contaminated and non contaminated items).  
- This waste route may only be used by prior agreement with the Radiation Protection Service. Special limitations will apply. |
| Green Tag VLLW | Waste should be placed in the black polythene bags and labelled with a VLLW tag. | Waste should be placed in the black polythene bags and labelled with a VLLW tag. |
| - Prepared uranium / thorium compounds.  
- Other specified alpha emitting radionuclides.  
- Radioactive sediments, soils and other mineralogical samples.  
- Contamination from spillages.  
- Laboratory consumables, gloves, paper, Benchkote, etc. (contaminated and non contaminated items). |  
- Prepared uranium / thorium compounds.  
- Other specified alpha emitting radionuclides.  
- Radioactive sediments, soils and other mineralogical samples.  
- Contamination from spillages.  
- Laboratory consumables, gloves, paper, Benchkote, etc. (contaminated and non contaminated items). |
| Organic (scintillant) | Waste should be placed in the blue radiation sacks provided by the Radiation Protection Service. | Waste should be placed in the blue radiation sacks provided by the Radiation Protection Service. |
| Waste should be placed in the blue radiation sacks provided by the Radiation Protection Service. | Waste radioactive materials in (high flashpoint) solvents or organic form.  
Scintillant vials and similar laboratory consumables. | Waste radioactive materials in (high flashpoint) solvents or organic form.  
Scintillant vials and similar laboratory consumables. |
| Lead – black bucket | Lead linings from source pots.  
Lead shielding. | Lead linings from source pots.  
Lead shielding.  
Labels removed and pots decontaminated.  
Where possible, plastic components removed. |

Technical notes

1) Solid, Organic and VLLW waste bags will be collected from the departmental waste storage areas by the Radiation Protection Service at the beginning of each month.

2) Bags must be correctly sealed, entered on RSID and marked with the RSID bag number. Only waste bags listed on RSID will be collected.