

University of Bristol Radioactive Waste Management

All radioactive waste generated must be disposed of via the correct route to ensure compliance with the conditions specified in the University's Environment Agency (EA) Authorisations for the Accumulation and Disposal of Radioactive Waste.

Details of these Authorisations are given in the document 'Working with Ionising Radiation Code of Practice', 2008, available on the Health and Safety Office website, <https://www.bris.ac.uk/safety/uobonly/radiation/radcop2008.pdf>

The principle routes are:

- Aqueous waste disposal
- Very low level solid waste disposal
- Incineration of organic scintillant and low level solid waste
- Gaseous waste disposal

All disposals must always be recorded on the University's online radiation database

Aqueous Waste

Disposal of low levels of radioactivity in the form of aqueous waste is permitted within strict monthly limits. The material should only be disposed of via designated and appropriately labeled sinks with copious amounts of water.

Very Low Level Waste (VLLW)

Materials contaminated with very low levels of radioactive material may be disposed of via the normal route for refuse, i.e. via waste bins. The rules for disposal via this route must be strictly adhered to with regard to activity limits set out in the Authorisations.

Incineration

(A) Organic Scintillant Waste

Unopened vials containing contaminated organic scintillant waste are packed in waste containers supplied by the Health and Safety Office. These containers are available in 30 litre and 60 litre sizes. Once packed and sealed these containers are transported and incinerated via the incinerator at Langford.

The EA Authorisations dictate the time period for the accumulation of this type of waste on University premises, which should never be exceeded.

Other radioactive contaminated solvents may be disposed of via this route providing they are not classed as highly flammable.

(B) Low Level Solid Waste

Low level solid waste may be sent for incineration using the approved containers. However, advice should be sought from the Radiation Protection Adviser regarding the radioactivity levels permitted for disposal via this route as alpha emitters may need to go via a specialist contractor for disposal.

NOTE: glass and sharps are not permitted in waste that is to be incinerated

Gaseous Waste

The release of radioactive gaseous waste is only permitted via certain designated and labeled fume-cupboards listed on the EA Authorisations.

Advice should be sought from the Radiation Protection Adviser BEFORE any radioactive discharges are planned to ensure compliance with set discharge limits.