

Dounreay recycles 98% of reactor decommissioning waste

News story

The site's oldest reactor, the Dounreay Materials Test Reactor, is leading the way in demolition waste recycling as internal dismantling continues.



Dounreay Materials Test Reactor vessel decommissioning

The fuel element storage block has now been demolished. This steel tank was 4.7m high and 2.8m in diameter, surrounded by an iron-shot concrete cylinder, and was capped off by a thick steel top plate. Historically it housed cooling irradiated fuel elements after their removal from the reactor.

During its dismantling, workers segregated recyclable and re-usable material from the waste products. An expected 9 tonnes of steel and 33 tonnes of lead will be recycled, and around 95 tonnes of concrete will be re-used off site.

Facility Manager Donald Buchanan said:

We have applied waste minimisation techniques which require all waste to be segregated and characterised, in compliance with the Scottish Government's zero waste plan. Some of these materials, which previously might have been disposed of as waste, can now be considered as a valuable resource.

We have carried out a robust programme of characterisation and sampling work to determine the appropriate disposal options and as a result we will be able to recycle and re-use the majority of the material. Only 2% of the waste produced will be disposed of in our low level waste vaults.

Cavendish Nuclear and sub-contractors KDC Demolition, JGC Engineering & Technical Services and Caithness Scaffolding are carrying out the work.

Published 20 October 2022