

News story: D-day as evaporator starts its mission

The £750m plant is needed to clean out the site's reprocessing plants.

Sellafield's newest plant is up and running, supporting the site's clean-up mission.

Evaporator D has been set to work reducing the volume of Sellafield's most radioactive waste product – highly active liquor.

The £750m plant is the only evaporator on the site able to process high-level liquid waste created during the clean-out of the Sellafield's reprocessing plants.

It acts like a giant kettle, reducing the volume of liquor so it can be turned into glass form and safely stored.

The facility was switched on at 8am on 8 December and is going through a 12 month process to prove its capability to regulators.

Once fully operational, Sellafield's two older evaporators will retire.

Steve Bostock, Sellafield Ltd chief operating officer, said:

Cleaning up the Sellafield site safely and securely is our mission. Evaporator D is a critical part.

It will enable us to clean out our former reprocessing plants; no other facility could do this.

It will also allow us to retire our oldest evaporators. We've worked these evaporators hard and they are nearing the end of their useful life.

Sellafield Ltd operates on behalf of the Nuclear Decommissioning Authority (NDA).

Duncan Thompson, the NDA's Sellafield programme director, said:

Evaporator D provides important capability required to complete our mission in a safe, secure and cost-effective manner.

It's a complex piece of nuclear engineering and I thank all those involved from Sellafield Ltd and the supply chain for their hard work and commitment.

The project to design and construct Evaporator D was challenging. It was the first project of its size in many years. The building includes 23,000 tonnes of concrete and 22km of pipework. It also required the construction of other facilities, such as cooling towers.

The evaporator modules were so large they had to be transported by sea. A docking platform was constructed on Sellafield's beach. Bridges and street furniture were removed to clear its route from shore to site.

Lessons learned have shaped how Sellafield Ltd will manage future projects. A project delivery directorate has been created alongside the 'Project Academy', which provides training for the company's workforce, supply chain, and people from the local community, in association with University of Cumbria.

Evaporator D was delivered by Sellafield Ltd and principal contractor Costain on behalf of the NDA, as part of its work to reduce the hazards left from the UK's civil nuclear legacy.