

Journey to Success 2008 – 2021

6. Environmental Safety Case 2011 and Permit 2015

The Environment Agency did not accept the Environmental Safety Case (ESC) submission in 2002 – long before LLWR became a stand-alone company and the PBO took charge of the company. This jeopardised future development and disposals at the Repository.

When the Environment Agency issued LLWR with a restricted authorisation (now called an Environmental Permit) in 2006, it only allowed disposal of low level waste in Vault 8 stacked up to the equivalent of four ISO containers and did not allow for capping or closure of Vault 8 or legacy trenches.

The subsequent Vault 9, although designed and built to meet disposal criteria, was authorised for storage only.

The extended operational lifetime of the facility, the continued disposal of waste into future vaults and the subsequent closure of the site, were dependent upon the approval of the ESC by the Environment Agency.

Resubmitting a fully underpinned ESC by 2011, as LLWR were required to do, became a top priority for the PBO and was one of the top 10 risks for the NDA.

In its 'Guidance on Requirements for Authorisation', the Environment Agency define an Environmental Safety Case as "a set of claims concerning the environmental safety of disposals of solid radioactive waste, substantiated by a structured collection of arguments and evidence."

Environmental safety today and up to thousands of years in the future were to be considered by LLWR.

This was a massive undertaking, involving more than 80 technical experts in its production and comprising a suite of technical documents amounting to 2,000 pages with a further 10,000



Dr Richard Cummings, pictured right, delivers LLWR's ESC to the Environment Agency in 2011

pages of underpinning technical data.

Geology, hydrogeology, waste characterisation, waste processing, engineering of the waste vaults, potential radiological impacts, coastal erosion and engagement with stakeholders were among issues examined in great detail.

The Environment Agency completed a detailed review and consulted on both the Safety Case and LLWR's independent 2013 permit application to allow continued disposal of radioactive waste at the Repository.

On 1st November 2015, a revised permit became effective, achieving a key objective of the NDA when awarding the new contract for managing LLWR to the PBO in 2008.

Through its rigorous ESC, LLWR had demonstrated that it was safe to continue to dispose of low level waste at the Repository.

Whilst this was a huge step forward for the organisation, planning permission was also required for disposal to continue in the long term, and we will examine that issue in our next chapter of Journey to Success.

Follow our journey over the next 12 weeks at www.gov.uk/llwr