

Management of the Low Level Waste Repository and the National Low Level Waste Programme

Low Level Waste Repository Ltd (LLWR) in Drigg, Cumbria, is the national repository for low-level radioactive waste in the UK. The repository was previously faced with the need to expand capacity to accommodate the expected amount of waste generated across the UK's nuclear estate and based on the forecast inventory, full capacity would have been reached in 2022. Sourcing an alternative LLWR site was expected to cost more than £2bn and would therefore be a significant cost burden to the UK government. Seeking industry's expertise, the NDA in 2008 decided to involve industry experts, and an Amentum led consortium took over the Management & Operation contract of LLWR and the National Waste Programme. The challenge ahead was understood.

Through the introduction by Amentum of an integrated national programmatic approach based on the national Transuranic waste programme in the USA that we lead, a holistic minimisation strategy was introduced across the industry, establishing connections and waste routes between the generators and the supply chain, incentivising re-use and alternative disposal routes where possible. Rigid and consistent focus on waste characterisation methodology was introduced alongside the firm implementation of the waste hierarchy. Engagement with Government and Regulators was initiated to develop national policy and strategy to implement the changes in waste management and behaviours.

Successful implementation of our initiatives led to:

- A decrease from 95% of LLW waste disposed of at LLWR in 2009 to just 2% in 2020, with 98% treated, recycled or alternatively disposed.
- Extending the operational life of LLWR by 107 years to 2129, solving the long-term capacity gap for NDA and the UK.
- Savings of £2 billion by eliminating the need for an additional repository, in addition to over £455m through waste diversion instead of disposal.
- Opening of new waste treatment and disposal opportunities and development of the supply chain.
- Developing and implementing new reporting tools and inventory reviews to improve accuracy. As a result, significant volumes of LLW have been re-characterised as VLLW or exempt waste (reducing demand on LLWR).

Our work at LLWR and creating the LLW National Waste Programme is a clear display of applying Amentum's values and expertise — we're passionate about providing the best value solutions and benefits for our clients, on time and within budget, every time.



From top: LLWR Site Aerial, Metallic Waste Removal Project, onsite transportation of HHISO from railway sidings.

About Amentum. Amentum is a premier global technical and engineering services partner supporting critical programs of national significance across defense, security, intelligence, energy, and environment. We draw from a century-old heritage of operational excellence, mission focus, and successful execution underpinned by a strong culture of safety and ethics. Headquartered in Germantown, Md., we employ more than 34,000 people in 50 U.S. states and 105 countries and territories. Visit us at www.amentum.com to explore how we deliver excellence for our customers' most vital missions.

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