



**Nuclear Waste
Services**

NuLeaf Annual Meeting

LLW Repository Update

Paul Skelton

31 October 2023

Nuclear Waste Services

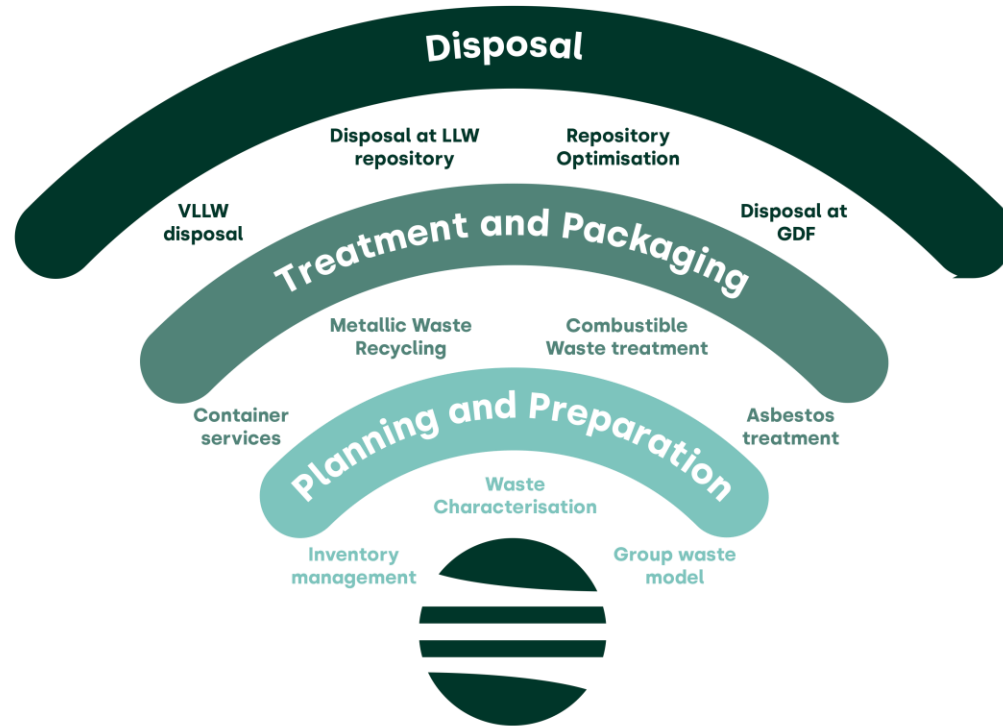
Nuclear Waste Services started operating on 31 January 2022, bringing together the expertise from LLW Repository Ltd and Radioactive Waste Management Ltd.

Coming together as a single business provides an integrated way of tackling waste of the past, while offering more sustainable and efficient services to waste producers, now and in the future.

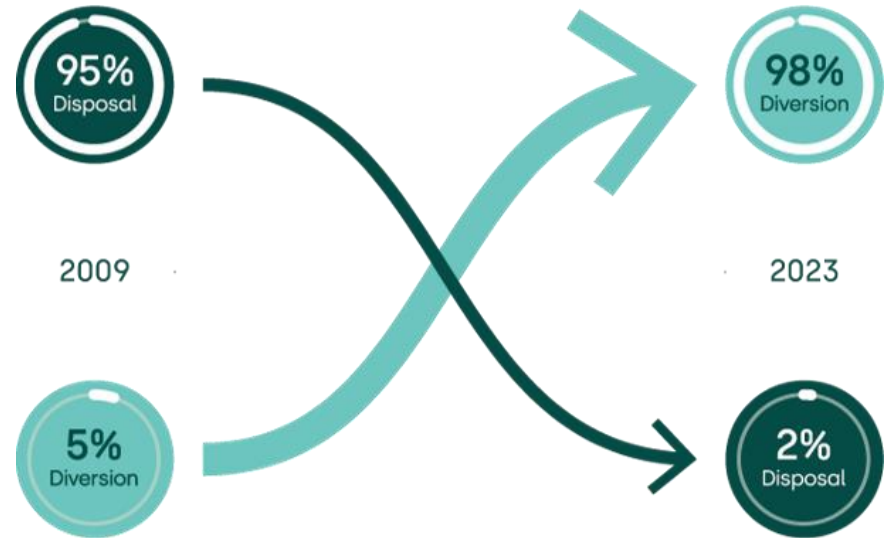
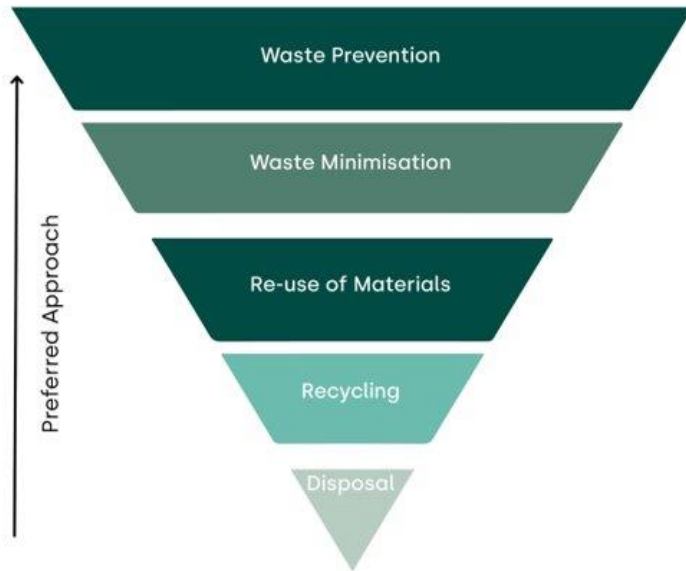


**Nuclear Waste
Services**

Our areas of focus



Implementation of the Waste Hierarchy



Waste Services



combustible



metallic



very low level



supercompactable



low level



expert support



**waste
characterisation**



**alternative
treatment**



packaging

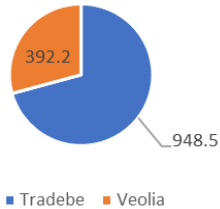


transport

Diversions stats *(half year position 2023/24)*

Combustible

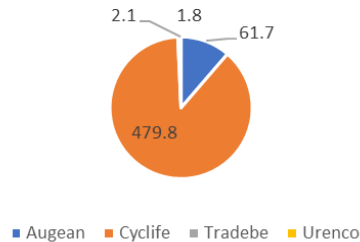
Amount of Combustible Waste by Service Provider



Tradebe	948.5 m3
Veolia	392.2 m3

Metallic

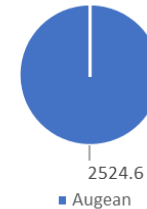
Amount of Metallic Waste by Service Provider



Augean	61.7 te
Cyclife	479.8 te
Tradebe	1.8 te
Urenco	2.1 te

VLLW to licensed Landfill

Amount of VLLW Waste by Service Provider

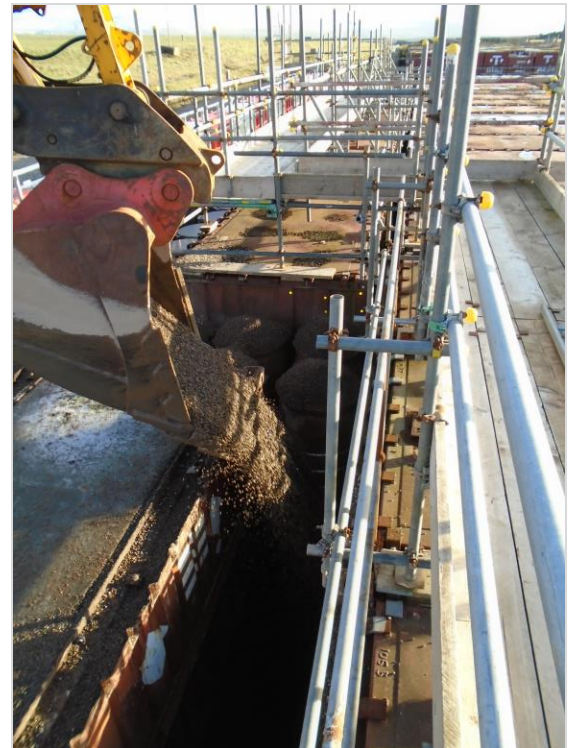
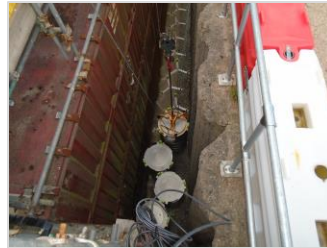


Augean	2524.6 m3
---------------	------------------

LLW Repository Nuclear Licensed Site



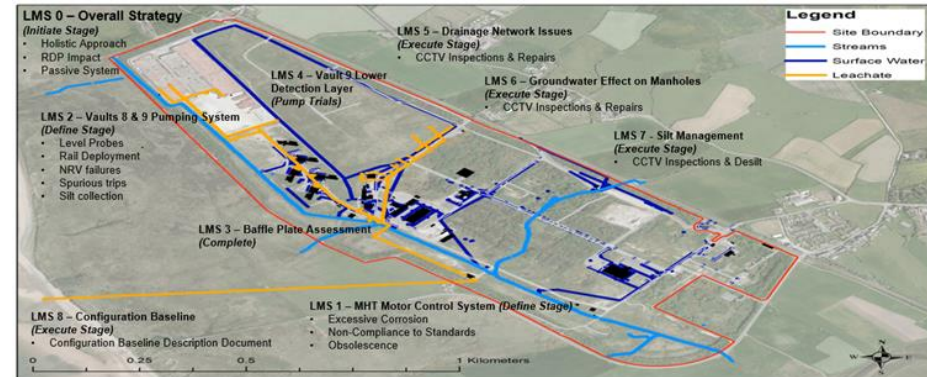
Treated Rad Waste Store (TRS) Drums, Winfrith



PCM Decommissioning and drum re-assay Universal Drum Assay and Segregation Service (UDASS)

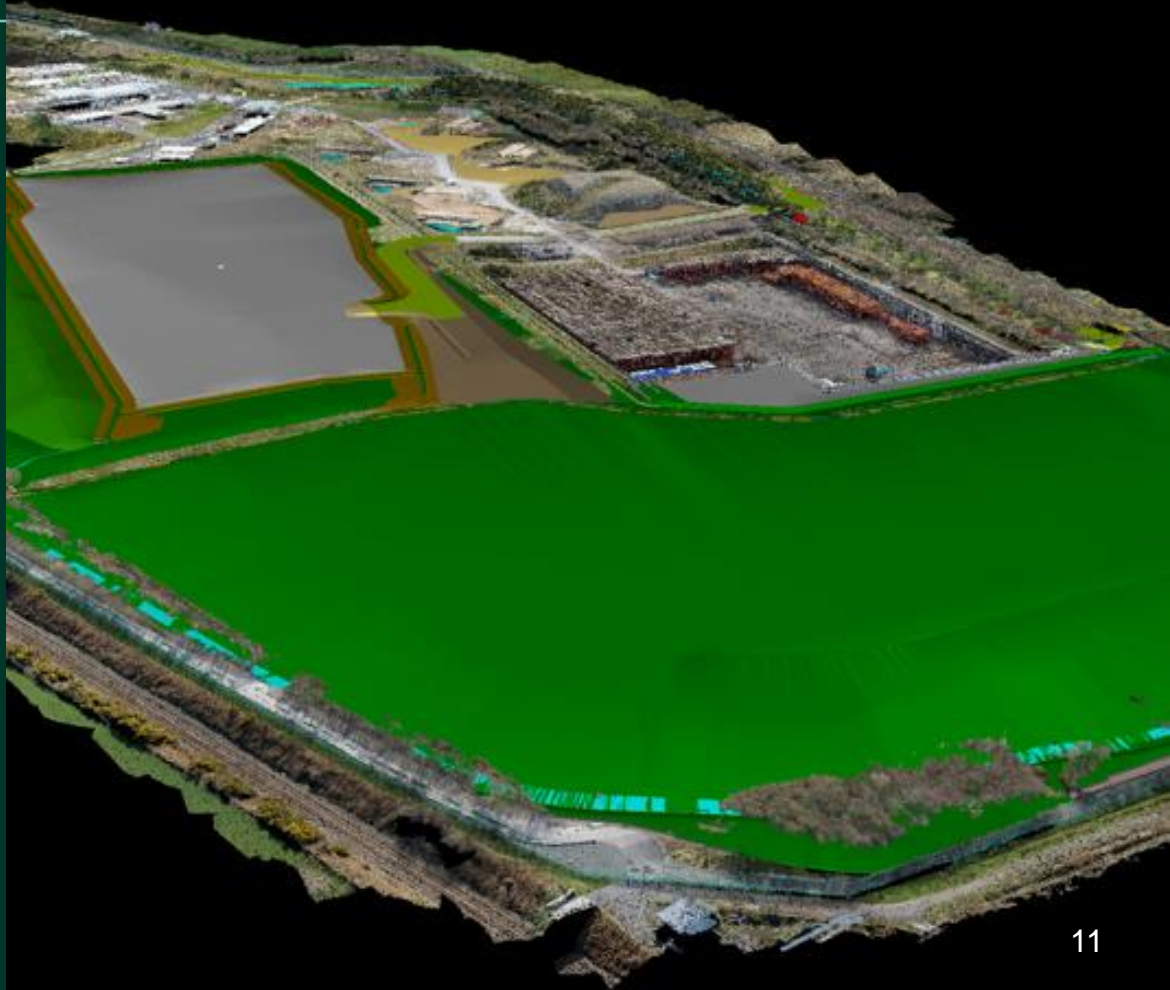


Repository Asset Care, Enhancement & Remediation (RACER)



Repository Development

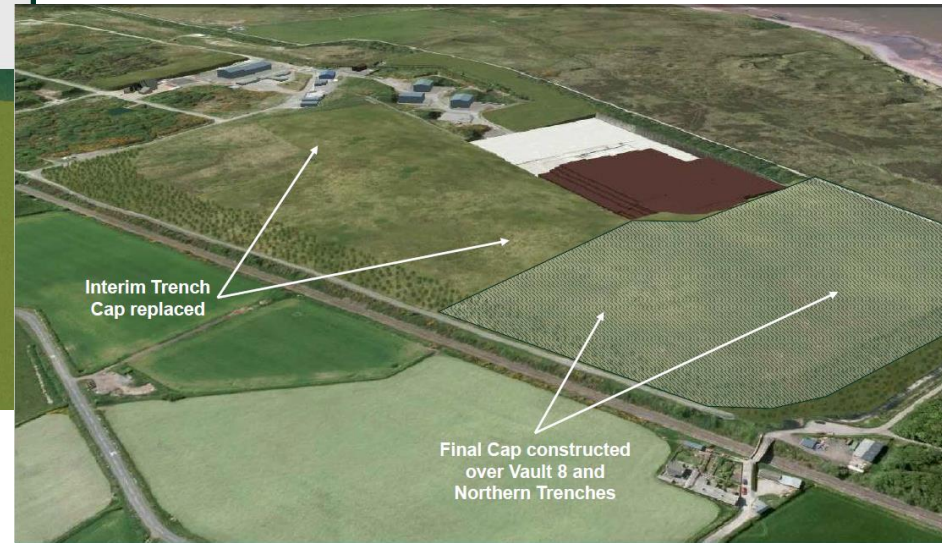
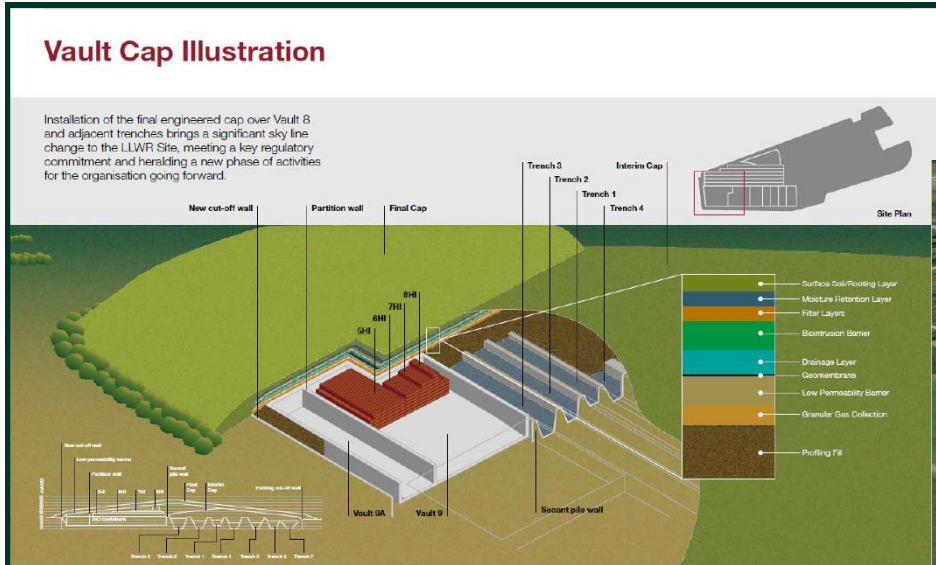
- Capping Operations
 - Early works for Southern Trench Cap Interim Membrane (STIM) replacement
 - STIM replacement
- Future Vaults Construction



Capping Operations

Vault Cap Illustration

Installation of the final engineered cap over Vault 8 and adjacent trenches brings a significant sky line change to the LLWR Site, meeting a key regulatory commitment and heralding a new phase of activities for the organisation going forward.





March 2023
6,000m³ of aggregate imported by rail.

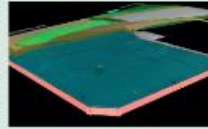


2024
Aggregate import will commence at 3 trains per week.

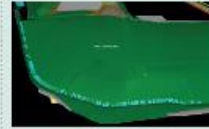
2028
Surcharging to commence on the northern trenches including installation of additional screening bund.



2030
Vault 8 void fill and begin surcharging.



2033
Build cut-off wall around Vault 8 and commence final cap on western edge of Vault 8.



2036
Complete final cap drainage and final cap installation over trenches (screen bunds will be removed).



2038
Completion of final engineered cap over Vault 8 and the northern trenches, providing long-term protection to the wastes and the environment.

2023

2024

2028

2030

2033

2036

2038



June 2023
Commencement of Southern Trench Cap Interim Membrane (STIM) project which includes the installation of herringbone drainage.



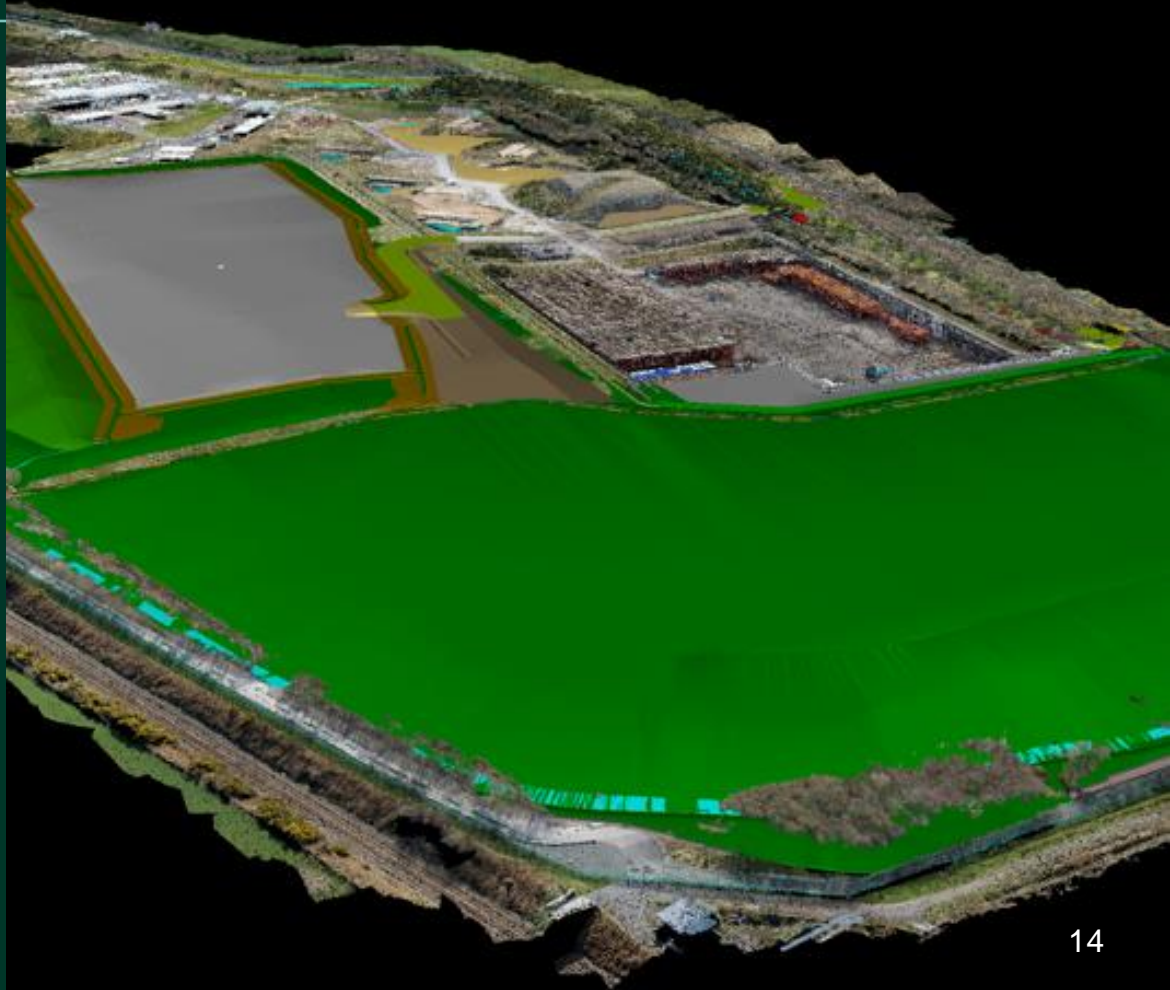
2024
Continue STIM project with the installation of replacement membrane and construction of the screening bund which will minimise the visual impact from construction works.



2033
Bentonite Enriched Soil (BES) batching plant required.

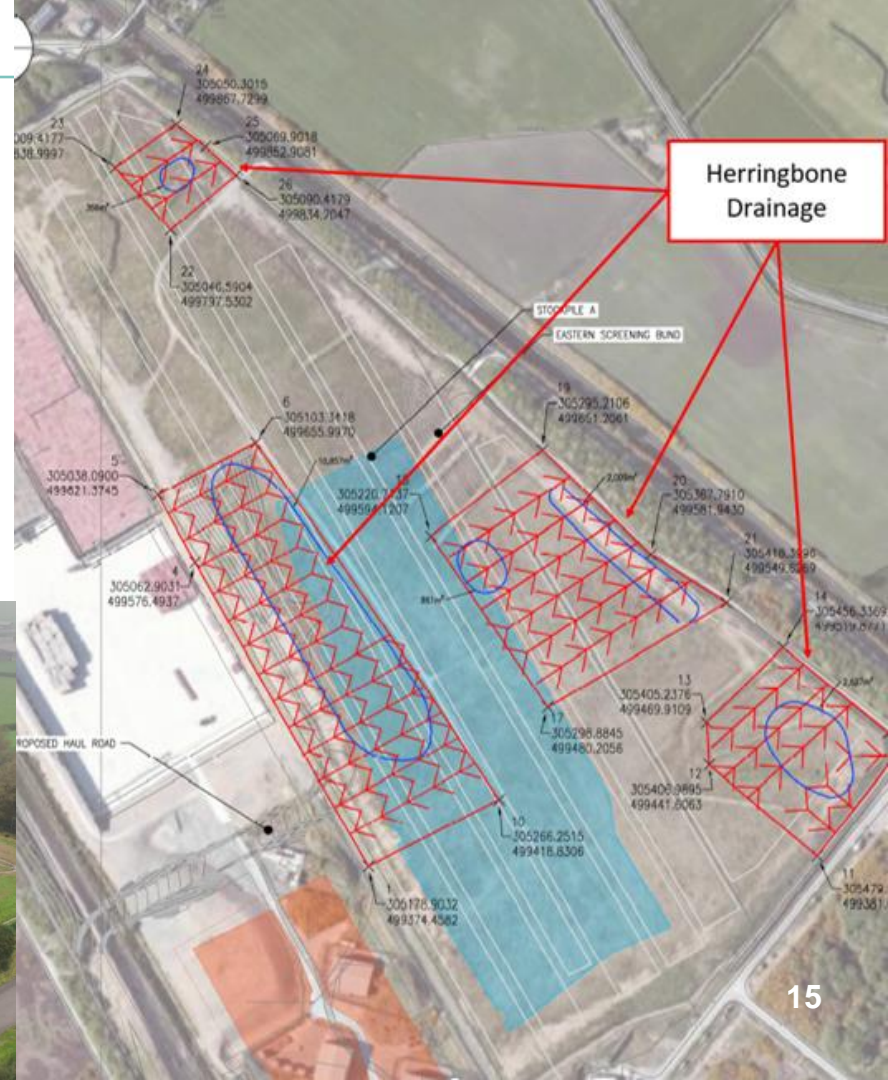
Southern Trench Cap Interim Membrane (STIM)

- The STIM project will deliver a replacement membrane which will continue to protect the waste in the historic southern trenches.
- The new membrane will remain in place for up to 100 years and will be gradually covered by the final cap as it advances south over the future vaults and adjacent trenches.
- Invitation to Participate (ITP) was published in September with expressions of interest due in by 23 October 2023.
- £53m contract over four years.

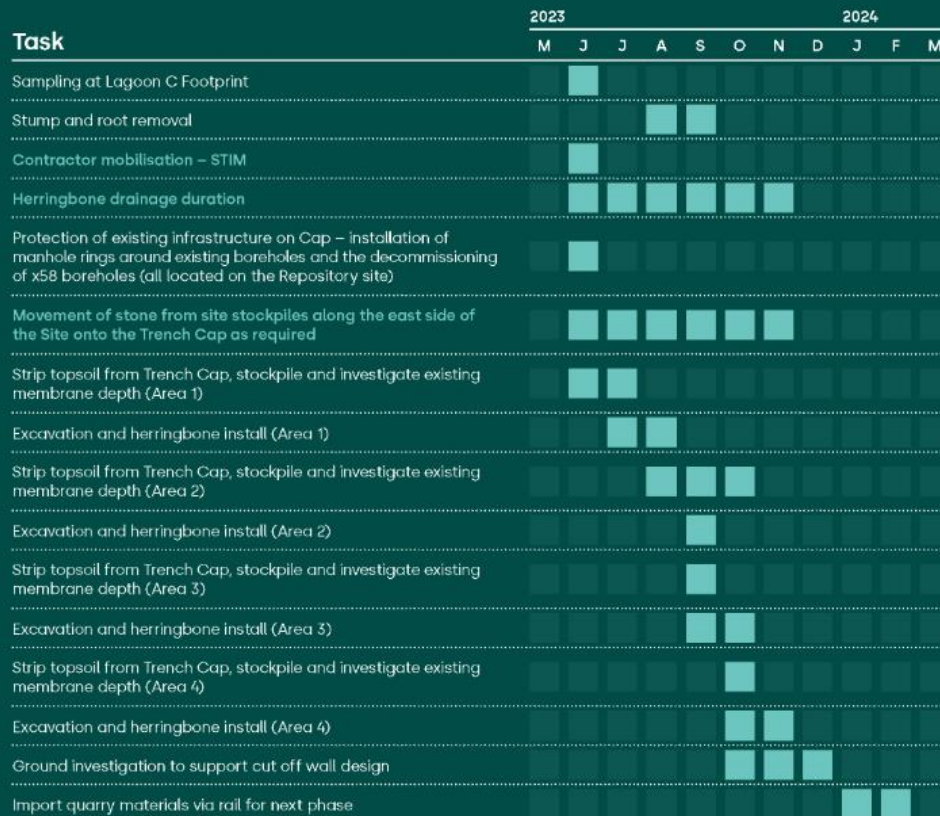


Early works STIM

- Installation of drainage in a 'herringbone' formation across the trenches to drain 'soft spots'.
- Progressing well, despite some challenging weather conditions.



STIM early works schedule



Environmental Safety Case (ESC)

- We are currently undertaking a major review of the 2011 ESC, which will be submitted to the Environment Agency in May 2026.



Waste Assumptions
Agree common set of group wide waste assumptions by 2023

Efficiency
Optimised our business delivering efficiency commitments v 2024

10 by 2030 Road Map

Community Downselect Decision
Decision to Government on communities to progress to deep borehole investigation and increased community investment by 2024

Repository Optimisation
Optimise the use of disposal capacity at the LCVW line

2023

2024

2025

2026

2030

Asbestos Solutions
Establish an innovation partnership for asbestos by 2023

Characterisation
Established a standard group wide service by 2024



Container Standardising
Introduce standard container catalogue by 2024

Thermal Treatment
Thermal treatment is a proven technology for the group 2024

Repository Development
Capping started on the repository in 2024

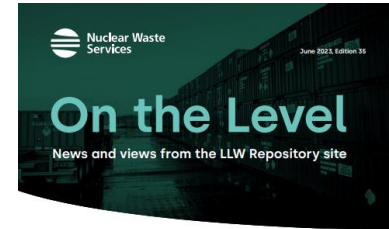
Deep Borehole Investigation
Start the characterisation deep borehole investigations 2024

Social License to Operate

- We always have an open door policy
- Continuous engagement with the local community and their representatives.
- Repository site visits programme
- Community open days and events
- Socio-economic funding to support local community initiatives
- Being a considerate neighbour to our community



Social License to Operate / Community Engagement



Local community site tour is a success

The LLW Repository site opened its gates for a community site tour in April. We welcomed 25 local residents, who read about the event in our previous edition of 'On The Level'.

The tour included a stop at the well-visited French traps, where the British Heritage Trust is the main benefactor. The tour also included a visit to the site's new 'On The Level' information centre, which will be used to share information on the site's development. The tour was a success, with many residents expressing their interest in the site's development. Local resident Laura Cottingham attended with her mother, Tracy Newton, who worked at the

my Mom to see of the changes over the years since she last worked there as a Health Physics Monitor some 20 years ago. She certainly enjoyed the tour and the opportunity to see the site and how it was managed. It was extremely informative and delivered with good humour.

My Mum to see of the changes over the years since she last worked there as a Health Physics Monitor some 20 years ago. She certainly enjoyed the tour and the opportunity to see the site and how it was managed. It was extremely informative and delivered with good humour.

