

# Environmental Statement Non-Technical Summary

## Revised application for Repository Development to Vault 11, Low Level Waste Repository

### Introduction

The Low Level Waste Repository (LLWR) is the UK's national facility for the disposal of low level radioactive waste (LLW). It is located close to the village of Drigg, Cumbria and is owned by the Nuclear Decommissioning Authority (NDA).

The site is licensed to LLW Repository Ltd. who have managed and operated the site on behalf of the NDA since July 2007.



# The Planning Application

## Proposed Development

### Overview

**LLW Repository Ltd. is seeking planning permission from Cumbria County Council, as the Waste Planning Authority (WPA), for:**

- Disposal of low level radioactive waste (LLW) in Vault 9 (rather than storage);
- The phased construction of new Vaults 10 and 11 and an extension to Vault 9 (Vault 9a);
- The phased disposal of LLW in the vaults over the period 2016 - 2045; and
- Phased construction of a final restoration cap over the period 2016 - 2051 across each full vault and the adjacent area of trenches.

The site will be progressively restored to grassland in parallel with a phased cap construction with screening planting on the perimeter of the site.

# Environmental Statement

## Overview

The potential environmental impacts resulting from the proposed development have been assessed. The assessment is presented in the Environmental Statement (ES) submitted as part of the planning application. A summary is provided below.

### Site Access and Traffic

The existing rail sidings and reception facilities will be used as far as possible to maximise the volume of construction materials delivered by rail.

The number of HGV and construction worker vehicle movements will be similar to that during Vault 9 construction, such that only small quantities of construction materials will be delivered by road. Small-scale imports of equipment or access for plant and maintenance etc. will also be by road. There will be no export of excavated materials as all such arisings will be used during the construction of future vaults or capping as part of the scheme.

A shuttle bus from a 'park and ride' facility to the LLWR site will be used to minimise car journeys by construction workers. A similar approach on the construction of Vault 9 enabled the removal of more than 6,000 single occupancy car journeys through Drigg village.

The hours of delivery will be restricted to avoid peak times, with advance notice being given to the Parish Council if HGV deliveries are likely to occur outside these hours.

Highway infrastructure has been assessed and the local highway network and junctions have capacity to accommodate the additional traffic generated during construction.

Most LLW will continue to be brought in by rail (exceptions include oversized loads) such that there will be no material increase in road traffic due to the continued operation of the LLWR.

### Working Hours

Proposed working hours during construction will be:

- Monday to Friday 0730 – 1800 hours
- Saturday 0800 – 1300
- No working at any other times including Sundays and Bank Holidays unless agreed in advance with Cumbria County Council as the waste Planning Authority.

Working hours during operations (LLW disposal) will be as at present.

# Environmental Statement

## Continued...

### Landscape and Visual Impact

Visual impacts of the capping have been assessed for representative locations in the immediate and far vicinity of the development. The most significant visual impact would occur over a relatively short period (3 years) following commencement for locations closest to the development. Mitigation will primarily be by screening of the development through construction of the edges of the cap, screening planting and, where necessary, use of temporary grassed mounds to screen construction operations from more distant residential locations.

### Noise

Noise levels and potential impacts during construction have been assessed at the nearest residential receptors and found to be acceptable. Temporary local noise barriers will be utilised where necessary, shielding items of plant and construction activities. This will ensure that the impact of construction noise on residential properties is minimised.

### Dust

The assessment of air quality (dust) impacts has confirmed that no significant effects from dust emissions (during both construction and operational phases) will arise. Despite this, measures will be employed to minimise construction dust emissions.



Views from the nearest residential properties showing the site 15 years after new planting

# Environmental Statement

## Continued...

### Biodiversity

To ensure that the biodiversity of the LLWR site as whole is not adversely affected during the proposed development, mitigation and habitat enhancement will be delivered for protected species and habitats. Appropriate licences will also be obtained from Natural England to ensure no adverse impact on great crested newts arises, and to maintain the population. A licence will also be obtained from Natural England for the closure of outlier badger setts within the application boundary.

In the long term, the final capping of the trenches and vaults and remediation to grassland, along with screening woodland re-planting, will substantially increase the habitat available on the LLWR for amphibians, reptiles and breeding birds. These habitats will be managed to retain their biodiversity interest. The proposed approach during the proposed development construction phases and post-closure will complement wildlife management currently being undertaken on the LLWR.

### Radiological Effects

Radiological impacts to the public have been assessed. All assessed impacts are consistent with regulatory guidance. The Environment Agency have reviewed the site's Environmental Safety Case (ESC) and judged it adequate to support an application for a revised environmental permit for disposal, which has now been issued.

### Geology Soils and Hydrogeology

An assessment of the potential environmental effects of the proposed development has been carried out in relation to soils, geology and hydrogeology and found them to be not significant.

### Climate Change and Coastal Erosion

Climate change is leading to rising sea levels that will increase coastal erosion. Available evidence suggests the facility will start to be eroded on a timescale of a few hundred to a few thousand years, and that once started the facility will be eroded over a timescale of one to a few thousand years. The site's ESC shows that the members of the public will be safe if erosion of the facility does occur.



**Phase 1:** 2016 — 2020: Site Preparation



**Phase 2:** 2019 — 2023: Capping of Vault 8 and adjacent trenches construct Vaults 9A+10



**Phase 3:** 2023 — 2030: Capping of Vault 9 and adjacent trenches, construct Vault 11

# Environmental Statement

## Continued...

### Surface Water

An assessment of the impacts on surface waters within and close to the site has been undertaken and has shown that impacts of the development are either not significant or can be prevented.

### Economic and Social Effects

The proposed development will deliver a range of important direct and indirect socio-economic benefits that will result in a general positive impact by the protection of existing jobs and the creation of new jobs during both the construction and operational phases of development. There will be a continued contribution to well-being of the local community through LLW Repository Ltd. and NDA support. The development will also contribute to the benefit and support of the wider nuclear sector in West Cumbria and will therefore support the local economy more generally.

### Sustainability Assessment

The scheme has been considered against the sustainability policies at national, regional and local levels. The proposed development secures the future of the LLWR to continue in its present role for the foreseeable future, and maintains its positive contribution to the sustainability of the local economy and the community of West Cumbria.

### Environmental Management Plan

Impacts during the construction and operation of the development will be mitigated through the implementation of an Environmental Management Plan (EMP). The EMP will outline how LLW Repository Ltd. will achieve the levels of environmental performance identified in the mitigation sections of the ES. Prior to and during each phase of construction, a review of lessons learnt will be undertaken and where appropriate be incorporated into the EMP for future works.



**Phase 4:** 2030 — 2032: Capping of Vault 10 and adjacent trenches



**Phase 5:** 2045 — 2051: Capping of Vault 11 and close site

# Site Masterplan

Proposed Development

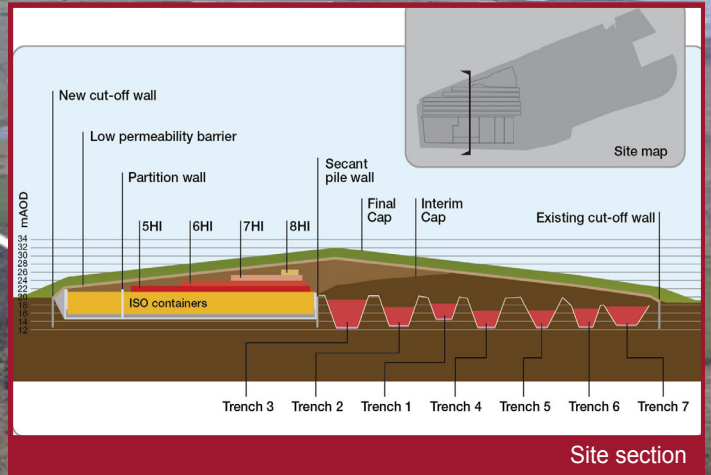
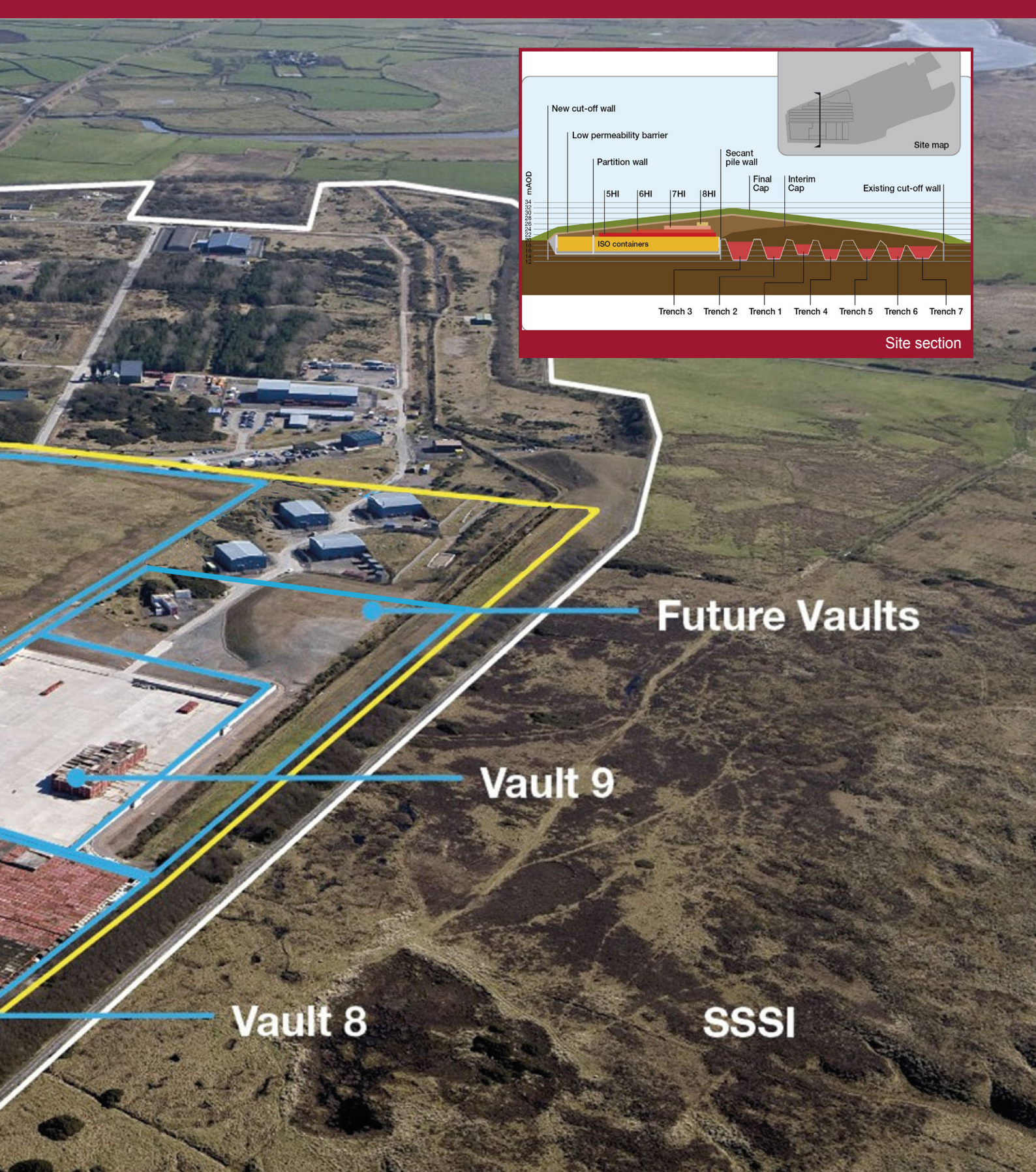


Drigg  
Village

Site  
boundary

Reference  
Disposal  
Area

Trenches 1 to 7



**Future Vaults**

**Vault 9**

**Vault 8**

**SSSI**

# Community Involvement

LLW Repository Ltd. is committed to consulting with the local community and interested stakeholders, including parish, borough and county councils.

A public exhibition was held at Drigg Village Hall in September 2015. Comments on the exhibition have been reviewed and incorporated into the proposals wherever possible. Comments have also been included in a Statement of Community Involvement, which accompanies the planning application and explains how LLW Repository Ltd. has involved and informed the community and local stakeholders of its proposals.

The exhibition boards are available to view online at the LLW Repository Ltd. website: [www.llwrsite.com](http://www.llwrsite.com)

## Timeline

- **Nov 2015:** The WPA will publicise the planning application as soon as it is registered and notify the local community. At this stage you will have an opportunity to comment on the proposals directly to the County Council.
- **Nov 2015:** Revised permit for disposal issued by the Environment Agency based on the Environmental Safety Case.
- **Feb 2016:** Earliest likely date for planning approval to be granted by Cumbria County Council
- **Summer 2016: Earliest development commencement date**

## Contacts and Further Information

The WPA will now consider the planning application. Any comments on the planning application should be made in writing to them at the following address:

**Development Control  
Environment Unit  
Cumbria County Council  
County Offices  
Kendal  
Cumbria, LA9 4RQ**

Details of the application, including full copies of all application documents, and who to write to with any comments on the application will be available on the Cumbria County Council website:

[www.cumbria.gov.uk](http://www.cumbria.gov.uk)

In addition, copies of the Environmental Statement will be available free of charge on request to LLW Repository Ltd. through the website :

[www.llwrsite.com](http://www.llwrsite.com)