

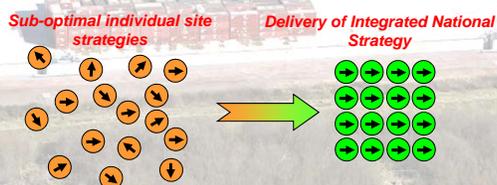
Preparing the UK National Low Level Waste Repository for the Next Century of Radioactive Waste Management

David Rossiter
Head of National Strategy Implementation
LLW Repository Ltd



LLWR is the lead for the LLW National Programme

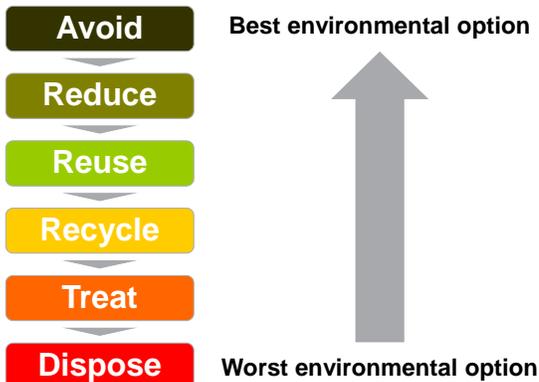
- Partnership with NDA implemented as part of successful contract award to UKNWM at the LLW Repository
- Purpose is to establish a UK-wide integrated National LLW programme to:
 - Develop and implement a National LLW Strategy
 - Extend the life of the repository
 - Obtain substantial overall cost savings



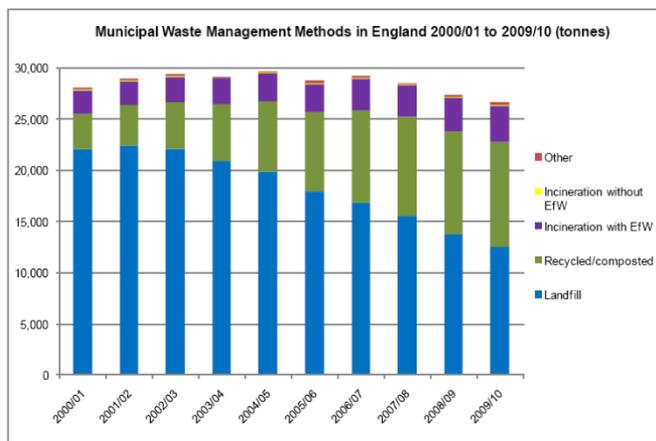
Implementing the UK Strategy

Our Objective:-

To support our customers in the safe, efficient implementation of the waste management hierarchy.



Trends in Conventional Waste



National Strategy Implementation

Policy for the Long Term Management of Solid Low Level Radioactive Waste in the United Kingdom

26 March 2007



Why Low Level Waste should be managed...

UK Strategy for the Management of Solid Low Level Radioactive Waste from the Nuclear Industry

August 2010



LLW Repository Ltd
NDA
UK Management of Solid Low Level Radioactive Waste from the Nuclear Industry:
LLW Management Plan

December 2009

What should be done & how...

DATED 2010

LLW Repository Limited (1)
And
[CUSTOMER] (2)

WASTE SERVICES CONTRACT relating to packaging treatment and disposal of low level radioactive waste

[REFERENCE]

How it can be done...

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Development of NDA LLW National Programmes

- National Programmes describe estate wide scope involving multiple PBOs/SLCs/M&O contracts and stakeholders
 - Desire to manage cross-SLC work activities in a more co-ordinated manner
 - Clearer definition of roles, responsibilities and delivery outcomes & benefits
 - Greater accountability for delivery and meeting overall programme aims
- LLW National Programme designed to drive compliance with Government policy and NDA strategy
- Need to track performance on all activities including:
 - Work undertaken by waste producers
 - Estate wide enabling activities
 - Delivery of Policy and Strategy implementation

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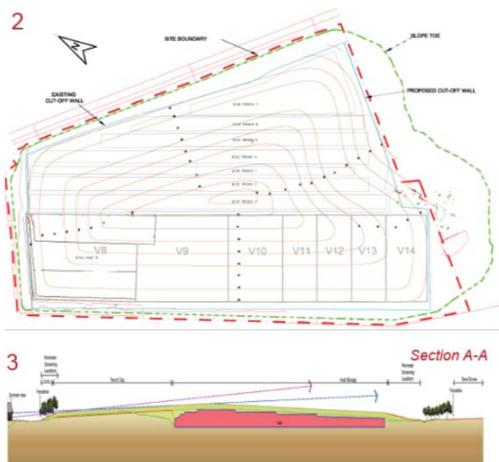
Segregated Waste Services

- Current Waste Management Services;
 - Metallic Waste Treatment, 6 facilities available
 - Combustible Waste Treatment, 8 facilities available
- Waste Packaging solutions;
 - Disposal containers, 6 existing and 2 new designs
 - Reusable Transport containers and inners
 - Waste consignment and technical support services
- Waste Management Services to be introduced during 2011
 - Waste Characterisation
 - Multi-modal transport
 - Container Maintenance and inspection



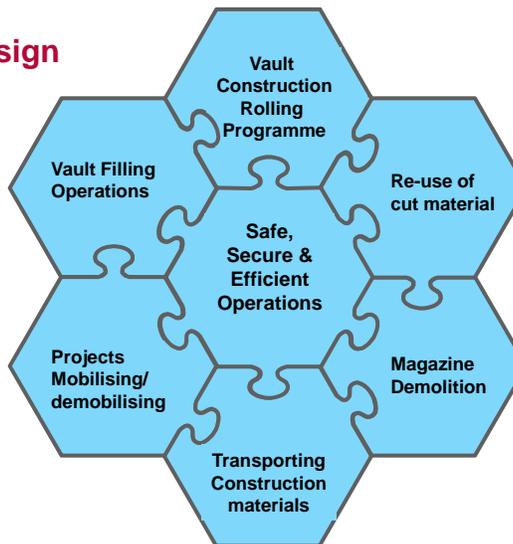
Maximising the Benefit of the Existing Repository

- 2011 Environmental Safety Case will inform :-
 - Radiological capacity of the site
 - Environmental safety of the proposals
- Innovations we are delivering:-
 - Optimised emplacement strategies (including higher stacking)
 - More efficient container designs
 - Options for VLLW
 - Alternative disposition routes for VLLW
 - Beneficial reuse on the LLWR site
 - Waste treatment for volume reduction
 - Optimised future vault and closure engineering designs
- The 'carrot' is **£2Billion** Cost Avoidance

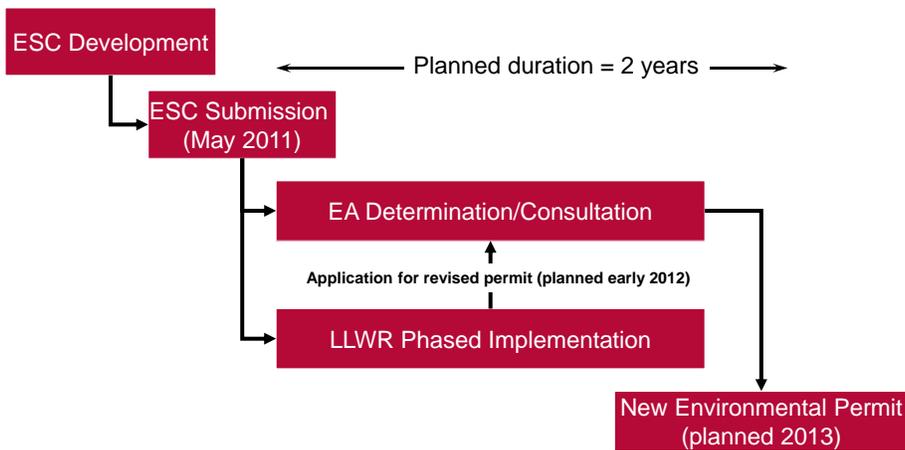


Optimised Repository Design

- Integrating key activities
- Making full use of the radiological and volumetric capacity of the existing site
- Requires waste producers to play their part
- We will always strive to minimise the impact of our operations on the local community and the environment



The 2011 Environmental Safety Case – the Path Forward



Summary

- A sustainable approach to disposing of the UK's Low Level Radioactive Waste is now being implemented
- The LLWR Site Licence Company, its customers, regulators, NDA and the local community all have a role to play
- Delivering these solutions will need sustained effort from all concerned – but the benefits will be significant
- The benefits of this approach are readily transferable to higher activity wastes



www.llwrsite.com

