

2011 Environmental Safety Case

*Presentation to:
WCSSG LLWR Sub-committee*

Date: 8th June 2011

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Presentation

- Submission of 2011 ESC
- Key conclusions
- Key aspects
- What happens now

2011 Environmental Safety Case

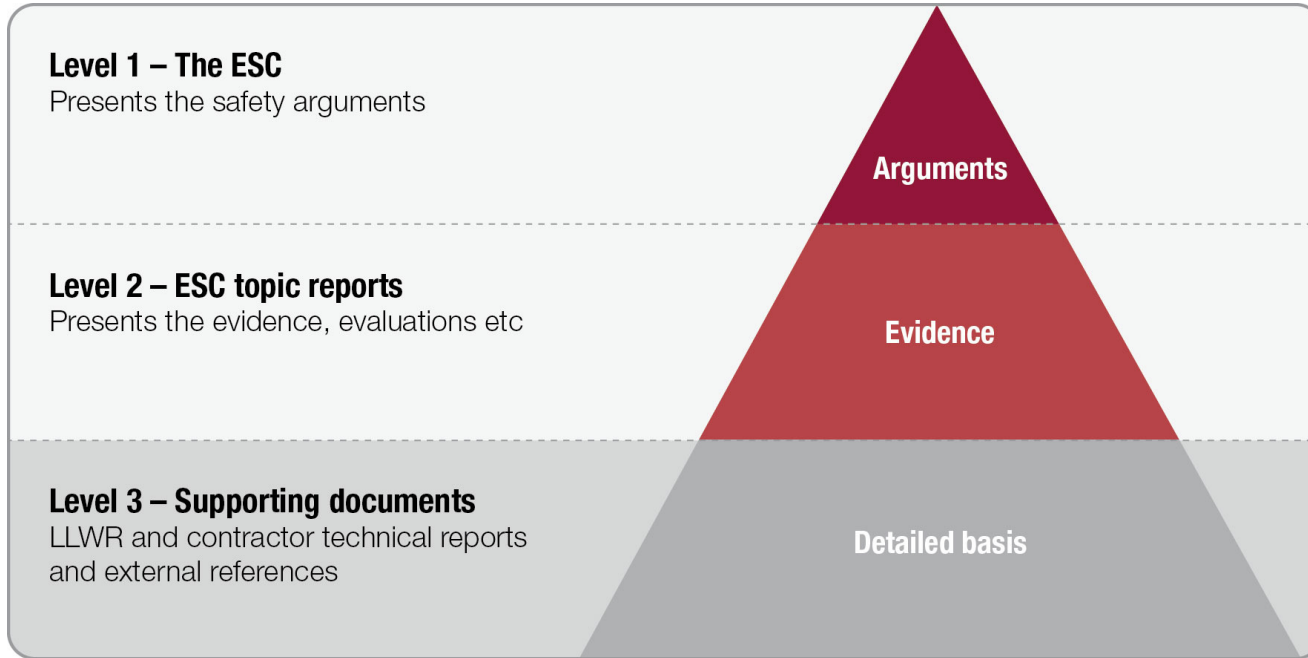
- Required by Environment Agency to submit by 1st May 2011
- Completed and delivered on time
- Vital for future of LLWR
- Available on LLWR website: www.llwrsite.com

 LLW Repository Ltd

The 2011 Environmental Safety Case



What Does it Look Like?



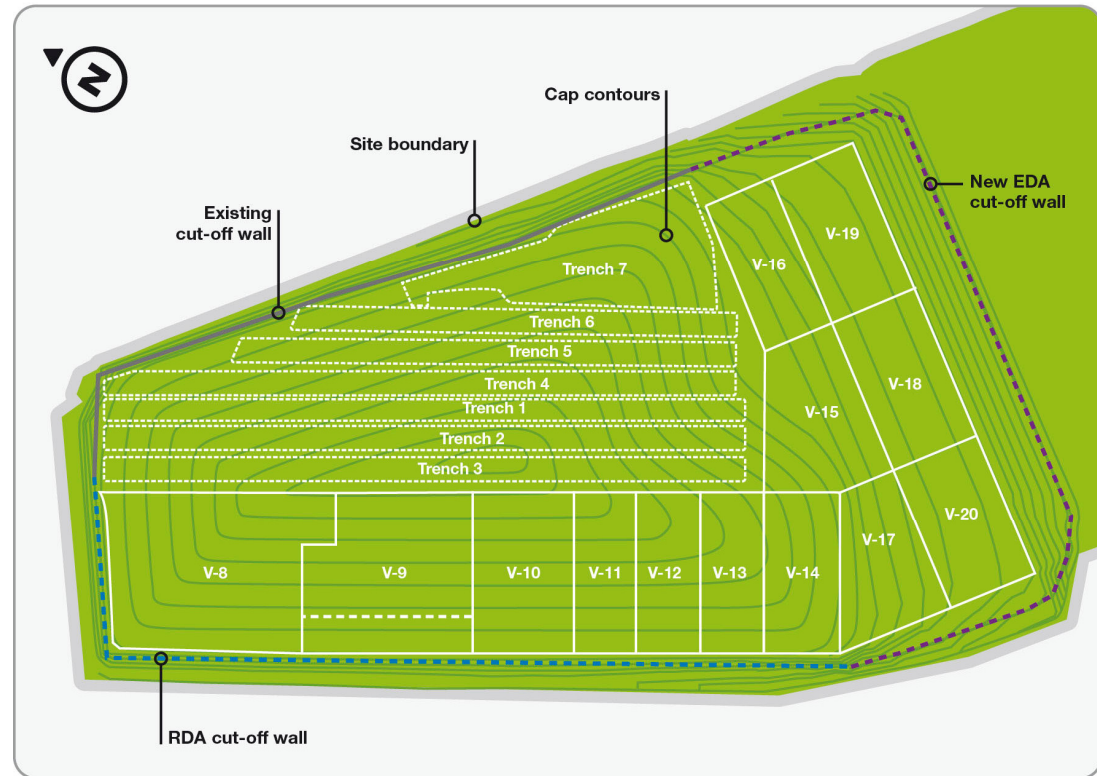
- Plus 20-page Non-technical Summary

Some Key Conclusions

- We believe 2011 ESC:
 - Meets Environment Agency's requirements
 - Shows safe to continue to dispose of low-level waste (LLW) at the LLWR
 - No need to remediate trenches
 - Early final capping (starting with Vault 8)

Disposal Areas Assessed

- Two disposal areas assessed in ESC:
 - Reference Disposal Area (RDA) – 2080
 - Extended Disposal Area (EDA) – 2130
- Both assessed to be safe



Outcome of RECALL Exercise

- Objective: obtain information on early disposals from current and former staff
- 28 interviews identified 45 issues identified, e.g.:
 - Disposal of shielded wastes
 - Incidents we already knew about
 - Chernobyl wastes
- Thorough analysis made
- Available evidence did not suggest significant and quantifiable impacts on inventory of wastes in the trenches
- Disposal of non-active wastes in early years may have meant we have overestimated trench inventory

Coastal Erosion

- Studies show site will be eroded on a timescale of a few hundred to a few thousand years
- Timing uncertain, but not outcome
- Assessment calculations show LLWR will be safe even if erosion occurs – radiological doses and risks meet regulatory guidance levels



Peer Review

- ESC reviewed by independent Peer Review Group (PRG)
- PRG here tonight
- Chairman will make a short presentation and answer questions

Agency Review and Permit Application

- Environment Agency review and due process scheduled to last into 2013
- LLWR will submit an application for a new permit allowing:
 - Continuing waste disposal
 - Capping of vaults and trenches starting with Vault 8 and adjacent strip of trenches
- Agency will undertake public consultations on our permit application and their decision

Planning Application

- Planning application required for:
 - Higher stacking of disposed waste in Vault 8
 - Disposal in Vault 9 and future vaults
 - Closure engineering – cap and cut-off ‘wall’
- LLWR submitting a planning application in parallel to submission of the ESC
- Planning application covers works for RDA

Implementation

- Permit requires us to manage repository in accordance with latest ESC
- Will now start to implement ESC
- E.g. will implement new Waste Acceptance Criteria
- Will ensure we manage the repository safely in accordance with assumptions and conclusions of the ESC
- Will also use to assess proposed changes to plans, e.g.:
 - New packages
 - Disposal of VLLW in cap profile



Conclusions

- 2011 Environment Safety Case submitted
- Believe it justifies using LLWR for LLW disposal
- Agency review of ESC and Permit application over next two to three years
- Planning application for engineering works in parallel
- ESC will now be implemented