The LLW Repository at Drigg: Assessment of BNFL’s 2002 Post-Closure Safety Case and Authorisation Review

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Outline of presentation

Background
The PCSC Review Process
Use of Review Outputs
Future Developments
The LLWR at Drigg

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Regulatory Framework

Authorisation granted under the Radioactive Substances Act 1960/1993

Formation of the Environment Agency 1996

Operator reviewed safety cases and submitted them in 2002

Major review of the authorisation commenced 2005
Post Closure Safety Case
received 30 September 2002
The process for review of the PCSC

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Establish the basis of regulatory review

Clear regulatory requirements

international guidance or requirements

wider considerations

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Radioactive Substances Act 1993

DISPOSAL FACILITIES ON LAND FOR LOW AND INTERMEDIATE LEVEL RADIOACTIVE WASTES:

GUIDANCE ON REQUIREMENTS FOR AUTHORISATION
Design of the Safety Case

Early dialogue

Need for balanced design of the safety case:
- building a safety case rather than assembling individual pieces of work
- understand key safety issues
- provide demonstration of how the system ensures safety through parallel lines of reasoning
How will findings from the review be used in making decisions?


and WM’03 Conference, Feb 23-27, 2003, Tuscon, AZ, USA.
Establish “rules of the game”

with the operator:
- communication during assessment
- clarification of issues raised by reviewers
- provision of new information

with statutory consultees, public bodies, Govt etc

with the wider community (pressure groups, local authorities, public)
Supply of information

Completeness

“frozen documents”

Openness / transparency (C-in-C)

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Recording comments and evolving positions from the review

Issue assessment process

Issues database

(see VALDOR 2001)

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Review approach

Use of wide range of expertise

establish and document the approach

use of risk assessments to focus review effort

identify and focus on issues that matter

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Building confidence in the quality of our judgements: methodology

Judgements based on sound, stated regulatory principles and requirements documented methodology of our approach to review of submissions procedure(s) designed to sift through the wood to get to the trees clear audit trail for judgements and basis of judgements
Building confidence in the quality of our judgements: expertise

- wide range of expertise selected individually to meet the scientific/technical needs of the task
- use of external and internal specialists
- independence from the industry

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Building confidence in the quality of our judgements: audits

- Traceability
- Reproducibility
- Quality and robustness of data

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Building confidence in the quality of our judgements: communication of findings

- Quality and clarity of outputs
- Expert review reports
- External publications
- Stakeholder involvement

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Using Review Findings to Make Regulatory Decisions

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Use of Review Outputs

Decision Document

Future regulation of disposals of radioactive waste at the low-level radioactive repository at Drigg, Cumbria.

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www.environment-agency.gov.uk/commondata/acrobat/dd_final_13030
Use of Review Outputs

Number of comments and recommendations

Feed into review of the LLWR authorisations

Ongoing dialogue with the operator

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Key conclusions

The repository is currently safe

The repository will remain safe while under active management

The 2002 Drigg safety cases do not make an adequate or robust case for continued disposal

The 2002 PCSC is a valuable piece of work on which to build for future revisions.
Our Decisions

Requirements on the operator in the revised authorisation include:

- Document how it will address findings of our review of the safety cases
- Undertake full option and risk management studies
- Update environmental safety cases in 5yrs
Future Developments

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Future Developments

Improvements to regulatory guidance:

“GRA” for different types of facilities and waste (shallow, deep disposal, VLLW, LLW, ILW, HLW)

How guidance relates to historic disposals.

How regulatory process fits with site selection and planning issues

Shelf life of GRA ~10yrs, timescale for development of new repository much longer

New directives and legislation

International developments
Future Developments (2)

More detailed guidance required on:

- the content/presentation of a safety case
- long-term management of information
- time periods
- optimisation
- PEGs
- human intrusion
Future Developments (3)

Improving the Process for Regulatory Review:
- Supply of information
- Supply of additional information during the review
- Confidentiality
- Dialogue with the proponent during the review
- Making the review more publicly transparent
Questions

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