Environmental regulation of nuclear site clean-up

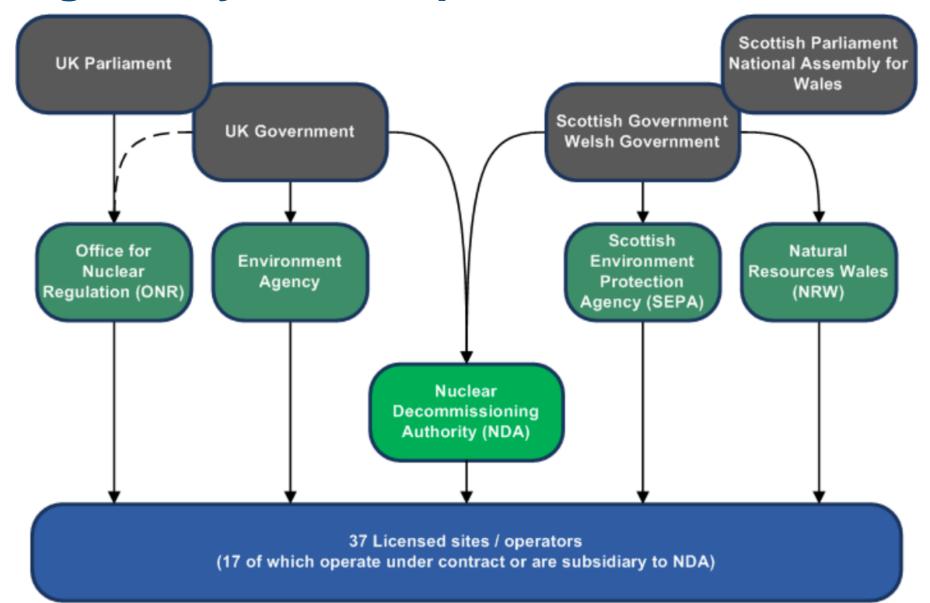
Malcolm Peters

Senior Nuclear Regulator and Nuclear Site Remediation Project Lead

Environment Agency



Regulatory landscape for nuclear site clean-up





Context



CREATING A BETTER PLACE











GREEN GROWTH AND A SUSTAINABLE FUTURE

SUSTAINABLE GALS DEVELOPMENT GALS







































Setting expectations for achieving release from regulation

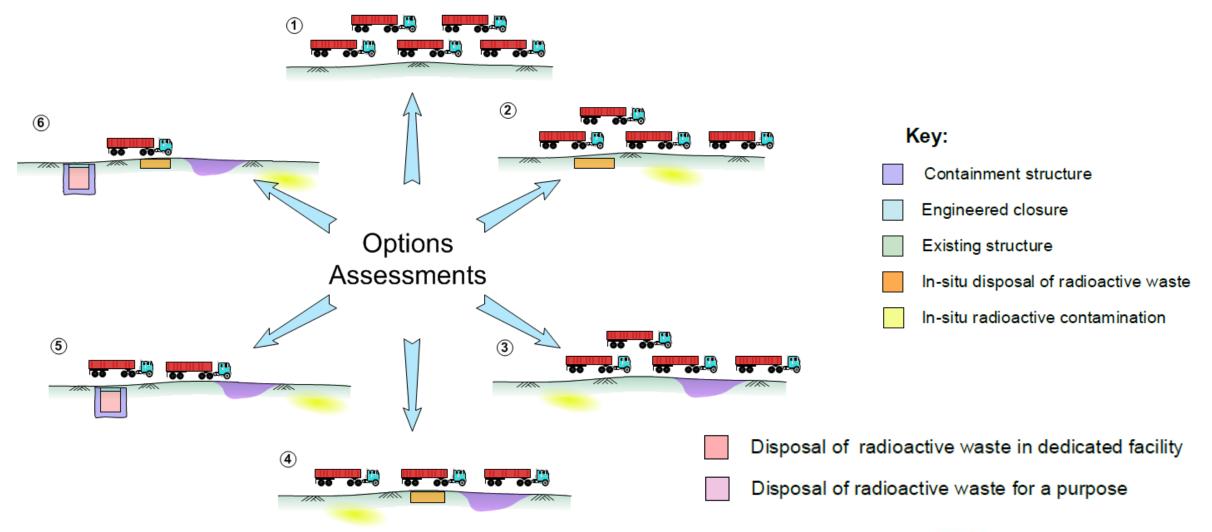
Published joint environment agencies guidance (GRR) clarifying our expectation that operators should optimise decisions on how best to manage radioactive wastes



- ◆ Informed by industry trial lead & learn approach
- Modified all nuclear permits in England & Wales



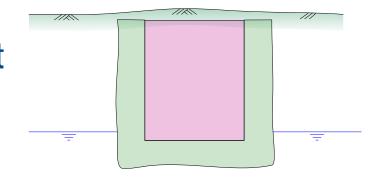
Optimisation of radioactive waste management





Integrated management of decommissioning arisings

GRR encourages integrated approach to waste management



- It sets criteria for:
 - In situ disposal
 - Disposal for a purpose similar to concept of 'recovery' in conventional waste legislation
- Recognise volumes of non-radioactive demolition material are significant
- Retention and re-use of materials on sites may offer a more sustainable route to 'End States'



Two key deliverables for GRR

Waste Management Plan (WMP)

- Documented practical plan
- For all radioactive wastes and contamination over remaining lifetime
- Demonstrates optimisation
- Holistic
- Proportionate
- Supports applications

Site—wide Environmental Safety Case (SWESC)

- Documented set of claims
- Demonstrates environmental safety
- During regulation and after release
- Evolution of the site without operator control
- Supports applications



Implementation progress

- Working with stakeholders and industry:
 - ◆ Industry trial worked in feedback from lead & learn
 - Public consultation on the draft guidance
 - Dedicated strategic and technical-level interactions on GRR – sharing learning and resolving issues
 - Developed industry-wide compliance timeline
 - ◆ Wider regular 'touch points' e.g. Site Decommissioning and Remediation – NDA Theme Overview Group, Nuclear Industry Liaison Group, Safety Directors Forum etc.



Implementation progress

- Successes and progress made:
 - ◆ EA issued 'Proportionality note' clear expectations across different sector areas
 - GRR Training modules
 - Developed Groundwater and Directive Waste guidance
- Ongoing work
 - Climate change impacts and adaptation work
 - Developing Integrated Environment Assessments
 Working Group for Nuclear On-site Disposal
 - Building more specialist support e.g. groundwater specialist
 - Working with industry group for sustainable reuse of materials

Challenges & changes

- Evolving legislation & policy
- Moving from an operational to a 'End State' focus broad range of new issues
- Need multi-disciplinary teams of specialists
- We are looking to optimise across legal and regulatory regimes with different standards and approaches
- Maintain consistency of environmental outcomes across Industry (level playfield)
- Promoting sustainable outcomes with good stakeholder engagement



