Strategic Nuclear and Energy Board 260618

Consultation on the Regulation of Nuclear Sites in the Final Stages of Decommissioning and Clean - Up

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Summary and Recommendation:

In May the UK Department for Business, Energy and Industrial Strategy (BEIS) launched a consultation on proposals to amend the legislation that underlies the regulatory framework for nuclear sites in the final stages of decommissioning and clean - up. The closing date for responses is 3rd July.

This report is to seek Members views for consideration for inclusion in the Council's response and to delegate sign-off of the final response to the Chief Executive in consultation with the Chair of SNEB and the Portfolio Holder for Nuclear and Corporate Services.

1. Background

1.1 On 8th May, the UK Government Department for Business, Energy and Industrial Strategy (BEIS) launched a consultation to seek views on proposals to amend the legislation that applies to UK nuclear sites in the final stages of decommissioning and clean up. A copy of the full consultation document and the associated impact assessment is available via the following link https://www.gov.uk/government/consultations/the-regulation-of-nuclear-sites-in-the-final-stages-of-decommissioning-and-clean-up.
Hard copies are available for Members on request.

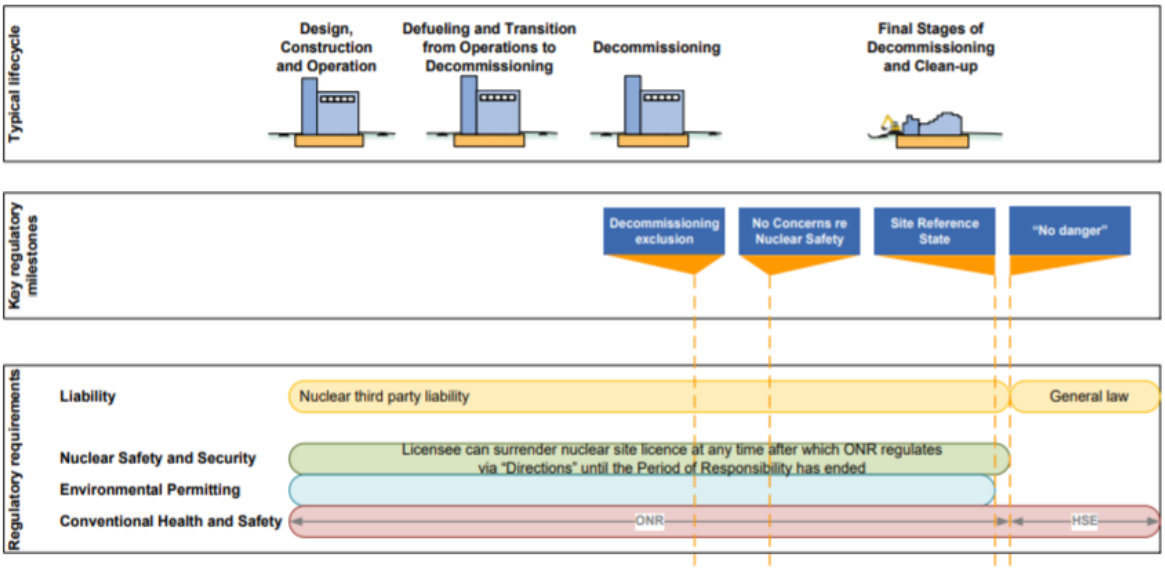
1.2 BEIS working with the regulators, the Office for Nuclear Regulation (ONR), the Environment Agency (EA), the Health and Safety Executive (HSE) and the Nuclear Decommissioning Agency (NDA) have identified an opportunity to amend the legislation (the Nuclear Installations Act 1965) that applies to the final stages of nuclear site decommissioning and clean up. The aim is to create 'a more sustainable approach to waste management and land remediation'.

2. The current legislative framework

2.1 The 1965 Act sets out the framework for nuclear safety and nuclear third party liability with a system based around a licencing process managed by the ONR. This regime requires a site operator to have a license to use a site for specific activities related to, for example, nuclear power generation and requires that financial provision is in place to meet claims in the event of a nuclear incident, as required under international law on nuclear third party liability.

2.2 The work undertaken has identified that through the early stages of decommissioning of a nuclear reactor site, after the removal of spent fuel and higher activity wastes, the radiological hazards on the site are reduced by 99%. It is suggested that regulation under the site licensing regime and nuclear third party liability regime are no longer warranted. From an international perspective the Steering Committee for Nuclear Energy of the Organisation for Economic Co-operation and Development (OECD) have also recently taken the decision that sites in the process of decommissioning may be excluded from the international nuclear liability regime, when the main nuclear hazards have been removed and the risks to the public are small.

2.3 The figure below summarises the regulatory regime and shows the key stages that must be reached before a site operator can relinquish its responsibilities under the current framework.



3. Case for change

3.1 In summary, the main reasons for change are:

- Nuclear third party liability currently continues beyond the point at which it is no longer required. (The UK has not yet implemented the decisions of the OECD Steering Committee for Nuclear Energy concerning the exclusion of certain sites from the nuclear liability regime);

- Site operators wishing to exit the NIA65 licensing regime are required to clean-up the site in a way that does not allow them to balance the overall safety and environmental risks and this may result in unnecessary costs; and

- Disposal facilities for radioactive waste located on nuclear licensed sites remain subject to nuclear licensing. Such sites are also regulated by the environment agencies. It is considered that dual regulation is unnecessary after nuclear safety matters have been resolved.

3.2 In addition change would allow;

- bringing the UK in line with internationally agreed standards for ending the period of responsibility for nuclear third party liability;
- ensuring that the site is regulated by the most appropriate regulators in each stage of the decommissioning process;
- ensuring sustainable clean-up of sites and allowing earlier re-use;
- removing the barriers to construction of disposal facilities on nuclear sites.

4. Principles for the development of consultation proposals

4.1 In formulating the proposals, Government and the environment agencies have built them around the following principles:

- there must be no relaxation in the standards for public protection - the proposals align with UK radiological protection law, international standards and Public Health England guidance;
- the proposals must respect the statutory principles of good regulation;
- sites must remain under appropriate regulation; and
- a rigorous procedure must be used for assessing the wider benefits and risks of different clean-up options, so that the best overall solution can be found for each site

5. Consultation proposals in summary:

i. The proposal is to change the NIA65 to allow licensees to exit the licensing regime once the site has reached internationally agreed standards and nuclear safety and security matters have been fully resolved.

ii. After the licence has been ended, the site would be regulated by the relevant environment agency and the Health and Safety Executive (HSE), in the same way that non-nuclear industrial sites undergoing clean-up for radioactive or other contamination are regulated. Proposals for further clean-up would be assessed by the relevant environment agency under the Radioactive Substances Regulations. This process would enable the site operator to work with the community to establish the most appropriate end state for the site and would result in improved waste management and other environmental benefits.

iii. The proposals would allow ONR to exclude certain disposal facilities for radioactive wastes from the nuclear licensed site, if it is content that nuclear safety and security matters have been fully resolved. The facilities would be regulated by the relevant environment agency and HSE and the relevant environment agency would be responsible for deciding when nuclear third party liability should end.

iv. To allow these changes to take place, UK Government would need to implement two recent decisions by the OECD Steering Committee for Nuclear Energy concerning the exclusion of certain sites from the nuclear third party regime.

v. The proposal would also tighten the licence surrender process to require a licensee to apply to ONR to surrender the licence and strengthen requirements for ONR to consult with HSE when the licence is surrendered or varied.

It is important to note that, after any decisions to end special liability requirements under the international nuclear third party liability regime, legal liability regimes for third party damage or injury would remain available under UK law.

6. Way Forward

6.1 Following the receipt of consultation responses Government have recognised that further work will be required which would be centred around drafting new legislation to amend the 1965 Act and assessing the impacts and potential changes required to secondary legislation.

7. Previous consultation

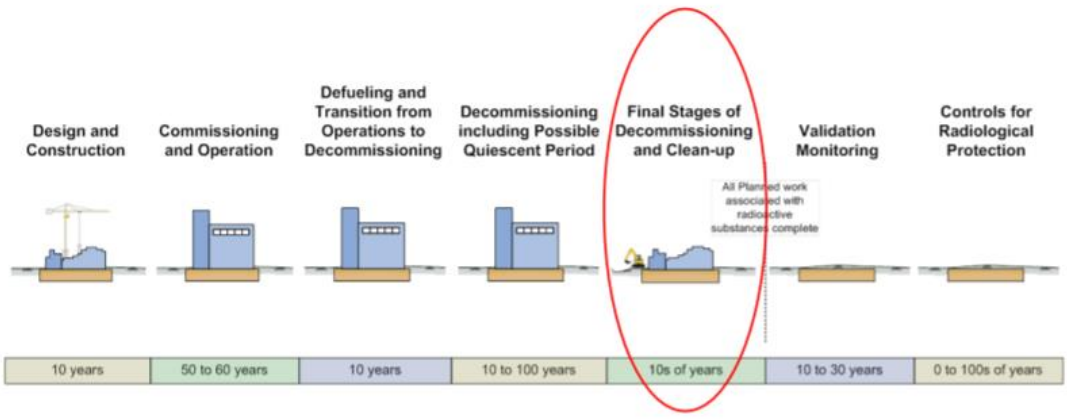
7.1 In November 2016 UK Government published a discussion paper on the regulation of nuclear sites in the final stages of decommissioning and clean up. A copy of the relevant report to SNEB from January 2017 is attached as Appendix A.

7.2 From the responses received most recognised that the proposals could provide a more flexible approach to nuclear site clean-up, applicable to a wide range of sites with different end-states with the potential to optimise waste management. Issues identified by respondents including the need for transparency with local communities and close engagement with local authority planners.

8. Status of nuclear decommissioning in UK

8.1 Of the 36 sites in the UK with nuclear installations 17 are within the NDAs programme for decommissioning and clean-up. Most of those sites will follow the staged process in Figure 1 below, the final stages of which involve the dismantling and demolition of redundant buildings and land remediation such that a suitable end state is achieved.

Figure 1: Illustration of the lifetime of a nuclear power station



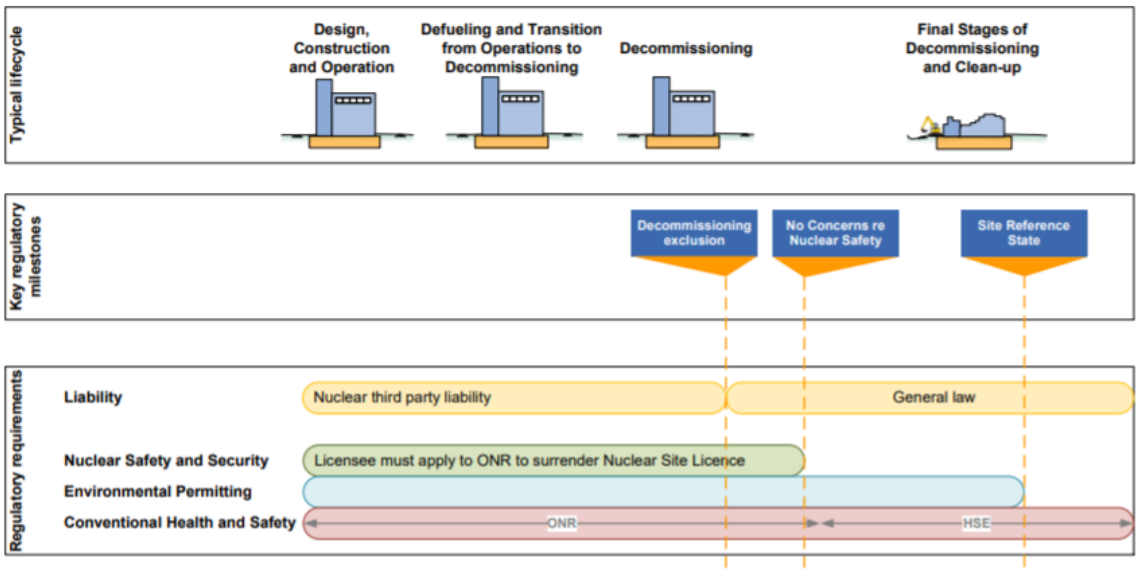
8.2 Optimising the final stages of decommissioning and clean up involves finding the 'best overall solution'. Optimisation is the process which brings the site to a condition such that radiation exposure is as low as reasonably achievable. Applying optimisation will ensure that that radioactive waste and contamination are managed in a way that is safe but may not necessarily lead to all radioactivity being removed from the site, although this will almost certainly vary from site to site.

8.3 In some instances it may be appropriate to remove all ALL waste and residual contamination from the site for disposal or management elsewhere. This will have impact on costs and the movement of materials. At the other end of the spectrum it may be optimum to leave the some waste or contamination in suit or use it to refill voids on site rather than bringing in clean spoil for infill purposes.

9. Proposed changes to the regulatory framework

9.1 This consultation proposes that the regulatory framework be amended such that ONR would be able to relinquish regulation of a site once content that the risks from the site have fallen below internationally agreed criteria and that there are no other nuclear safety or security concerns. Such a site would, in effect, no longer be a 'nuclear' site.

The figure below shows the proposed framework for the regulation of nuclear sites;



9.2 Under the proposed framework:

- The nuclear third party liability regime would cease to apply when ONR was satisfied that the site had met the Paris Convention Decommissioning Exclusion criteria. The ending of the period of responsibility would not mean that the owner or occupier of the site has no liabilities or responsibilities to third parties. When the nuclear liability regime ceases to apply, third party liability (under ordinary law) would then apply to the site, providing an alternative but nevertheless still robust legal regime for third party damage or injury.

- Separately and potentially at a later date, the site operator would have to apply to ONR to surrender the site licence. ONR would be able to accept the surrender of the licence once content that the period of responsibility for nuclear third party liability had ended and that nuclear safety and security were no longer a concern. ONR would consult with HSE and the relevant environment agency before taking this decision.

- Once the site licence has been revoked, the health and safety of work activities on the site would be regulated by HSE.

- Any further site remediation, and waste management and disposal, would continue to be regulated by the relevant environment agency, until the site operator could demonstrate to the satisfaction of the relevant environment agency that the RSR permit could be surrendered (indicated as "Site Reference State" in Figure 6).

- The site operator could apply to ONR to exclude certain disposal facilities from the nuclear licensed site. ONR would consult with HSE and the relevant environment agency before taking a decision and would accept the application if satisfied that nuclear safety and security matters had been resolved. The relevant environment agency would determine the period of responsibility for these facilities.

- Low level waste disposal facilities which meet stringent internationally agreed requirements would be excluded from the requirement for nuclear third party liability.

10. Expected benefits from the proposals

10.1 The final stages of nuclear decommissioning and clean-up are dominated by environmental remediation. These proposals would:

- allow ONR to concentrate their specialist nuclear safety skills on sites which require this expertise;

- ensure that the site is regulated by the most appropriate regulators in the final stages of decommissioning and clean-up. These are HSE for worker safety and the environment agencies for environmental protection and radioactive waste disposal. Site operators would therefore be working to a single set of environmental standards and regulations (the Radioactive Substances Regulations), rather than being required to consider two sets as they do at present.

- enable the operators to optimise the end states, on a site by site basis, in consultation with local stakeholders and under regulation by the relevant environment agency;

- remove the current disincentives to construct disposal facilities on nuclear sites, rather than off-site, for example, on greenfield land. This would constitute better use of land and would reduce transport costs and risks; and

- allow certain low level waste disposal facilities to be excluded from the nuclear third party liability regime, thereby saving costs.

10.2 At sites for which the optimum end state is different to the currently proposed end state, the proposals would result in additional benefits, including:

- avoiding unnecessary remedial work, and allowing substructures and soils to remain in place, where it has been demonstrated that this represents the optimal solution for the site;
- a significant reduction in the generation of radioactive and conventional waste and the risks to workers and the public associated with excavation and transport of these wastes;
- a reduction in pressure on the existing disposal facilities;
- cost savings from reduced excavation and transport of waste; and potentially,
- earlier re-use of sites for recreational purposes or redevelopment.

11. Consultation questions

11.1 Government are seeking comments from stakeholders against the following questions;

Consultation Questions	
1.	Do you agree with the proposal to exclude nuclear sites in the process of decommissioning and clean-up from the continuing application of the third party liability regime, once conditions specified in the Paris Convention Decommissioning Exclusion are met? If not, why not?
2.	Do you agree that the licensee of a nuclear site should be required to **apply** to the Office for Nuclear Regulation (ONR) to surrender the licence and should lose the ability to surrender the licence unconditionally as at present?
3.	Do you agree that ONR should be able to exclude waste disposal facilities from the nuclear site licence if satisfied that nuclear safety and security matters for these facilities are fully resolved? If not, why not?
4.	Do you have any further evidence that we should take into account in our impact assessment?
5.	Do you have any other comments on these proposals?

12. Next steps

12.1 Members are asked to identify any specific issues to be included in the Council's response to the above consultation. Subject to Members agreement it is proposed that the final draft will be signed-off by the Chair of SNEB and the Portfolio Holder for Nuclear and Corporate Services in consultation with the Chief Executive and submitted by the closing date of 3rd July.

Appendix A

Strategic Nuclear and Energy Board 120117

Regulation of Nuclear Sites in the Final Stages of Decommissioning & Clean Up

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Summary and Recommendation:
This report informs Members of the publication of a discussion paper on the development of the policy, legislative and regulatory framework that relates to the regulation of nuclear sites in the final stages of decommissioning and clean-up.

Recommendation: Members are asked to note the report and the NuLeAF draft response to the consultation on the informal discussion paper.

1. Introduction

1.1 The Department for Business, Energy and Industrial Strategy (BEIS) is responsible for the development of policy, legislation and regulation of nuclear energy and nuclear installations across the UK.

1.2 This includes the policy, legislative and regulatory framework that relates to nuclear site decommissioning and clean-up.

1.3 A discussion paper published in November 2016 sets out the Government preference for a more flexible approach to decommissioning the determination of end-states and approaches to waste management.

1.4 The Government is seeking views from stakeholders to ensure any subsequent development of policy in this area is well informed prior to undertaking formal public consultation.

1.5 Views are being sought from all relevant stakeholders with a particular interest i.e. local communities in the vicinity of existing nuclear sites, nuclear operators and liability owners, local authorities and members of the nuclear industry (including the radioactive waste management supply chain).

2. Background

2.1 Working with regulators and the Nuclear Decommissioning Authority, the Department for Business, Energy & Industrial Strategy has identified an opportunity to improve current arrangements that apply to the regulation of the final stages of nuclear site decommissioning and clean-up.

2.2 There are 37 licensed nuclear sites located across England, Wales and Scotland, each comprising one or more nuclear facilities.

2.3 A subset of these sites (17 sites including Sellafield) have been designated by UK Government to the Nuclear Decommissioning Authority (NDA) for decommissioning and clean-up.

2.4 The discussion paper summarises the proposals that have resulted from work undertaken so far by the NDA working with the regulators to explore ways in which the final stages of decommissioning and clean-up might be optimised, in particular, to explore how the regulatory regime might allow a range of potential end states to be considered.

2.5 The document describes:

- the current regulatory arrangements that apply and the implications and consequences if they continue to apply as now;
- the proposal for changes to improve current regulatory arrangements, and the potential benefits and downside of any such changes; and
- Government's views on developing and implementing the proposals.

2.6 The discussion paper can be viewed following the link below:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/565233/Discussion_Paper_3_November_2016_.pdf

3. Consultation

3.1 The consultation period for this informal discussion paper ended on 29th December 2016

3.2 Once responses to the discussion paper have been considered and if the UK Government decides to take forward the proposals, BEIS aim to publish a formal public consultation in early 2017

3.3 NuLeAF (the Nuclear Legacy Advisory Forum) who are the Local Government Association (LGA) representative body on legacy wastes and decommissioning, of which Copeland Borough Council is a supporting Member, drafted a response to this consultation on the informal discussion paper.

3.4 Attached as Appendix 1 is the draft response from NuLeAF that was circulated to its Members for comment. Members are asked to note this response.

Appendix 1

Regulation of Nuclear Sites in the final stages of Decommissioning and Clean-up: NuLeAF Comments on discussion paper

1. Introduction

NuLeAF (the Nuclear Legacy Advisory Forum) is the Local Government Association (LGA) representative body on legacy wastes and decommissioning. NuLeAF is directly supported by around 100 local authorities and national park authorities across England and Wales and speaks for the wider local government community. Our remit encompasses all aspects of the management of the UK's nuclear waste legacy. Our primary objectives are:

- to provide a mechanism to identify, where possible, a common, local government viewpoint on nuclear legacy management issues;
- to represent that viewpoint, or the range of views of its member authorities, in discussion with national bodies, including Government, the NDA and the regulators;
- to seek to influence policy and strategy for nuclear legacy management in the interests of affected communities; and
- to develop the capacity of its member authorities to engage with nuclear legacy management at a local level.

Our member local authorities cover all nuclear sites in England and Wales that would be affected by any changes to regulation. This is therefore an issue of great interest to them. We have engaged with Government and the regulators as work on Proportionate Regulatory Controls (PRC) and the related Guidance on the Requirements for Release of Nuclear Sites from Radioactive Substances Regulation (GRR) has evolved.

In particular, we have drawn on the expertise of our Radioactive Waste Planning Group (RWPG), made up of professional planning officers from across the NDA sites. They have been able to advise Government and regulators on the planning implications of any changes, and the limitations of the planning system as a mechanism for regulating sites after the nuclear licence is revoked. Our response to this discussion paper is informed by the RWPG and by discussion with our members on how proposals may affect plans for NDA sites.

2. General comments

NuLeAF believes that the framework for the clean-up of NDA sites must guarantee public safety and environmental health, ensure public confidence, deliver the desired next use of the site and avoid any future ambiguities and uncertainties. These factors, not a desire to reduce costs, must be the driver for any legislative change.

The statement that a new approach *'offers the potential for a more sustainable approach to clean-up work, thereby enabling earlier reuse of sites, avoiding unnecessary generation of radioactive waste…and reducing the transport of waste'* (1.4) gives a degree of reassurance on this. However, the approach taken will need to be transparent and designed to deliver truly sustainable outcomes. There must be early and effective engagement with local government and communities. If waste is left in situ, this must not impact adversely on future use of the site.

The discussion paper notes the possible role of planners and local authorities after the site is delicenced. Throughout this process we have been concerned that there has not been a full appreciation of what the planning system can and cannot do in this context and so we are pleased that it is confirmed that *'none of the proposals would involve the relevant environment agencies passing on any of their regulatory remit for environmental protection and improvement to the local authority.'* (1.40).

We would still appreciate a clear explanation of how it is anticipated that Local Development Plans, planning permission, covenants or Section 106 agreements could be utilised in this context. For more information on this we would refer you to our Consultation response and to our recent submission to NDA and BEIS based on a discussion between our RWPG members and a consultant working on these matters.

3. Response to questions

1. **Do you agree that the UK Government proposals set out in this paper should enable a more flexible approach to nuclear site clean-up that takes account of a range of possible site end states and opportunities to optimise waste management? If not, why not?**

   Yes, the proposals should lead to a more flexible approach as it will enable options not currently possible, such as the leaving of some structures or waste in situ.

   However, the question should be whether this more flexible approach will lead to better outcomes for host communities and the environment. While we welcome the statement (1.45) that the proposed changes have the potential for *'enabling earlier reuse of sites',* there is a risk that the leaving of some material or structures on a site may impact on the next planned use of the site, to the potential detriment of local people.

2. **What should the UK Government be mindful of when developing proposals to implement the changes discussed in this paper?**

   As initial media coverage of this Discussion Paper has highlighted, there is and will continue to be some concern as to the real motivation for this work. Many will have a suspicion that cost savings are at the heart of the proposed changes, rather than environmental protection or community well-being.

   Government, the NDA and regulators must therefore set out clearly:
   - The process by which assessment of the benefits of leaving residual radioactive contamination on site will be made. This must be transparent and shared with local authorities and the community. While we accept that cost will always be a factor, the primary driver for any changes must be the optimum environmental and Health and Safety outcomes, for example through the reduction in lorry movements or the limiting of worker exposure to risk.
   - The means by which local communities and councils will be engaged in discussions on any changes and the impact they might have on the site or its next planned use. We note that the paper states that *'optimisation requires good communication... with the regulators and members of the*

public, especially the local community.' (1.42) We would add 'local authority' to this list. We also believe that not just communication but effective engagement is required.

- The role of Local Planning Authorities in the management of site. As noted above, planners require reassurance that the scope for using planning controls to help manage sites after the licenced with revoked is fully understood.
- How any cost savings derived from decisions to leave waste in situ will be reinvested? While 1.45 notes that significant reductions in the cost of clean-up *'could be re-invested for other benefits',* we believe that there should be a clear commitment that cost savings benefit the host community either directly or as part of wider NDA operations. This is essential given that cost savings are likely to be the result of leaving contamination on site that was previously earmarked for removal.

3. **Do you agree that legislative changes are likely to be needed to realise the opportunity set out in this paper? If not, what more could be done under the existing regulatory regime?**

   As the paper sets out, there are currently impediments to the leaving of materials in situ. We therefore accept that legislative change will be required if this proposal is to be realised.

   Any legislative change must be subject to proper scrutiny, enabling all concerns to be discussed in an open and transparent way.

4. **What other changes could be made to realise the opportunity set out here?**

   Our members are still not clear as to the exact process of the Lead and Learn sites and how this will feed into the PRC work and vice versa. We would welcome the provision of more information on the Lead and Learn sites.

I hope these comments are helpful.

Yours faithfully,

Philip Matthews
Executive Director
07949 209126