

Meeting:	NuLeAF Steering Group, 27 January 2010
Agenda Item:	Addendum to Item 8
Subject:	Scottish Government Policy on Higher Activity Waste
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Purpose:	To report on consultation on Scottish Government policy on higher activity wastes

Introduction

This addendum outlines the Scottish Government's proposed policy on the management of higher activity wastes and suggests the main points of a response.

Recommendation

That the Steering Group delegate authority to the Chair and Vice-Chair to agree the submission of comments, based on the main points set out below.

Strategic Objectives

The proposed comments are most relevant to the following strategic objectives:

- To encourage regional approaches where they are supported by affected local authorities in light of the overall balance of benefits and disadvantages
- To seek to ensure that a consistent, proportionate and transparent approach can be taken to the establishment of Community Funds associated with key radioactive waste management facilities.

1 Introduction

The Progress Report under item 8 notes the impending launch of a consultation on the Scottish Government's proposals for managing Higher Activity Wastes (HAW). This was launched on 18 January and closes on 9 April.

The Consultation Document (CD) and associated Environment Report (ER) are available on the consultation section of the Scottish Government's website ([Scotland's Higher Activity Radioactive Waste Policy: Consultation 2010](#)).

2 Proposed Policy

In summary, the proposed policy is to:

support long-term near surface, near site storage and disposal facilities so that the waste is monitorable and retrievable and the need for transporting it over long distances is minimal.

The CD explains that:

- The proposed policy has been extended to include near surface, near site disposal as well as storage
- The intention is to enable waste producers to consider “all available options” (other than geological disposal – see further discussion below)
- The Scottish Government has a preference for near surface disposal, and storage should be pursued where this is not possible (para 3.02.04)
- The policy will require a developer to consider the retrievability of wastes when planning a facility (para 3.03.26)
- The policy will also require a focus on the waste management hierarchy and on innovation (4.01.02), and will allow export for treatment of wastes (para 4.03.04).

The ER explains that near surface disposal is preferred to storage because the latter involves a greater burden on future generations and increased risks (p8). It also notes that geological disposal has been excluded from consideration as Scottish Ministers do not view it as a “reasonable option”.

3 Wastes Covered by the Policy

The proposed policy applies to Intermediate Level Waste (ILW) and Low Level Waste (LLW) that is not suitable for disposal elsewhere. It applies only to wastes that arise in Scotland. It excludes:

- waste arising from the decommissioning and dismantling of redundant nuclear submarines including those berthed at the former Defence Establishment at Rosyth;
- waste which has already been dealt with under the policies of previous governments;
- waste which is the subject of previous or existing contractual arrangements, including waste sent to facilities outside of Scotland;
- waste categorised as High Level Waste (HLW) as there is no longer any such waste at nuclear sites in Scotland; and

- radioactive substances and material which are not currently classified as radioactive waste, such as spent nuclear fuel, plutonium, uranium or other such radioactive fuels and materials (CD, para 2.01.4).

The CD adds that 50% of the waste covered is graphite and 25% metal. It is estimated in the ER that around 25% of the waste cannot be disposed of and will need storage (para 3.22).

4 Key Definitions

The CD provides the following definitions of key terms in the proposed policy:

- long-term: at least 100 years (para 3.03.06)
- near surface: down to several tens of metres below the surface (para 3.03.13)
- near site: not prescriptive, based on the proximity principle and a risk-informed approach (paras 3.03.14-15)
- storage: placing the waste in a suitable facility with the intent to retrieve it at a later time (para 3.03.19)
- disposal: placing the waste in a specialised facility without the intent to retrieve (para 3.03.19).

5 Implementation of Policy

The CD explains that:

- NDA will be responsible for developing an implementation strategy (section 4.06)
- There is a policy expectation of early engagement with stakeholders on the development of plans for treatment, storage or disposal (para 4.05.04)

The ER adds that:

- The implementation strategy will include a “detailed strategic siting strategy” (p9)
- Consideration was given to whether to guide the future site selection process in a “more prescriptive way”, but it was concluded this would be inappropriate (p10)
- Close liaison with the communities who could be affected by the facilities will be needed at all subsequent stages in the planning and development process (p13)
- Some existing nuclear sites may not be suitable for long-term management facilities, hence the need for flexibility (para 5.03)
- There could be a significant risk of coastal flooding at existing nuclear sites over long timescales (para 5.09)
- There is no automatic assumption that on-site or adjacent-site options should be considered optimal (paras 5.17-18)

The ER also provides a description of broad siting options:

- i. Fully decentralised – at multiple existing nuclear sites
- ii. Partly decentralised – at some of the existing nuclear sites (with some transfers of waste between sites)
- iii. Partly centralised – different facilities at different sites with transfers
- iv. Fully centralised – single shared off-site facilities

6 Environmental Assessment

The ER documents the findings from the strategic environmental assessment (SEA) of the policy options considered reasonable by the Scottish Government. It seeks to explain how environmental considerations have been integrated into the proposed policy. Following consultation, a post-adoption SEA Statement is to be published.

Overall, the ER concludes that no significant effects are expected from the decision to allow disposal as well as storage, and that the key environmental hazards would be avoided or mitigated to acceptable levels (p7).

A summary of the effects of the proposed policy is provided in Table 1 of the ER (p11).

7 Proposed Main Points for Response

Although the proposed policy is for wastes arising in Scotland, it is important for NuLeAF to comment where that policy may (a) have direct impacts upon waste management in England and Wales or (b) set precedents for strategies for managing wastes in England and Wales.

The Steering Committee may therefore consider it appropriate to comment on the following issues.

Position on Geological Disposal

The position of Scottish Ministers is not fully explained. It is notable that no reference is made to the reasons why CoRWM included geological disposal in its recommendations, following its extensive programme of assessment in the period 2003-6¹. There is, however, brief reference to Scottish Ministers being committed to near-surface disposal (rather than geological disposal) “partly” in order to facilitate easier retrievability of wastes over the long-term (p9).

Vitrified High Level Waste (VHLW) from Reprocessing Spent Fuel from Nuclear Power Stations in Scotland

The CD does not take up NuLeAF’s earlier suggestion that a question be included about whether this VHLW should be included within the scope of the proposed policy. Instead it asserts that the policy excludes waste which is the subject of previous or existing contractual arrangements. The implication is that the VHLW at Sellafield that arises from the reprocessing of spent fuel from reactors in Scotland will be stored at Sellafield pending disposal to a Geological Disposal Facility (GDF).

Amount of ILW that cannot be disposed of

As reported under item 7, ‘NDA Update’, the Strategy Review Group recently heard a presentation from NDA about the identification of alternative disposal routes for reactor decommissioning wastes (RDW), including graphite. This clearly indicated that further assessment is needed before it is known what proportion of RDW could be disposed of to near surface facilities. As such, the ER’s assertion that only around 25% of Scottish ILW cannot

¹ NuLeAF published a statement broadly supportive of CoRWM’s views on geological disposal in 2007 (see [Policy Statement 3](#)).

be disposed of may need to be subject to review and revision as NDA assessments are completed.

Development of a Strategic Siting Strategy

The Scottish Government wishes to avoid a prescriptive approach and proposes that NDA develop an appropriate strategy. It also discusses four broad siting options: fully decentralised, partly decentralised, partly centralised and fully centralised. However, the CD and ER are silent about whether any of the concepts from the GDF siting process in England and Wales – voluntarism, partnership and community benefits – should be applied to any of the broad siting options.

There are a number of points that might be made about this:

- The approach to siting ILW treatment, storage or near-surface disposal facilities in Scotland may set a precedent for future approaches in England and Wales.
- It is arguable that concepts of voluntarism, partnership and community benefits should be applied in some circumstances. The case for application of these concepts could be argued to increase from decentralised to centralised options (in terms of provision of a service for a greater number of sites), and from storage to disposal (in terms of the level of public controversy and difficulty of siting).
- The application of such concepts would need to be a matter of Government policy, not NDA strategy.
- There is a need for public consultation and debate about the potential applicability of such concepts.

Omission of Socio-Economic Effects from Environmental Assessment

Despite an acknowledgement that significant effects could arise from perceptions of hazard and risk (para 6.04), the ER does not systematically address the potential socio-economic impacts of siting different types of facility, including blight.

This is in contrast to the NDA's SEA of the proposed UK LLW Strategy (see [LLW SEA](#)). Although concluding that LLW management options are unlikely to cause significant or widespread socio-economic impacts, this acknowledges that effects will be specific to local circumstances.

It is possible to imagine that the socio-economic impacts of siting some facilities (eg centralised ILW near surface disposal) could be particularly significant.