

<b>Meeting:</b>	NuLeAF Steering Group, 27 January 2010
<b>Agenda Item:</b>	8
<b>Subject:</b>	Progress Report
<b>Author:</b>	Fred Barker
<b>Purpose:</b>	To report on a range of developments relating to nuclear legacy management

## **Introduction**

This progress report provides updates on:

- The siting process for a Geological Disposal Facility (GDF)
- Consultation on Scottish Government policy on higher activity wastes
- Forthcoming consultation on plutonium management
- A COWAM in Practice workshop in Luxembourg
- An HSE workshop on proposals to alter some aspects of the arrangements for licensing the storage and disposal of radioactive wastes
- Proposals for a future Exemptions Regime under the Radioactive Substances Act 1993 and the Environmental Permitting Regulations 2010

The report is for noting.

## 1 The Siting Process for a Geological Disposal Facility (GDF)

The following developments have taken place since the Steering Group (SG) meeting in October 2009:

**West Cumbria MRWS Partnership:** a meeting of the Partnership on 14 October 09 discussed: peer review arrangements for initial high level geological screening by the British Geological Society (BGS); the range of potential impacts from hosting a GDF; and progress with the first round of public and stakeholder engagement (PSE). The meeting report is available in the ‘document library’ at [westcumbriamrws](#). A meeting of the Partnership on 13 January is discussing the regulatory processes that apply to GDF siting, and the meaning and implications of reversibility and retrievability. The Partnership has also started producing a newsletter. The January issue focuses on progress with the first round of PSE and is available on the Partnership website. A case study on the early work of the Partnership has also been published on the NuLeAF website ([Case Study 9](#)).

**Liaison meeting between NuLeAF, Government and NDA:** this took place on 10 December. Topics included: updates from Government and NDA; peer review of the high-level BGS screening; and other siting processes (including the Submarine Dismantling Project – see report item 5 above). Updates included that Government has not had any interest in the GDF siting process from other parts of the country following its update letter to local authorities in early October, and that NDA is to publish a ‘Steps towards Implementation’ report towards the end of January.

**Presentation to CoRWM;** the Executive Director gave a presentation to the CoRWM plenary meeting on 16 December. The presentation covered the work being undertaken towards achieving NuLeAF’s strategic objectives on the GDF siting process. The presentation is available on the CoRWM website at [NuLeAF presentation](#).

**Government Response to CoRWM report on Geological Disposal:** on 12 November the Government published its response to CoRWM’s report on geological disposal (see [Government Response](#)). The response states that Government largely agrees with CoRWM’s recommendations. Particular points of interest in the response are:

- Government does not wish to be unduly prescriptive about benefits packages at this early stage. Further work to progressively develop benefits in individual areas will be undertaken in dialogue with interested local communities as the process moves forward: “if a community felt that work to provide confidence in benefits being delivered was necessary then this could also be undertaken” (para 3.4).
- Whilst not having yet taken a final decision, the Government is inclined to look towards applying the new planning system for nationally significant infrastructure to any a GDF (para 4.1). No matter what the eventual decision, voluntarism and partnership will be at the heart of the GDF siting process (paras 4.2-4.4). It points out that a community would have been through the whole volunteer process with full rights of withdrawal before a planning application for a GDF was made.
- The advantages and disadvantages of single and two stage planning applications for underground investigations and construction of a GDF will form part of the discussions that Government and NDA will have with potential host communities (para 5.1).

**Pre-Consultation Meeting on Site Identification Framework:** the secretariat has arranged a meeting with NDA on 5 February to discuss NDA’s preliminary proposals for the part of the

process that would enable a long-list of potential site areas to be identified from a broader participating area. The meeting is being attended by the Executive Director and officers from Allerdale Borough Council, Copeland Borough Council and Cumbria Council. The discussion will also cover the nature of the formal consultation that will be undertaken on the proposals.

**Regulatory Review of NDA's Radioactive Waste Management Directorate (RWMD) transition to a Prospective Site Licence Company (SLC):** The NDA is in the process of transforming RWMD to become an organisation that will be able to hold a nuclear site licence for a GDF. A recent review by the regulators concluded that significant progress has been made, and that further development is now needed to demonstrate that the principles concerning its governance, structure and operation as a Prospective SLC have been fully achieved (see [Regulators Review](#)). RWMD is now operating as a Prospective SLC under voluntary regulatory scrutiny.

## **2 Scottish Government Policy on Higher Activity Wastes**

At its July meeting, the Steering Group (SG) considered a report on the Scottish Government's proposals for developing a more detailed policy (based on its initial statement of support for long-term, near surface, near site storage). Following discussion the SG agreed to write to the Scottish Government to suggest that the forthcoming consultation on the policy should include a question about whether Vitrified High Level Waste from reprocessing spent fuel from nuclear power stations in Scotland should be included within the scope of its policy. A letter was sent following the SG meeting.

It is now anticipated that consultation on the draft policy will start on 18 January. A verbal update on arrangements for responding to the consultation will be provided at the Steering Group meeting.

## **3 Forthcoming Consultation on Plutonium Management**

The Government is intending to launch a formal consultation on policy on plutonium management later this year. The officer comments attached as Annex A were submitted to DECC in response to a pre-consultation document on potential decision-making methods.

Dean Gallagher from DECC is attending the Steering Group to give a presentation on the Government's plans in the afternoon session.

## **4 COWAM in Practice (CIP) Workshop in Luxembourg**

CIP are organising an international workshop to take place in Luxembourg between 8 and 9 April, 2010. NDA have offered funding for a small group of UK representatives involved in the UK CIP stakeholder group and the NuLeAF secretariat is making the arrangements for attendance.

The programme comprises a review of EU funded research projects (COWAM, ARGONA etc) in the light of their contribution to the practical implementation of the Aarhus convention. Presentations are intended to show good practices (e.g. the UK work within CIP in framing the issue of defining affected communities), but also ways of overcoming difficulties or hurdles in the practical implementation of Aarhus principles.

## **5 HSE Workshop on Proposals to Alter Aspects of the Arrangements for Licensing the Storage and Disposal of Radioactive Wastes**

The UK intends to introduce legislation to prescribe, under the Nuclear Installations Act 1965 (as amended), facilities designed or adapted for the disposal of bulk quantities of radioactive matter. The effect of this will be to require such facilities to be subject to nuclear licensing and the provision of insurance for an absolute liability for damage caused by ionising radiation. It is intended to exempt facilities for the disposal of Low Level Waste (LLW) from the above provision.

The Executive Director (ED) attended a pre-consultation workshop to discuss proposals on 1 December 2009. A high level summary of the proposals is attached as Annex B. A formal consultation on the proposals is expected later this year.

## **6 Proposals for a future Exemptions Regime under the Radioactive Substances Act 1993 and the Environmental Permitting Regulations 2010**

The Steering Group considered the consultation on the Government's proposals at its meeting in July 2009 (see the response at [Comments on Exemption Regime Proposals](#)).

The consultation document requested comments on proposals to revise the current exemption regime under the Radioactive Substances Act, with the aim of meeting "modern requirements for the regulation of ubiquitous and low risk radioactive materials and waste". If materials or waste are exempt, they will not be subject to control under the Act, or will be subject to a lower level of control.

As a result of comments received, it is understood that the Government has decided to revise its proposals and carry out a further consultation in the Spring of 2010.

## **APPENDIX A: NOTE ON PRE-CONSULTATION DISCUSSION PAPER ON PLUTONIUM ASSESSMENT METHODOLOGY AND TIMETABLE**

**Fred Barker, Executive Director, NuLeAF, 27 October 09**

### **Introduction**

DECC have published the discussion paper so that stakeholders can submit views prior to preparation of a formal consultation later in the year ([DECC Discussion Paper](#)).

The discussion paper suggests a three phase approach to decision making on plutonium management options:

- Phase 1 – testing the credible options
- Phase 2 – selecting an option
- Phase 3 – regulatory decisions and implementation

The paper invites comments on whether it is timely to select a preferred option, or whether further work or information is required, but expresses the view that:

- a considerable amount of work is needed during Phase 1, to test the credible options
- the second phase can only commence when Government is satisfied that sufficient is known about each option to make it sensible to reach a decision.

The paper envisages two stages of public consultation: first to nominate additional factors against which options will be assessed; and second to inform the selection of options in phase 2.

The paper also invites comments on the best means of carrying out the first phase, including whether established formal methods of decision-making, such as multi-criteria decision analysis (MCDA), should be employed.

### **The 2003 Plutonium Report from the BNFL National Dialogue**

It is suggested that there would be value in DECC reviewing the Plutonium report from the BNFL National Dialogue (the 'Pu report'), not least because this provides a useful discussion on the role of different approaches to decision-making under conditions of uncertainty and incomplete information.

In particular, the Pu report discusses:

- the limited value of attempting to undertake a formal MCDA when there is insufficient information to effectively undertake judgements of option performance against different assessment criteria (p20);
- the value of utilising 'Strategic Action Planning' (SAP) to identify what further explorations are needed to inform robust decision making (p28-29).

The Pu report also contains a series of recommendations for further exploratory work, based on SAP undertaken by a Dialogue Working Group (the 'PuWG'). These recommendations include (but were not confined to):

- establishing a waste form qualification system that could be applied to Pu waste forms, including spent MOX and ceramic waste forms;
- exploration of the financial basis for the possible use of MOX fuel in existing or new build reactors;
- a comparison of the pros and cons of using MOX, inert matrix, and conventional uranium fuels; and
- establishing an immobilisation research, process development and design study to more fully establish the optimum technology for plutonium immobilisation.

The purpose of these recommendations was to ensure that the ‘plutonium owner’ could move to a position where they had sufficient information to make informed choices between Pu management options.

### **Suggestions on a Way Forward**

The following suggestions are made in the light of the above:

1 That DECC consider the applicability of the **Strategic Action Planning** approach to the initial work in **Phase 1**, the testing of credible options. In particular, SAP could be undertaken to provide a systematic, transparent and multi-stakeholder approach to identifying the further work that needs to be undertaken to inform decision-making.

2 At the very least, DECC should **review the output of the SAP undertaken by the PuWG of the BNFL Dialogue** to identify which of its recommendations have been acted upon, and which, in the current context, require further work in order to inform Phase 2 of DECC’s proposed assessment.

3 DECC should consider organising some form of **stakeholder workshop** during the next phase of consultation to help inform the scope and nature of the further work that will be undertaken in Phase 1. That workshop could review DECC’s proposals for that further work, or contribute to some form of SAP, including the review of the output of the SAP undertaken by the PuWG of the BNFL dialogue.

4 That DECC consider adopting a participative form of **MCDA** for **Phase 2**, drawing on the experience of CoRWM between 2003-6 (see Ch 11 in [CoRWM Report](#)) and taking into account the methodology proposed by NDA for Phase 4 of the GDF siting programme ([Approach to MCDA in Stage 4](#)). Such approaches to MCDA represent good practice with regard to process and stakeholder participation and are likely to be appropriate to DECC’s approach to assessing Pu management options.

## **Annex B: Proposals to alter some aspects of the existing arrangements for licensing of the storage and disposal of radioactive wastes.**

**HSE Nuclear Directorate, October 2009.**

### **Summary Document**

#### **Proposals**

- 1 The UK intends to introduce legislation to prescribe, under the Nuclear Installations Act 1965 (as amended), facilities designed or adapted for the disposal of bulk quantities of radioactive matter. The effect of this will be to require such facilities to be subject to nuclear licensing and the provision of insurance for an absolute liability for damage caused by ionising radiation.
- 2 The UK intend to exempt facilities for the disposal of Low Level Waste (LLW) from the above provision.
- 3 The UK intend to exempt the storage of sealed sources from the existing licensing/liability requirements relating to facilities designed or adapted for the storage of bulk quantities of radioactive matter.
- 4 In parallel the regulator (Health and Safety Executive (HSE)) will publish a policy statement on how they intend to interpret the phrase “bulk quantities” for application to both storage and disposal facilities.

#### **The need for legislation**

- 5 The UK Government’s White Paper *Managing Radioactive Waste Safely* (MRWS) published in June 2008 proposed to manage higher activity radioactive waste through a new geological disposal facility (GDF). The White Paper<sup>1</sup> envisages that this facility will require a licence under the Nuclear Installations Act 1965 (NIA), and recognises that this may require legislative change. Other facilities specifically for disposal are also in prospect. Action is required to take forward legislative change to implement the Government’s expectation of licensing for the GDF and to clarify the position for any other planned disposal facilities.

#### **Proportionality for disposal of LLW**

- 6 The UK’s approach to such legislation is that it should be risk based and proportionate. Government and devolved administrations desire to see progress in the application of their LLW policy using a risk-based approach to disposal options.
- 7 Licensing of LLW disposal facilities could be a disproportionate obstacle to effectively passive operations involving low concentrations of activity. The UK believes that the small extent of the risks involved warrants the exclusion of LLW disposal facilities from the requirements of NIA65 and hence from the application of the Paris Convention
- 8 The simplest and clearest way of expressing this would be to prescribe disposal and exclude low level waste facilities.

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<sup>1</sup> <http://www.defra.gov.uk/environment/radioactivity/mrws/pdf/white-paper-final.pdf> (paras 5.10 - 5.12)

## **Storage of Sealed Sources**

- 9 During the process of developing our proposals it became clear that some institutions such as hospitals with teletherapy sources would be caught by the definitions being proposed. We believe it was never the intention of the Act to cover such installations, and given that the design of such sealed sources is such that widespread dispersal of radioactivity from such sources is highly unlikely, we therefore propose to make a specific exclusion for sealed sources in relation to storage.

## **The way forward**

- 10 The following will be taken forward in 2010:
- a. Amendments to NIR1971 to prescribe disposal of “bulk quantities” of radioactive matter excluding low level waste.
  - b. Amendments to NIR71 to exclude sealed sources in relation to the storage of radioactive matter
  - c. A Policy Statement explaining how HSE will interpret the phrase “bulk quantities”.

**October 2009**