

# **UPDATE FOR LGA ENVIRONMENT BOARD – FOR INFORMATION**



2 May 2008

## **Introduction**

A meeting was held between representatives of the Board (Councillor Manton and Alice Roberts) and NuLeAF (Councillor Swainson and Fred Barker) on 13 March. It was agreed that more regular updates should be provided to the Board, and that similar meetings should take place around three times a year.

This update covers:

- the launch of the Government's implementation framework for siting a geological disposal facility (GDF) for higher activity radioactive wastes;
- the first steps in development of a Nuclear Decommissioning Authority (NDA) strategy for managing Low Level radioactive Wastes (LLW);
- NuLeAF's briefing for planners;
- NuLeAF's proposal for a national framework for community packages; and
- Government consultation on funded decommissioning programme guidance for new nuclear power stations.

See Annex 1 for an explanation of the categories of radioactive wastes.

## **GDF Implementation Framework**

It is anticipated that the White Paper on the implementation framework for siting a geological disposal facility (GDF) will be published within the next six weeks. This will be accompanied by an invitation to communities to express an interest in the possibility of participating in the siting process.

All local authorities in England and Wales will be informed about the publication of the White Paper and launch of the siting process by letter from Government. This will be accompanied by press statements and a tiered approach to information provision about geological disposal and siting on the DEFRA website.

The meeting between representatives of the Board and NuLeAF agreed that LGA should:

- Consider adoption of a policy perspective on the long-term management of higher activity radioactive wastes (attached as Annex 2)
- Issue a joint press release with NuLeAF in response to the launch of the White Paper
- Send an alert to Chief Executive Officers about the launch
- Publish an article in Local Government First (a draft article has been submitted to the editor)
- Hold an interactive web-based discussion (currently scheduled for June 19).

## **Developing NDA Strategy for Managing LLW**

The NDA has established a national nuclear industry LLW Strategy Group (LSG) to promote innovation, value for money, application of the waste hierarchy and planning for effective approaches to disposal. The LSG will play an important part in the development of the NDA's LLW Strategy.

NuLeAF's Executive Director represents NuLeAF on the LSG. Cumbria CC is also represented on the LSG as planning authority for the LLW Repository. Other members include representatives from the NDA, Site Licensee Companies, Government Departments and the regulators. The LSG held its first meeting on 17 April.

Key points from the meeting are outlined in Annex 3. This explains the first steps in development of LLW strategy and NuLeAF's response.

## **Briefing for Planners**

NuLeAF has produced a Briefing Paper to assist local authority planners identify the radioactive waste management issues that should be taken into account in preparing or updating Minerals and Waste Development Frameworks. The paper provides a high level overview of radioactive waste management in the UK and references to where more detailed material can be found. The paper – Briefing Paper 13, 'Briefing for Local Authority Planners' - is available on the NuLeAF website at [www.nuleaf.org.uk](http://www.nuleaf.org.uk).

## **National Framework for Community Packages**

NuLeAF has also produced a discussion paper proposing a national framework for community packages that should, in appropriate form, be associated with the development of new radioactive waste management facilities. The discussion paper covers the legislative basis, justifications for providing packages, and factors to take into account in determining a proportionate approach. The paper has been published on the NuLeAF website as Briefing Paper 14, 'Community Funds and Radwaste Facilities'.

## **Consultation on Funded Decommissioning Programme Guidance for New Nuclear Power Stations**

The Energy Bill will require any operator of a new nuclear power station to have a Funded Decommissioning Programme (FDP), approved by the Secretary of State. On 22 February the Government published for consultation two sets of draft guidance on what a FDP should contain ([Consultation of FDP Guidance](#)). The deadline for comments is 16 May 08. Annex 4 contains an outline of the proposed guidance and NuLeAF's response.

## **Contacting NuLeAF**

NuLeAF's Executive Director is Fred Barker, who can be contacted on 01422 847 189 or by e-mail at: [fred.barker@nuleaf.org.uk](mailto:fred.barker@nuleaf.org.uk). NuLeAF can also be contacted via the Secretariat c/o Suffolk County Council, Endeavour House, Russell Road, Ipswich IP1 2BX, Tel: 01473 264833 e-mail: [catherine.draper@nuleaf.org.uk](mailto:catherine.draper@nuleaf.org.uk).

## **ANNEX 1: CATEGORIES OF RADIOACTIVE WASTE**

Radioactive waste is any material that is either radioactive itself, or is contaminated by radioactivity, for which no further use is envisaged. Most radioactive waste is produced by nuclear power stations and fuel cycle facilities. A substantial amount arises from nuclear research and development sites. Some also arises from Ministry of Defence sites, and small amounts are produced by medical, industrial and educational establishments.

In the UK, radioactive waste is classified as:

**High Level Wastes (HLW)** – are highly radioactive and generate substantial amounts of heat. HLW is a product from reprocessing spent nuclear fuel at Sellafield in Cumbria.

**Intermediate Level Wastes (ILW)** – the radioactively levels are higher than for Low Level Waste, but do not require heating to be taken into account in the design of management facilities. ILW is sufficiently radioactive to require shielding and containment. It arises mainly from the reprocessing of spent fuel and from operations and maintenance at nuclear sites.

**Low Level Waste (LLW)** – LLW does not normally require shielding during handling or transport. Currently, LLW consists largely of paper, plastics and scrap metal items that have been used in hospitals, research establishments and the nuclear industry. In future there will be large volumes in the form of soil, concrete and steel, as nuclear plant are decommissioned.

**Very Low Level Waste (VLLW)** – this is divided into Low Volume ('dustbin loads') and High Volume ('bulk disposal'). Low volume VLLW can be disposed of to destinations with municipal, commercial or industrial waste. High volume VLLW can be disposed of to specified landfill sites and controls are necessary as specified by the environmental regulators.

The phrase 'higher activity wastes' applies mainly to HLW and ILW that are intended for disposal in a Geological Disposal Facility.

## **ANNEX 2: POLICY STATEMENT ON THE LONG-TERM MANAGEMENT OF HIGHER ACTIVITY RADIOACTIVE WASTES**

The Government is expected to publish a White Paper in late spring setting out the implementation framework for siting a geological repository for the disposal of higher activity radioactive wastes.

The Government re-affirmed its view that geological disposal was the appropriate approach to the long-term management of higher activity wastes following a fundamental review of options by the Committee on Radioactive Waste Management between 2004 and 2006. It also consulted on a proposed approach to implementation during 2007.

The LGA recognises the need to make progress in the long-term management of higher activity wastes and makes the following points:

- It is recognised that geological disposal is widely considered to be the preferred long-term approach<sup>1</sup>, subject to interim storage arrangements being robust to delay or failure in the siting programme, and regulatory and host community confidence in long-term environmental safety at a specific site.
- It is anticipated that the White Paper will be a major step forward in establishing an appropriate implementation framework. The fundamental switch away from decide-announce-defend to a siting process based on willingness to participate, partnership and enhancing community well-being is welcomed. The Government's commitment not to impose a repository on an unwilling community is particularly welcome.
- It is essential that *major local decisions* within the siting process are taken by local authorities, including: whether to participate at key stages, or exercise a right of withdrawal; the local acceptability of proposals for community support packages; and the local acceptability of the sites within an area that are proposed for field investigations. These decisions should be informed by the work of Community Siting Partnerships.
- It will be important for there to be sufficient time and resources to genuinely empower potential host communities and their local authority/ies, and for a substantial community package that is additional to the direct and indirect socio-economic benefits of hosting a repository.
- The way Government has worked with NuLeAF to develop its approach to implementation is welcome. NuLeAF's offer to support, assist or advise any local authorities that may wish to consider participation in the siting process is also welcome.

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<sup>1</sup> See NuLeAF, 'Geological Disposal', Policy Statement 3, January 07

## **ANNEX 3: DEVELOPMENT OF NDA LLW STRATEGY**

### *Background*

- The Government's 2007 policy statement on LLW management introduces a more flexible approach. NDA highlighted various aspects of Government policy, including changes in the definition of VLLW which could in principle allow greater use of landfill for decommissioning wastes, and changes that allow use of international facilities, for example, for recovery of re-usable materials or where treatment will make subsequent management easier.
- Challenges include to substantially increase the operating life of the LLWR and to substantially reduce LLW liabilities. NDA reports that currently forecast arisings could fill LLWR disposal capacity by 2020, assuming permissions to construct additional vaults.
- It is intended that the NDA's LLW Strategy will focus on implementation of the waste hierarchy, the optimum use of the LLWR and opening up additional 'fit for purpose' LLW management routes.

### *Process for Strategy Development*

- A preliminary strategic review of LLW management has been undertaken which identified opportunity to achieve a 20% reduction in the NDA's LLW liability by 2129, and extension of the life of the LLWR to 2070. NDA states that the work represents an initial view and requires full discussion, consultation and review.
- The current step is to seek feedback from LSG members on four topical strategies, covering application of the waste hierarchy, waste packaging, waste transportation and waste tracking/inventory management (see below). Following comment, the topical strategies will be developed to inform preparation of the new LLW strategy.
- A Strategic Review report will be issued to LSG members for comment in October 08. This report will identify (a) initiatives that can be taken in the short-term and (b) longer-term initiatives that require further evaluation through Option and Opportunity (O&O) Studies. Formal consultation on the draft Strategy will begin in April 09. The aim is to have an approved LLW Strategy in place by the end of 2009.
- The O&O studies will be phased over the next four years. The studies will be framed by NDA's approach to 'integrated waste management'.
- A UK LLW Management Plan will be developed alongside the Strategy. It will set out the how, where and when involved in Strategy implementation. It will also identify future investment needs, risk mitigation strategies and the R&D that is needed.
- NDA states that stakeholder engagement is critical for successful development and implementation of nuclear industry LLW Strategy.

### *Topical Strategies*

- Application of the waste hierarchy is seen as key to solving the 'disposal capacity gap' and reducing liabilities. NDA proposes moving to increased standardisation based on identifying best practices in waste avoidance and minimisation, characterisation and segregation, waste treatment and volume reduction and re-use/re-cycle.
- NDA points out that better characterisation and segregation of wastes would result in a larger fraction consigned as Exempt or Very Low Level Wastes, allowing the optimum use of waste treatment and disposal facilities.
- On waste treatment and volume reduction (eg surface decontamination, metal melting or incineration) it proposes that the LLWR Site Licensee Company (SLC) will evaluate all available commercial treatment capacity, open avenues to existing capacity and review how best to exploit and potentially expand current UK capacity. It suggests that a

centralised service could simplify authorisations and regulatory approvals whilst reducing overall costs, and notes that the use of overseas facilities in the short-term could mitigate LLWR capacity pressures whilst developing the business case for the construction of UK facilities.

- On re-use/re-cycle, NDA points out that treatment processes can typically allow over 95% of treated metal to be re-cycled. It adds that significant opportunities could exist for re-use of decommissioning rubble as aggregate for new construction projects.
- On disposal, NDA proposes to encourage more 'fit-for-purpose' approaches, including on-site disposal, in-situ disposal and landfill, particularly for large volumes of low activity wastes from decommissioning and site clean-up. NDA intends to work closely with stakeholders to 'identify and mitigate any barriers that currently prevent full utilisation of these routes'.
- On packaging, NDA proposes to consider a range of new, innovative and flexible approaches, including the scope for increased packaging efficiency (ie the proportion of a package filled with waste), whether less expensive containers could be fit for purpose, and the potential for re-usable containers.
- On transport, the LLWR SLC will undertake an integrated transport study to identify the optimum approach to the movement of LLW, including potential for switching from road to rail, and potential use of transport hubs such as Crewe and the port of Workington (for consolidating LLW prior to onward transport).
- On waste tracking/inventory management, NDA proposes that the LLWR SLC will switch from a largely paper-based system to a secure web-based system. This is intended to simplify waste scheduling, transportation, processing and disposal, and substantially enhance analysis and forecasting capability.

NDA is seeking feedback on the topical strategies from LSG members by 16 May.

NuLeAF's preliminary comments are that:

- The emphasis on identifying best practices for application of the waste hierarchy, the optimum use of the LLWR, and reducing liabilities is welcome.
- Care will be necessary to ensure that the drive to reduce liabilities does not jeopardise, or be perceived to jeopardise, adherence to key principles, including openness and transparency, consultation and community engagement, addressing local community concerns and appropriate consideration of the proximity principle.
- NDA should recognise the limitations and sensitivities associated with some of the proposed approaches, including landfill capacity and community concerns about incineration.
- NDA should recognise the importance of early engagement with local authority planners to ensure an appropriate approach is taken to developing proposals for new facilities.
- For proposed new facilities – particularly for the treatment and disposal of wastes - further work is needed to identify and utilise best practices in risk communication and ways of building local community confidence in proposals.
- NDA should adopt a 'holistic' perspective, so that proper regard is paid to interactions with approaches for managing non-radioactive wastes.

## Consultation on Funded Decommissioning Programme Guidance for New Nuclear Power Stations

The two sets of guidance are:

- Decommissioning and Waste Management Plan Guidance (DWMP) – This is intended to assist operators in costing the steps involved in decommissioning and radioactive waste management, including an indicative timetable within which Government expects to be able to publish cost estimates and set a fixed unit price for waste disposal.
- Funding Arrangement Plan Guidance (FAP) – This is intended to assist operators in setting out acceptable financing proposals to meet the costs identified. It sets out the Guiding Principles against which the Government will assess operator funding proposals.

The Consultation Document (CD) poses the following questions:

- 1 Do you agree or disagree that the FDP Guidance adequately sets out what an approvable FDP should contain? What are your reasons? Do you have any other comments on the guidance?
- 2 Does the draft guidance contain sufficient information to enable operators to understand the matters that their FDP should contain?
- 3 Do you agree or disagree that the Base Case sets out a realistic and prudent way to estimate the potential costs of waste management and decommissioning? What are your reasons?
- 4 Do you agree or disagree that the FAP sets out a prudent way to ensure that operators make adequate provision for meeting their liabilities? What are your reasons?

DBERR is organising two consultation events to present an overview of the draft guidance and to enable discussion of the consultation questions (London on 17 April and Manchester on 1 May). The Executive Director is attending the event on 1 May.

Subject to discussion at the consultation events, it is proposed that NuLeAF respond to the consultation along the following lines:

- The creation of a Nuclear Liabilities Financing Board (NLFAB) to provide independent scrutiny and advice is to be welcomed (CD 1.9-1.14). The Government should empower the Board to review and compare the performance of the decommissioning funds that may be established, and to recommend modifications where appropriate. Government should be under an obligation to publicly respond to the advice and recommendations of the Board.
- The aim of the DWMP is to be welcomed. This is to ensure that planning for decommissioning and the management of radioactive wastes is carried out prior to construction of a new station, and is based on accurate and up-to-date estimates of the costs (CD, 4.1.8).
- The financial modelling being undertaken by Government to estimate the financial impact of adding wastes from new build to a geological disposal facility should take into account the need for a proportionate increase in the scale of community benefits that should be associated with the increase in the inventory of radioactive wastes for disposal (CD, 2.7).
- The 'Base Case' estimates for the costs of waste management and disposal should include a component for establishing associated community funds (CD, 4.1.9 – 4.1.1, see [BP14 Community Funds and Radwaste Facilities](#)).

- The commitment to keep the assumptions in the 'Base Case' for the management and disposal of radioactive wastes under review is welcome (CD, 4.1.9). Changes to the 'Base Case' may be needed to reflect developments that lead to an increase in liabilities, including the possibility of the need for more than one successor facility to the LLW repository near Drigg, and the potential need for a second geological disposal facility.
- The commitment to publish updated estimates of the total costs of waste management, disposal and decommissioning, and the methodology for establishing fixed unit prices for ILW and spent fuel disposal is welcome (CD, 2.8). Sufficient information should be published to ensure wider stakeholder confidence in the robustness of the estimates.
- The Guiding Principles in the FAP are to be welcomed. These are that the Fund should: be independent of the operator and government; be sufficient to discharge in full the operator's liabilities as and when they fall do; ensure that moneys in the Fund are not used for any other purpose; prevent recourse to public funds to meet the liabilities; and be transparent and visible (CD, 5.2.6).
- Government should clarify whether a 'shared' fund offers benefits in terms of further reducing the remote risk that public funds could be called on to meet liabilities. The draft Guidance is flexible on whether a separate fund should be set up for each new station, or whether a 'shared' fund should be established for a fleet of new stations (for a single operator or a number of operators, CD, para 5.3.4).