

<b>Meeting:</b>	NuLeAF Steering Group, 27 January 2010
<b>Agenda Item:</b>	6
<b>Subject:</b>	Low Level Wastes (LLW) Strategy and Developments
<b>Author:</b>	Fred Barker
<b>Purpose:</b>	To report on developments

## **Introduction**

This report covers:

- an update on NDA consultation on the proposed UK LLW Strategy;
- issues discussed at the November meeting of the NDA's LLW Strategy Group; and
- secretariat initiatives, including the meeting of NuLeAF's LLW Officer Working Group on 8 December 2009.

## **Recommendation**

That the Steering Group endorse the initiatives being taken by the secretariat.

## **Contribution to Achieving Strategic Objectives**

The initiatives are intended to contribute to the achievement of the following NuLeAF objectives:

- To seek to ensure that LLW Strategy is developed and implemented in ways that can inspire local authority and public confidence.
- To encourage and assist the NDA, Site Licensee Companies and the supply chain to take full account of the role and needs of the local authority planning system in the implementation of LLW strategy.
- To encourage regional bodies to develop policy in Regional Strategies on the management of LLW (and VLLW)
- In the context of implementation of the waste hierarchy and subject to suitability of the nuclear licensed site in question, to encourage development of local or regional LLW management facilities at existing nuclear sites, rather than at non-nuclear sites.

## **1 Update on NDA Consultation on Proposed UK LLW strategy**

NDA extended the deadline for comments from mid-September to end-November because Scottish Government officials were concerned about a lack of awareness about the consultation amongst Scottish local authorities. It is understood that 15 additional responses were received from a variety of sources. (NuLeAF's comments are available at [Consultation Response on UK LLW Strategy](#)).

Having reviewed responses, NDA do not anticipate any major changes to what was proposed in the draft strategy. However, there will be changes of emphasis, and issues identified through consultation will be taken into account in implementation. In particular, NDA will emphasise the need for decision-making at site level on preferred options to be developed through early stakeholder engagement, particularly on the potential use of thermal treatment and alternative disposal routes. An overview of NDA's initial review of comments is available at [Preliminary Review of Consultation Comments](#).

NDA are anticipating Ministerial approval of the Strategy by end of the financial year. The Strategy will then be published, along with NDA's formal review of comments.

## **2 Issues Discussed at the November Meeting of the NDA's LLW Strategy Group**

These included the following issues:

- (a) Accelerated Element 2 Strategy (ACCELS)
- (b) Work Streams in the National LLW Management Plan
- (c) 'Pointers to Good Practice in Communication and Stakeholder Engagement in Implementation of LLW Strategy'
- (d) Future of the LLW Strategy Group

A summary of discussion on each issue is provided in Annex A.

## **3 Secretariat Initiatives**

The following initiatives are underway:

**Overview of Proposed LLW Disposal Facilities:** Preparation and updating of a spreadsheet providing an overview of proposals for Clifton Marsh (Lancashire), Keekle Head (Cumbria), King's Cliffe (Northamptonshire), Lillyhall (Cumbria) and Springfields (Lancashire). The spreadsheet lists: the type of site, the operator, the nature of the proposed disposal facility, the permissioning process; the current position and anticipated decision dates; public and local authority views; sources and potential volumes of waste; maximum activity levels; and further information. The spreadsheet is attached as Annex B to this report (double click on the icon) and is published on the NuLeAF website. The spreadsheet is being updated as new information becomes available and will include any new proposals as and when they are made<sup>1</sup>.

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<sup>1</sup> The SG should note that LLWR Ltd has sought expressions of interest in a contract for VLLW disposal services. The contract would have a dual purpose. Firstly, to enable LLWR Ltd to offer an "integrated service", which would involve the company putting consignors in touch with the most suitable disposal site. Secondly, to establish whether further proposals for use of landfill are likely to come forward. According to

**New LLW section on website:** This has been developed so that local authorities dealing with proposals for LLW management facilities can easily access relevant information ([LLW section](#)). It covers: Government policy; UK LLW strategy; regulation; planning and current developments.

**Meeting with regional planners:** Following a presentation by the ED to a meeting of Chairs of Regional Technical Advisory Bodies, a follow-up meeting between NDA and regional planners is being organised for 5 March. This will review a regional breakdown of waste arisings and management facilities, and involve exploratory discussions about the implications for regional planning.

**Discussion about coverage of use of landfill for LLW/VLLW disposal in Minerals and Waste Development Frameworks:** there are different views in the LLW Officer Working Group on whether specific policy should be included in MWDFs. The ED will be preparing a note on this in the light of discussion at the group and a legal opinion being obtained by Suffolk County Council on the use of landfill and requirements for planning permission.

**NuLeAF seminar:** the July meeting of the SG agreed to delegate authority to the Executive Director to make the necessary arrangements for a seminar on case studies in radwaste management and planning. The secretariat has the timing of the seminar under review to ensure that it can give timely consideration to key case studies. A date towards the end of June is a possibility.

**International overview:** a preliminary overview of LLW disposal practices in other countries with significant nuclear programmes has been prepared. This is attached for information as Annex C.

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NDA, selection of companies to participate in this framework will give no guarantee that any volume of waste will be disposed of at their facilities. It adds that LLWR will consider each waste stream on a case by case basis, and waste producers will need to undertake detailed optioneering to demonstrate that its chosen waste route demonstrates BPEO.

## **ANNEX A: ISSUES DISCUSSED AT THE NOVEMBER MEETING OF THE NDA's LLW STRATEGY GROUP**

### *Accelerated Element 2 Strategy (ACCELS)*

A renewed drive to reduce costs has led to development of the ACCELS programme, which places a big emphasis on waste avoidance, characterisation and reduced costs. The programme is focusing on:

- Achieving substantial reductions in inventory (eg by taking a realistic view on what needs to be categorised as LLW, rather than a very conservative view)
- Achieving targeted savings (eg by reviewing the top 20 LLW cost areas across sites, using existing facilities rather than new projects and ensuring remaining capital projects are fully aligned with strategy objectives).

Overall, the aim is to achieve a reduction in LLW liabilities from £10 billion to £8 billion.

### *(e) Work Streams in the National LLW Management Plan*

NDA provided an overview of progress with current work streams. These include:

- Standardising waste avoidance and minimisation – a draft guidance document on application of the waste management hierarchy (WMH) has been prepared for users (and will be on the [LLWR website](#) shortly)
- Identifying and sharing re-use and re-cycle good practices – use is to be made of the best practice website at [www.rwbestpractice.co.uk](http://www.rwbestpractice.co.uk) and a promotional strategy is being developed
- Transport – scenario analysis is underway to assess the use of transport hubs, and the scope for increasing the use of rail transport and integrating movements with those for spent fuel. A report is expected in mid-March 2010.
- Study on disposal routes for Sellafield Very Low Level Waste (VLLW) – indicates that arisings over the next 15 years can be disposed to existing on-site facilities or to off-site disposal routes.
- Development of performance metrics – work is underway to develop metrics linked to strategy objectives, so progress in implementing the WMH, making best use of existing assets, and opening new disposal routes can be demonstrated.
- Incentivisation – consideration is being given to putting ‘performance based incentives’ in contracts to ensure delivery of specific aspects of strategy.

### *(f) 'Pointers to Good Practice in Communication and Stakeholder Engagement in Implementation of LLW Strategy'*

The Strategy Group adopted the above paper, which summarises ‘pointers’ under the following topic headings:

- Objectives
- Planning and managing the process
- Engaging stakeholders
- Communicating risks

It also contains 2 case studies:

- Stakeholder Engagement on LLW Management at Dounreay (from Dounreay Site Restoration Ltd)
- Stakeholder Engagement supporting the Licensing of the Lillyhall Landfill Site for the Disposal of High Volume Very Low Level Radioactive Waste (from WRG and EnergySolutions)

The paper is based on an initial draft prepared by the NuLeAF Executive Director (ED). The final version is to be on the LLWR website shortly.

*(g) Future of the LLW Strategy Group*

The NDA presented initial proposals. The main points were:

- The current terms of reference are robust and still applicable
- The breadth of stakeholder membership has been a strength
- The group has had a fundamental influence on strategy development
- The future focus might be on the promotion of best practice and innovation
- 'Implementation' working groups might be on (a) the NDA estate, (b) non-NDA nuclear estate and (c) non-nuclear

During discussion it was suggested it might be better if working groups were convened as and when necessary to focus on specific issues that may cut across the different estates. The ED suggested a working group on non-technical issues in implementation, including public acceptability, spatial planning and socio-economics. NDA is considering the best way of proceeding in the light of discussion.

## ANNEX B

### OVERVIEW OF DEVELOPMENT OF LOW-LEVEL WASTE FACILITIES



Overview of development of LLW

## ANNEX C

<b>PRELIMINARY OVERVIEW OF INTERNATIONAL APPROACHES TO LLW/VLLW DISPOSAL</b>								
	<b>UK</b>	<b>France</b>	<b>USA</b>	<b>Canada</b>	<b>Japan</b>	<b>Belgium</b>	<b>Sweden</b>	<b>Spain</b>
<b>LLW</b>	National near surface (LLWR), near-site near surface (Dounreay), and landfill	National near surface (Soulaires)	National (Clive and Barnwell) and regional (Richmond) near surface (p3 GAO*)	National geological (Bruce)	National near surface (? check type, Rokkasho)	National near surface (Dessel)	National near surface (50 metres, Forsmark)	National near surface (El Cabril)
<b>VLLW</b>	On-site near surface and landfill	National near surface (Morvilliers)	GAO concludes US needs more alternative disposal options via exemption or special facilities (p37)	Category not defined	Category not defined	Category not defined	Category not defined	National near surface (El Cabril)
<b>Exempt</b>	Landfill	Category not defined	Landfill	?	?	?	Landfill (GAO 026)	?

\* United States Government Accountability Office, 'Low Level Radioactive Waste Management', March 07, GAO-07-221

### **Preliminary Conclusions from Overview of International Approaches**

There is a pretty consistent approach to LLW - most of the countries in the table have, or plan to have, a national near surface disposal facility. Canada is bucking the trend by providing a geological disposal facility. The UK is moving towards a more dispersed approach.

In the minority of countries that define a category of VLLW, two have a national facility (France and Spain) and one (UK) is promoting increased use of alternative disposal routes, including landfill. Countries that do not have a category of VLLW probably define most of the equivalent material as exempt or cleared waste and dispose of it to landfill, on nuclear sites or other specific facilities (see GAO, p26)

Although details are difficult to obtain, it is indicated that most countries have some way of defining exempt or cleared wastes and use a variety of dispersed disposal routes (again see GAO, p26).

(Note that the IAEA will be publishing new guidance on categorisation of radioactive wastes in 2010)