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| **Meeting:** | NuLeAF Steering Group, 27th February 2013 |
| **Agenda Item:** | 8 |
| **Subject:** | Low Level Waste Strategy update |
| **Author:** | Philip Matthews |
| **Purpose:** | To provide an update on developments on Low Level Waste management |

**Introduction:**

This report covers:

- Lower Activity Low Level Waste (LA-LLW) Capacity Paper
- an update on the National Waste Plan for England
- the revised NuLeAF Planning paper

**Recommendation:**

The report is for noting.

**Contribution to 2012/14 Service Plan:**

The activities described in this report relate to the following Key Tasks in the Service Plan 2012-14:

*Revise NuLeAF guidance to local authorities on model local policies in view of changes to legislation and national planning policy.*

*Monitor revisions of local policies for radioactive waste management and encourage consistency between policies for radioactive waste management within local development waste plans.*

*Promote practices that secure high standards of public acceptability in LLW management through continued engagement with NDA Integrated Waste Management TOG; Site Restoration TOG; LLW Delivery Overview Group; and V/LALLW Review Group. Engage with the Environment Agency and other regulators as appropriate.*

*Continue to engage with regulators to align permissions for V/LLW disposals with LA planning permissions. Update NDA regularly of revisions to local planning policies relevant to this issue.*

*Encourage SLCs to consult with communities impacted by site waste management plans (inc. 'Duty to Cooperate').*

## 1 Lower Activity Low Level Waste (LA-LLW) Capacity Paper

Low Level Waste Repository Ltd (LLWR) has now published a revised draft LA-LLW capacity gap analysis paper, following comments by NuLeAF and others on an earlier iteration.

This paper is important in informing policy decisions on LA-LLW (waste with less than 200Bq/g), providing as it does far more information on this issue than is likely to become available through the 2013 Radioactive Waste Inventory (RWI) (currently in preparation). Data for the capacity assessment was drawn from the 2010 inventory, Joint Waste Management Plan (JWMP) submissions from March 2012 and the Waste Inventory Form (WIF) for the period 2012-20.

At the heart of the paper is an analysis of the LA-LLW and VLLW volumes suitable for disposal in near surface sites, in comparison to the capacity of existing sites in the UK, between 2012-2030. The report looks at both the UK national picture and the regional picture (limited to two regions – north and south) for arisings and capacity. However the paper notes that the actual waste routes will be decided by waste producers through Best Available Technique (BAT)/Best Practicable Environmental Option (BPEO).

There are currently 5 sites capable of accepting LA-LLW but two are largely excluded (Calder Landfill Extension Segregated Area (CLESA) and Dounreay) as they are only permitted to take waste from their respective sites. However, it should be noted that Sellafield Ltd has undertaken an assessment of the opportunity for a further on-site landfill (CLESA2). They are not, however, planning to implement a solution in the near term, but will be developing a strategy for on-site disposal due for publication in 2013.

The paper notes that in the case of NORM (Naturally Occurring Radioactive Materials) wastes (from the oil and gas industry) there is alternative capacity available. A number of other landfill sites are also authorised by the Environment Agency to accept small amounts of LA-LLW, such as Lamby Way Landfill site in Cardiff which accepts waste from GE Healthcare. These are not considered.

The report instead focuses on the three sites that can potentially accept waste from anywhere in the UK (ENRMF (King's Cliffe), Clifton Marsh and Lillyhall). These sites only have planning permission to 2016, 2015 and 2014 respectively and are currently authorised to receive 0.74million $m^3$ of LA-LLW. Lillyhall is only authorised to receive VLLW.

The analysis only covers the nuclear industry so capacity for non-nuclear industry wastes will also be required. The paper also excludes much of the potentially contaminated land at Sellafield which could amount to 13 to 14 million $m^3$, considerably more than the 4.43million $m^3$ that the UK Radioactive Waste Inventory estimates for LLW.

The paper notes that there are significant differences in the volumes of waste predicted by the RWI compared to the JWMPs and WIF. This is in part because the JWMPs and WIF only cover sites operated by Sellafield, RSRL and Magnox. However, there is clearly a need for further work in improving the accuracy and quality of the waste inventory data supplied.

The main conclusions of the paper are that:

- There is adequate capacity until December 2016 at the three existing sites
- If the extended authorisations for the 3 sites are granted, there is adequate capacity until 2026 after which further capacity would need to be identified
- In the Northern region there is adequate capacity until 2015 – at Lillyhall and Clifton Marsh. If extended authorisations are obtained for the existing sites, there would be adequate capacity until 2020
- In the Southern region there is adequate capacity until 2016 or until 2026 if ENRMF gains an extension – the ENRMF is the only facility in the region at present
- The possible potential for the use of some LA-LLW in the LLWR cap is noted although this is still under investigation
- There may be scope for the reclassification of some wastes either into or out of LA-LLW. If the UK Government decides to do so this will have an impact on waste volumes.

## 2 National Waste Plan update

NuLeAF has written to Defra regarding the Waste Management Plan for England (WMPE). The letter (Annex A) expresses concern at the lack of a focal point in national planning policy on radioactive waste management, with responsibility spread between Defra, DCLG and DECC. The concern is that, if this issue is not properly addressed, it may undermine the delivery of radioactive waste management infrastructure over the next 20 years or more.

Planning Authorities need to support delivery of appropriate infrastructure. There are aspects of waste management that are common to all forms of waste, including radioactive waste; in particular, applying the waste hierarchy. Inclusion of radioactive waste in the WMPE would help to embed a common language, also bringing further clarity to the application of the proximity principle/communities taking more responsibility for their own waste.

The situation is further confused by the EU *Directive on Spent Fuel and Radioactive Waste Management* which also requires the development of a 'national waste plan'. It is understood that the Environment Agency has asked DECC to clarify whether there will be two waste plans or one.

Through engagement it is hoped to ensure that the WMPE provides far greater clarity on how radioactive waste issues should be dealt with. NuLeAF is grateful to Guy Robinson of Somerset County Council for his help in drafting the NuLeAF letter.

## 3 Revised NuLeAF Planning paper

NuLeAF has published a draft of a revised guidance paper on planning for comment. The paper updates Briefing Paper 21 in light of a range of developments relevant to radioactive waste planning. This advice covers:

- developments in spatial planning including the new National Planning Policy Framework, the 'Duty to Co-operate' and the forthcoming Waste Management Plan for England (WMPE)
- NDA Strategy and the draft LLWR 'capacity gap' analysis
- Developments in the preparation and adoption of planning policies on radioactive waste
- NuLeAF's advice on radioactive waste planning

This draft advice was discussed by the Radioactive Waste Planning Group (RWPG) at their meeting on 12th December 2012. Comments have been received and it will be finalised shortly. Steering Group members are also welcome to comment on the draft which will be supplied on request.

Engagement around the planning paper with Defra, DECC, DCLG, PINS, the Environment Agency and the NDA is on-going and includes written correspondence (2.2 above) and discussion at the NuLeAF seminar.

### *3.1 Revised NuLeAF view – strategy and governance*

Responsibility for radioactive waste planning is spread between Defra, DCLG and DECC, with the NDA also involved through their strategy development process.

There is arguably an excess of technical information available to planning officers without sufficient focus on what is relevant to the plan making process. The WMPE provides a valuable opportunity to address this although this is still almost a year away. The WMPE must also help to guide Waste Planning Authorities on their role in bringing forward 'needed' infrastructure over a clear timeframe, noting the very long-term perspective required when considering radioactive waste management development. In this it should be informed by research recently undertaken by LLWR Ltd on capacity and need, so that greater clarity formally emerges on what is needed.

Any such detail will help local waste planning authorities to better understand what is required to become more effective, encourage consistency between local plans, and make local planning policy more robust. It is vital that planning authorities receive a clear message from central government and the nuclear industry about what is needed.

### *3.2 Revised advice to planning authorities*

The current lack of clarity makes it difficult to offer a clear view as to how local authorities should address radioactive waste.

However, given the issues that have arisen over recent years, sound local plan policies based on effective community engagement are critically important.

This is supported by PINS, who believe that most legacy development[1] will not be decided at the national level and that there is therefore a critical role for community consent and an important role for Local Plans. The current steer from PINS is that not all waste core strategies/Development Plan Documents need nuclear legacy policies in order to be sound. However:

- Authorities proposing potential partnership in long term Higher Activity Waste (HAW) disposal may wish to develop a policy framework for this
- Authorities with existing LLW facilities should have a sufficient policy framework in place to enable the on-going development and management of those facilities to proceed

Thus all Waste Planning Authorities need to consider radioactive waste, though the extent to which such consideration is represented in their final Plans and Policies will vary depending on the nuclear industry and non-nuclear industry presence and the facilities currently available to manage such wastes in their area.

Waste Planning Authority (WPA) areas hosting existing nuclear sites require a sufficient policy framework to support decommissioning activities and on-site interim management of wastes. For WPA areas without nuclear sites, DCLG guidance on implementing EU Waste Framework Directive (2008/98/EC) issued in December 2012 states that:

"The Directive applies to most wastes but certain types of waste are excluded from its scope. Notwithstanding these exclusions, we expect waste planning authorities to plan for the sustainable management of waste including, but not exclusively:

- Municipal/household;
- Commercial/industrial;
- Construction/demolition;
- Low Level Radioactive Waste;
- Agricultural waste;
- Hazardous waste; and
- Waste water."

There is a need for an informed conversation and understanding of future requirements.

[1] See Presentation by Planning inspectorate
http://www.nuleaf.org.uk/nuleaf/DisplayArticle.asp?ID=9498

On this basis the following advice is offered:

<u>On-site disposal of LLW/VLLW (applicable to WPAs with licensed nuclear sites)</u>
In order to reflect the different aspirations at different nuclear licensed sites (i.e. constraining radioactive waste management activities to an existing site versus early site clearance and de-licensing), policy could *either* state that

- The preferred location for VLLW/LLW disposal is within the nuclear site where it arises. If a rigorous assessment demonstrates that this is not practicable then land adjacent to the nuclear site should be assessed. Only if that is also demonstrated to be impracticable should more distant suitable sites be considered. *or*
- The preferred location for VLLW/LLW disposal is at suitable existing or planned facilities outside the WPA's area[2]. If such capacity is not available, consideration should first be given to use of existing landfill within the WPA's area. If this is also not available, disposal at new facilities within or next to the nuclear site should be considered.

<u>Cross-boundary 'imports' of radioactive wastes from other WPA areas (disposal aspects applicable to all WPAs)</u>
Policy could state that:

- Any proposals to treat, store or dispose of significant volumes of VLLW, LLW or ILW from outside the WPA's area in an existing facility would need to be in accordance with existing permissions or require a new permission. Where a new permission for use of an existing facility is required, the proposals must (a) be strongly justified[3], (b) demonstrate that the planning impacts are acceptable and (c) demonstrate that local social and economic benefits outweigh negative impacts.
- Any proposals for a new facility that would include the treatment, storage or disposal of significant volumes of VLLW, LLW or ILW from outside the WPA's area would need to (a) be strongly justified, (b) demonstrate that the planning impacts are acceptable and (c) demonstrate that local social and economic benefits outweigh negative impacts.

<u>Impact mitigation and community benefits (disposal aspects applicable to all WPAs)</u>
Policy could state that where radioactive waste management facilities are proposed, the Waste Planning Authority will expect measures to be put in place as necessary, and as a normal part of the planning process, to mitigate the impacts of hosting such facilities.

The NDA has recently indicated that it is not supportive of a national adoption of a Radioactive Waste Management Community Benefits Protocol but work is on-going in Cumbria which may set a precedent for elsewhere. NuLeAF

[2] It has been suggested that WPAs which adopt this policy should also specify which existing or planned facilities are likely to be used and liaise with the host authority to clarify that use of the facility is deliverable.
[3] This justification should be based on assessments of national need and whether there are acceptable alternative options (existing or planned) closer to the source of the waste.

continues to support such a Protocol applicable to regional or national VLLW, LLW or ILW management facilities and will continue to engage with NDA on this issue.

Regardless of the outcome of those discussions, in a Local Plan context it might also be appropriate to explain the possibility of Community Benefits as a voluntary contribution from a developer that helps to ensure that national needs are met in a way that is fair and reasonable at the local level, and which is entirely separate from the planning process.

### *3.3 How should the Duty to Co-operate be addressed?*

Greater clarity is being sought on this issue, based on the limited number of instances where the Duty has had an impact on waste planning decisions to date. NuLeAF will develop further guidance on this as the interpretation of the DtC in planning policy practice becomes clearer.

### *3.4 The role of NDA and SLCs*

NDA and SLCs must engage early and effectively with local authority planners. The implications of the LLW capacity gap analysis and NDA's development of an Integrated Waste Management strategy will need careful consideration.

### *3.5 Sustainability Appraisal and SEA*

Under European Directive 2001/42/EC there is a requirement that certain plans and programmes undertake a Strategic Environmental Assessment (SEA) to assess the effects on the environment. The process of an SEA is clearly defined and set out in Government guidance, and the assessment covers a range of environmental issues and also population and health. SEA's are also underway of significant plans related to nuclear legacy issues- again this is a requirement of the Directive. These include the proposals for a Geological Disposal Facility (GDF).

Planning documents, including Local Plans, fall within the scope of the Directive, and under PPS12 a wider Sustainability Appraisal is required. While PPS12 has now expired this requirement remains extant until it is officially withdrawn or revised.

NuLeAF supports the requirement for a wider sustainability appraisal. This can meet all the requirements of a SEA – as has been demonstrated in many cases[4] – and has the advantage of properly considering socio-economic issues as well as environmental concerns. The integrated consideration of all relevant issues is likely to lead to better outcomes that take on board the interests of the local community.

[4] http://www.pas.gov.uk/pas/core/page.do?pageId=152450

## Annex A

Letter from NuLeAF to Defra re Waste Management Plan for England


Letter to Defra.pdf