

<b>Meeting:</b>	NuLeAF Steering Group, June 12 <sup>th</sup> 2019
<b>Agenda Item:</b>	6
<b>Subject:</b>	Update on national developments in radioactive waste management
<b>Author:</b>	Philip Matthews
<b>Purpose:</b>	This paper provides an update on recent developments in radioactive waste management and Nuclear Decommissioning Authority (NDA) operations

## **Introduction:**

This paper updates members on recent developments in radioactive waste management and NDA operations. It covers:

- Reports from Theme Overview Group (TOG);
- NDA Update;
- Submarine Dismantling Project (SDP);
- BEIS Update;
- GRR Task Group; and
- SCCORS.

## **Recommendation:**

This report is for noting.

### **1. Reports from Theme Overview Group (TOG)**

**1.1 Site Decommissioning and Remediation (SDR) Theme Overview Group (TOG)** meetings were held in Manchester on the 26<sup>th</sup> March and in Penrith on the 7<sup>th</sup> May, while an **Integrated Waste Management (IWM) TOG** took place on the 9<sup>th</sup> May. NuLeAF' Director attended two of the meetings while Rob Ward of Copeland Borough Council was at the 7<sup>th</sup> May TOG and reported back. NuLeAF is grateful to Rob for this.

Some topics were discussed at more than one meeting, reflecting the ongoing and linked nature of much current work.

**1.2 BEIS** presented to all three TOGs on developing plans for a revised **UK and Devolved Government Statement on Policy for the Decommissioning of Nuclear Facilities**. The current Policy was agreed in 2004 and is felt in need of updating given developments such as the publication of the Nuclear Sector Deal.

It is proposed that the updated Statement will cover all (existing and new) UK nuclear facilities and their sites and will set out a high-level policy and

strategy framework against which operators or liability owners can make provision for, and take decisions on, the development and implementation of their decommissioning strategies and plans. The Statement will also enhance opportunities for improvements in radioactive waste, spent fuel and nuclear materials management, and seek to maintain the UK as a leader and influencer in the field of nuclear decommissioning and clean-up.

The new policy will underpin much of the work currently underway in Government, NDA and Regulators on institutional controls and the application of a risk-based approach which considers the whole lifecycle. The aim is to:

- Establish clearly how to prioritise actions
- Ensure worker, public and environmental safety
- Support the development of sustainable solutions that avoid placing an undue burden on future generations
- Apply regulation proportionate to risk
- Deliver beneficial reuse of sites sooner rather than later, with nuclear sites to be considered first for the location of new national infrastructure e.g. in energy or waste

1.3 In parallel, the UK Government is leading a **Higher Activity Waste (HAW) Policy Review**. The aim is to promote a risk-informed approach to the management of these wastes that is more cost effective and proportionate to the nature of the wastes (radiological, chemical, physical) and the risk that they pose to people and the environment. It is hoped that the new approach can emulate the benefits that have been delivered through a similar approach to LLW management. The new policy will be underpinned by the following principles:

- The use of a risk-informed approach to ensure safety and protection of the environment.
- The use, where appropriate, of the Waste Management Hierarchy to ensure the minimisation of waste arisings (both activity and volume)
- The consideration of all practicable options for the management of HAW.
- A presumption towards early solutions to waste management.
- The appropriate consideration of the proximity principle and waste transport issues.
- In the case of long-term storage or disposal facilities, consideration of the potential effects of future climate change.

The revised Statement and HAW Policy will be made available for an 8-week consultation this autumn. NuLeAF has been identified by BEIS as a key stakeholder and will submit a response.

1.4 An update was also provided on **near surface disposal (NSD)**, something that a new HAW policy might support as an option for the management of some of the HAW inventory. NDA has been investigating what credible options there are for NSD, considering the likely inventory, the potential risks and issues that might arise, and the economic implications.

At this stage they believe that NSD could be an acceptable disposal route for some ILW. Their assessment has considered both surface vaults, and vaults and disposal silos at depths of 10s of metres. They have identified two preferred options for disposal and are now investigating these further.

The NDA are clear that NSD would only be suitable for a part of the ILW inventory and that such a facility would not be appropriate for much of the waste arising from Sellafield. A Geological Disposal Facility (GDF) would therefore still be required.

At the meeting NuLeAF highlighted the risk that such proposals may cause confusion or concern to the general public, and in particular to communities around sites chosen for NSD if not properly explained and stressed that clarity would also be needed about how any NSD facility siting process might operate. NDA acknowledged these issues and the need for full engagement with local government and communities as this work progresses.

1.5 There was further discussion at the first SDR TOG on the developing **national narrative** for the management of wastes through sustainable remediation of nuclear sites. The narrative is intended to help support engagement with local authorities and stakeholders on proposals for the remediation of sites, with a focus on options for in-situ or on-site disposal of low-level wastes. The latest iteration is more concise, but it was agreed that further work was required to make it accessible to its intended audience. NuLeAF's Director has, at the request of the TOG, redrafted the introductory sections of the paper to improve presentation and readability.

1.6 At the 9<sup>th</sup> May meeting, Martin Grey of NDA provided an update on the NDA's **Transport Strategy** for which he is temporary lead following Steve Dutton's retirement.

While the original proposal was for a stand-alone Transport Strategy, NDA are now planning a statement/strategy on transport that will sit within Strategy IV and be consulted on as part of that wider consultation. The Strategy will address 4 priority areas namely Packages, Transport Modes, Regulatory/Stakeholder Engagement and Demand (for transport). A working group has been set up and the aim is for the work to be complete by March 2020.

NuLeAF first engaged in discussions on this in late 2017 and has made a number of representations to NDA on the need for the Strategy to address public concerns on waste movement and the travel to work impacts of NDA operations.

Disappointingly, it does not appear that NuLeAF's concerns have been taken on board. The Director noted these concerns at the TOG meeting and will follow this up with further communication.

## 2. NDA Update

2.1 In collaboration with NuLeAF, the NDA has held three local authority engagement events on its developing **Socio-economic Strategy**. These were in Bristol on the 30<sup>th</sup> May, London on the 31<sup>st</sup> of May and Penrith on the 11<sup>th</sup> June. Separately, the NDA engaged with Welsh local authorities as part of a wider event held in Cardiff on the 5<sup>th</sup> June. A verbal report on these events will be provided at the Steering Group meeting.

2.2 Taking on board comments made at the March Steering Group, and the discussions at the NDA/ NuLeAF engagement events, NuLeAF has finalised a **Position Paper on Socio-economics** setting out our view on a wide range of issues including employment, direct and indirect economic benefits, skills, and community funding. This paper will be used to inform NuLeAF's engagement with NDA around socio-economics as their Strategy is developed.

2.3 NuLeAF has also responded to the consultation on **Social Value in Government Procurement**<sup>1</sup>, given its relevance to NDA Group operations.

2.4 The April 2019 Radioactive Waste Planning Group (RWPG) received an update from Simon Boniface of NDA on proposals for the accelerated decommissioning of Magnox sites. Simon's presentation is posted on the NuLeAF website<sup>2</sup>.

In 2018 the NDA board agreed to move away from the current approach of putting all sites into Care & Maintenance for a protracted period, and instead adopting an approach where the decommissioning of some sites will be accelerated. Since then, NDA has been preparing the business case which will be taken to the NDA Executive in July 2019, and then to NDA Board and Government in September 2019.

At the current time, it is not possible to predict the sequence in which reactors will be decommissioned as it depends on the emphasis placed on the discriminatory factors (Managing risk to people, Protecting the environment, Socio-economic impact, Enabling the mission, Lifetime cost, Resources, and Logistics) and wider changes in government and NDA/Magnox plans. However Simon felt that it was likely that only 2 sites would be decommissioned at any one time and noted that some sites require urgent action to address their poor state – these were likely to be the first sites selected. He also noted that

---

<sup>1</sup> <https://www.gov.uk/government/consultations/social-value-in-government-procurement>

<sup>2</sup> <http://www.nuleaf.org.uk/wp-content/uploads/2019/05/Update-to-NuLeAF-May-2019.pdf>

the new policy might result in changes to plans for interim storage, and that near surface disposal of some wastes would also be considered.

Finally, the paper being presented to the NDA Board in September will contain a section on communications. Simon stated that NDA would welcome input from local authorities on how it should engage with communities and looked forward to further discussions with NuLeAF on this issue.

2.5 The **2019 NDA Stakeholder Summit** will take place at Coleg Menai in Llangefni on Anglesey on the 9<sup>th</sup> and 10<sup>th</sup> July, with NuLeAF working with NDA to support local government attendance. As in previous years, NuLeAF will be holding an event on the morning of Tuesday the 9<sup>th</sup> July. Invitations have been extended to Alan Cummings of NDA and Ann McCall of RWM to address members and answer their questions on current and future work of their respective organisations. A conference dinner will also be held on the middle evening.

2.6 It has been announced that Duncan Thompson has been appointed the NDA's Director of Group Development, while Corhyn Parr has taken up a new role as Director of UK Waste Operations. Corhyn will be responsible for more effective strategy implementation and more integrated working across the NDA.

2.7 The NDA Strategy 4 programme of work will be initiated in June 2019. A stakeholder engagement group will be formed to support strategy development.

### **3. Submarine Dismantling Project**

3.1 On the 3<sup>rd</sup> of April the National Audit Office (NAO) published a highly critical report on the Ministry of Defence's (MoD) performance in defueling and dismantling its out of commission nuclear powered submarines. At present 20 submarines are stored at Devonport and Rosyth with more destined to require decommissioning in years to come.

The NAO found that:

- Nine of the 20 submarines have still not been defueled. The MoD has not defueled any submarine since 2004 and while defueling was due to start again in 2012 the current estimate was that this would not occur until 2026.
- The 15-year delay in the dismantling project had increased costs by £0.8Billion, that is 50%. The estimated cost of submarine dismantling now stands at £2.4Billion.
- Total liabilities for maintaining and disposing of the 20 submarines currently stored, and 10 in-service submarines now stands at £7.5Billion

There was widespread coverage of the report in the UK media, and NuLeAF's Executive Director was interviewed on the issue on British Forces TV<sup>3</sup>.

3.2 The MoD, working with the regulators, indicated before Christmas that it was considering alternative options for the management of the ILW generated through the Submarine Dismantling Project. This came as a surprise, as in 2016 a clear commitment was made that all such waste would be stored at Capenhurst pending disposal in a GDF.

NuLeAF raised local government concerns about the re-opening of this process with the MoD and it now appears there has been a change of heart. At the ILW TOG meeting on the 9<sup>th</sup> May an MoD representative stated that there would be no change and that all waste was destined for Capenhurst as originally planned.

#### **4. BEIS update**

4.1 Following the resignation of Richard Harrington MP, Andrew Stephenson has been appointed as Parliamentary Under Secretary of State at BEIS with responsibility for the nuclear sector and the Industrial Strategy. He is Member of Parliament for Pendle in Lancashire.

4.2 On the 15<sup>th</sup> May, it was announced via a Parliamentary Statement that the UK has all the necessary measures in place to ensure the UK nuclear industry can operate post-Brexit. Government has also published guidance to industry on no-deal arrangement for the trans-frontier shipment of radioactive material and spent fuel<sup>4</sup>.

#### **5. GRR Task Group**

5.1 NuLeAF's Director participated in a **Joint Industry/Regulator GRR Task Group** in Penrith on 8<sup>th</sup> May.

The **Guidance on Requirements for Release from Radioactive Substance Regulation (GRR)** was published by the English, Welsh and Scottish environment agencies. Its purpose is to help site operators demonstrate that they've reached an optimised end state where there is no further need for regulation from the environment agencies, and the site is fit for its next intended use.

The GRR requires site operators to produce a Waste Management Plan (WMP) and a Site Wide Environmental Safety Case (SWESC) for each site. The aim of the Task Group is to support the development of WMPs and SWESC for each

---

<sup>3</sup> <https://www.forces.net/services/navy/mod-criticised-dismal-failure-dispose-obsolete-nuclear-submarines>

<sup>4</sup> <https://hansard.parliament.uk/commons/2019-05-15/debates/19051530000005/NuclearEnergy>

nuclear site, to share learning and to co-ordinate communications where possible.

The implementation of the GRR has significant implications for local authorities and the planning regime, and NuLeAF will continue to participate in this work as it progresses. Reflecting the interest that the environment agencies have in engaging with planners, Dr Juliet Long of the Environment Agency spoke on the GRR to NuLeAF's Radioactive Waste Planning Group (RWPG) on the 30<sup>th</sup> April and expressed her wish for further dialogue. Dr Long's presentation is available to view on the NuLeAF website<sup>5</sup>.

## **6. SCCORS**

6.1 NuLeAF's Director attended a meeting of the Scottish Council Committee on Radioactive Substances (SCCORS) held in Paisley on the 25<sup>th</sup> April.

The main item was a presentation from David Troland and Fiona McCall of EDF Energy on the current situation at Hunterston B. The plant has been offline for many months due to a significant number of hairline cracks in graphite bricks within the reactor core, and the company is working with ONR to decide the best way forward. The station is due to operate until 2023 but will not be able to re-open unless the regulator is satisfied. The situation at Hunterston has implications for other EDF reactors.

---

<sup>5</sup> <http://www.nuleaf.org.uk/wp-content/uploads/2019/05/EA-update-to-RWPG-on-GRR-implementation.pdf>  
Steering Group, Item 6, National developments in radioactive waste management,  
12<sup>th</sup> June 2019