

Meeting: Nuleaf Steering Group
Date: 13th March 2024
Item: 6
Subject: Update on Geological Disposal Facility (GDF) siting process
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Introduction:

This report provides an update on recent developments related to the process for identifying a site for a Geological Disposal Facility and activities at NWS. It covers:

- Geological Disposal Facility (GDF) Siting Process;
- Nuclear Waste Services (NWS) update;
- International news; and
- CoRWM Update.

Recommendation: This report is for noting.

Background information:

The UK Government's policy on **Working with Communities – implementing geological disposal** was published in December 2018¹, with the equivalent policy for Wales published in January 2019². The **National Policy Statement**, governing the planning aspects of the GDF in England, was published in July 2019³.

1. Geological Disposal Facility (GDF) Siting Process

1.1 There was a significant development in the GDF siting process on the 25th January when it was announced that South Holderness had established a Working Group, with the local authority, East Riding of Yorkshire, agreeing to participate⁴. A number of drop-in sessions in local communities were held in early February to discuss the plans, but there was significant opposition and on the 21st February the local authority voted almost unanimously to exit the process.

¹ <https://www.gov.uk/government/publications/implementing-geological-disposal-working-with-communities-long-term-management-of-higher-activity-radioactive-waste>

² <https://gov.wales/docs/desh/publications/190116-geological-disposal-of-higher-activity-radioactive-waste-working-with-communities-en.pdf>

³ <https://www.gov.uk/government/publications/national-policy-statement-for-geological-disposal-infrastructure>

⁴ [South Holderness area considered for radioactive waste disposal - BBC News](#)

The local MP Graham Stuart, who is also a DESNZ Minister had lobbied hard for the process to end and said he was 'delighted' that it had done so⁵.

Councillor Anne Handley, leader of East Riding of Yorkshire Council, said: '*In the past few weeks, many people within the community have made it clear that they find this idea unpalatable and do not want South Holderness to be part of the conversation. Councillors have today considered all these views and decided that it is right to withdraw from this process.*'

Nuclear Waste Services (NWS) stated that they 'fully respect' the Council's decision and that they will now take the steps required to wind down the Working Group⁶.

The brief establishment of a Working Group in South Holderness means that it is the 5th community to formerly enter the siting process – some interest in entering the process emerged in Hartlepool in 2021 but no formal engagement began. In recent months, NWS has withdrawn from Allerdale, meaning that three communities remain active, two in Cumberland and one in Lincolnshire.

While it is understood that a number of other communities are or have been engaged in discussion with NWS, it remains to be seen if any will move formally into the process.

1.2 South Copeland GDF Community Partnership held well attended events on geology during January. Fiona McEvoy, Head of Site Characterisation and Research & Development, NWS said: '*These interactive events will explore the work we're doing to develop a digital geological model from seismic data, previous studies by other organisations in the broader region, as well as studies of comparable rocks in other parts of the country. We'll share what is known about the geology in Copeland, what continuing investigations could look like, and explain the significance of this in ensuring the long-term safety of our communities and the environment.*'

Both Copeland Community Partnerships have also published an article from **Cumberland Council Leader Cllr. Mark Fryer**, setting out his views on the local authority's involvement in the process. In it he stresses the Council's neutrality on whether a GDF should proceed in the area, and notes that the area will be impacted on by the GDF regardless of where it is developed, given that most HAW waste is stored at Sellafield.

1.3 Aerial surveys to determine the presence of bird and marine life are nearing completion off the coast of Lincolnshire and Cumberland. These will inform the baseline data that will help the assessment of whether either area is suitable for a GDF.

⁵ [Council votes to end Holderness nuclear waste talks - BBC News](#)

⁶ [Nuclear Waste Services responds to council's withdrawal from South Holderness Working Group - GOV.UK \(www.gov.uk\)](#)

2. Nuclear Waste Services (NWS) Update

2.1 Juliet Sotnick has been appointed to the Board of Nuclear Waste Services. Her background is in sustainability, having previously served as the Chief Sustainability Officer at Babcock International Group⁷.

Speaking of the appointment Adrienne Kelbie CBE, Independent Chair at NWS, commented *'We are committed to developing and designing sustainable waste management solutions to protect the environment for generations to come.....Juliet brings first class knowledge and experience of designing and implementing sustainability strategies, which will help us expand our capabilities and influence how we work.'*

2.2 Nearly 200 experts, academics and students attended the **Nuclear Waste Services (NWS) Research Support Office (RSO)** annual conference in Sheffield on the 11th and 12th January 2024⁸. The RSO is a collaboration between the universities of Bristol and Manchester and is designed to support UK universities in developing radioactive waste management solutions. A total of 17 universities are involved and the RSO has 52 active PhD research projects.

3. International news

3.1 A decision on the site of Canada's deep geological repository is expected during 2024⁹. Two sites are under consideration – Ignace and South Bruce and the municipalities and the First Nation peoples in each area are planning to vote on the plans in the coming months. Both must approve the plans for it to proceed, and there is therefore a risk that neither site will progress.

If a site is selected the regulatory approval process will then take a decade, with construction taking another 10 years. Fuel emplacement would be undertaken over around 60 years after which there would be an 'extended monitoring' phase of about 7 decades.

4. CoRWM Update

4.1 The Committee on Radioactive Waste Management (CoRWM) has published a position paper on the implications for Higher Activity Waste (HAW) and Spent Fuel (SF) management of the development of Small and Advanced Modular Reactors (SMR/AMRs)¹⁰.

⁷ <https://www.gov.uk/government/news/sustainability-expert-juliet-sotnick-joins-nws-board>

⁸ <https://www.gov.uk/government/news/nuclear-research-academics-share-learning-at-nws-conference>

⁹ [Site for Canada's nuclear waste repository to be selected next year \(citynews.ca\)](https://www.citynews.ca)

¹⁰ <https://www.gov.uk/government/publications/development-of-small-modular-reactors-smrs-and-advanced-modular-reactors-amrs-corwm-position-paper>

The paper echoes some of the concerns raised in the Nuleaf seminar on AMRs held in 2023. CoRWM state that *'So far there is little published material from the promoters and developers of new reactor types to demonstrate that they are devoting the necessary level of attention to the waste prospectively arising from SMR/AMRs, on which there has been Parliamentary criticism in respect of similar submarine reactors.'*

The paper also notes that *'it is not necessarily the case that all types of spent fuel and radioactive waste will be suitable for disposal in a geological disposal facility (GDF), at least without potentially difficult prior treatment processes. Some may simply not be able to achieve the necessary state of passive safety required in a GDF as currently planned, in which case other new options will have to be identified, which may involve treatment or conditioning and which could be expensive, complex and uncertain.'*

It concludes that *'Clear guidance is needed from government to promoters, regulators, Nuclear Waste Services (NWS) and GBN on the necessity of addressing the cost, safety and environmental issues associated with radioactive waste management at an early stage.'*

The Chair of CoRWM, Sir Nigel Thrift, will address this Steering Group meeting.