

ITEM 5: UPDATE ON GEOLOGICAL DISPOSAL FACILITY SITING PROCESS

Report to RWPG, 28th April 2022

This report provides an update on recent developments related to the process for identifying a Geological Disposal Facility (GDF). It covers:

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

1. Introduction

1.1 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.

2. Geological Disposal Facility (GDF) Siting Process

2.1 More information has been provided on the search area being considered in **Lincolnshire**⁴. The suggested area is centred around a disused gas terminal and encompasses Withern, Theddlethorpe and Mablethorpe as well as an area stretching offshore for 22km. Jon Collins, independent chair of the Theddlethorpe GDF Working Group said members would look at '*local geology, environmental issues, transport, and safety*' and consult with the local community over the plan.

2.2 The **Mid-Copeland** Community Partnership has become the first to award Community Investment Funding. Three projects in their area have been provided with grants totalling over £65,000. The largest sum has been awarded to the revamp of a local BMX track, with smaller sums to a refurbishment of Reading and Recreation Rooms at Beckermet and for an electronic scoreboard at the Seascale Cricket Club.

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/geological-disposal-higher-activity-radioactive-waste-guidance-communities>

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

⁴ <https://www.bbc.co.uk/news/uk-england-lincolnshire-60304295>

2.3 Meanwhile, **South Copeland** Community Partnership has appointed Ged McGrath as its new Chair. Mr McGrath has lived in South Copeland for 20 years and has a wealth of experience working in and engaging with the local community. This includes previously owning and operating Millom Post Office, being elected as a local Councillor, and running a tourism business.

2.4 In **Allerdale** the Community Partnership has issued an invitation to local people to apply to join, with the aim of creating a Partnership that is diverse and reflective of the community. In addition, the local Community Investment Fund is now open for applications.

3. Nuclear Waste Services (NWS) Update

3.1 **Nuclear Waste Services** was launched on the 31st January 2022, bringing together the Low Level Waste Repository Limited, Geological Disposal Facility (GDF) developer Radioactive Waste Management Limited and the Nuclear Decommissioning Authority (NDA) group's Integrated Waste Management Programme.

3.2 NWS has published its **GDF Annual Report**⁵, outlining progress with the national programme. It includes a revised costing for the GDF, based on a larger volume of waste and 'more realistic' scope. It is now projected that the total bill could be up to £53 billion, compared with an estimate 4 years ago of between £12 billion and £20 billion to build and operate the facility for 150 years. This cost will be borne by taxpayers and nuclear power operators, with each paying roughly half. However, that ratio rests on the assumption that 16 gigawatts of new nuclear power will be built.

4. CoRWM Update

4.1 The Committee on Radioactive Waste Management (CoRWM) met on the 16th March 2022. The meeting included an update on their work on the community aspects of the GDF process, with CoRWM indicating that they are considering a number of issues including the process through which a community might withdraw.

CoRWM noted that they are preparing a paper on the costs of a GDF now that new data on this has been released by NWS (see 3.2). The Committee is also undertaking work on the waste aspects of Advanced Modular Reactors (AMRs) and looking at the residual wastes left over following the end of Magnox Reprocessing.

The meeting heard an update from Martin Walkingshaw on Nuclear Waste Services and their work on Low Level Waste. His presentation covered Near Surface Disposal (NSD), with a suggestion that the development of a NSD would likely be dealt with

⁵ <https://www.gov.uk/government/publications/gdf-annual-report-2020-2021>

through the Town and Country Planning Regime rather than be designated as a Nationally Significant Infrastructure Project (NSIP).

5. International situation

5.1 Nuleaf's Executive Director spoke at the 6th **International Conference on Geological Repositories (ICGR)** held in Helsinki on the 4th to 8th April⁶. The event was attended by over 200 delegates from across the world including waste management organisations staff, engineers and scientists, regulators, local and national government representatives, environmental organisations and the public. It looked at both the technical and political challenges of GDF development. Due to the Covid pandemic it was the first such event held since 2016.

The choice of venue was appropriate given that Finland is the first country in the world to begin construction of a GDF. Sweden is close to giving such a facility the final go ahead and a decision is expected this September on the preferred site in Switzerland⁷.

Canada is likely to announce in 2023 which of the two sites still in the process, Ignace and South Bruce, will be chosen. The deep borehole drilling programme in Canada, to understand the deep geology at the two sites, has now been complete⁸.

5.2 Philip Matthews also attended a meeting of **EURAD** in Paris from the 28th to 30th March. This was the first time that members had been able to meet in person since the programme was launched 2 years ago. Updates from national GDF programmes across Europe were provided along with discussion on a range of technical issues and on stakeholder perceptions around safety. A recoding of the event will be available soon via the EURAD website⁹.

5.3 The University of Sheffield and Deep Isolation, a company promoting the use of boreholes for disposal of spent fuel and high-level waste, have published research on stakeholder views on the subject. The research indicates a degree of support for borehole disposal, particularly for countries with a limited inventory¹⁰.

⁶ https://www.oecd-nea.org/jcms/pl_31984/sixth-international-conference-on-geological-repositories-icgr-6-advancing-geological-repositories-from-concept-to-operation

⁷ <https://www.dailysabah.com/life/science/options-considered-switzerland-plans-to-bury-radioactive-waste>

⁸ <https://www.world-nuclear-news.org/Articles/Canadian-waste-organisation-completes-borehole-pro>

⁹ [A successful second annual event | Eurad \(ejp-eurad.eu\)](https://www.eurad.eu/)

¹⁰ <https://www.neimagazine.com/features/featureis-it-time-to-consider-deep-boreholes-for-nuclear-waste-disposal-9612136/>