

ITEM 7: UPDATE ON GEOLOGICAL DISPOSAL FACILITY SITING PROCESS

Report to RWPG, 29th January 2025

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

- GDF Community Partnerships;
- International news; and
- CoRWM update.

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. GDF Community Partnerships

2.1 A **Hosting Agreement** between Lincolnshire County Council, East Lindsey District Council, Nuclear Waste Services (NWS) and the UK Government is being considered, with this setting out the infrastructure requirements for a GDF if developed in the area⁴. The Agreement was the subject of a report considered by the County Council's Executive on the 3rd December.

An agreement could be similar to that reached between South Bruce Municipality and the Canadian Nuclear Waste Management Organisation (NWMO) and would have to be developed before any 'Test of Public Support' was undertaken in **Theddlethorpe**.

2.2 Nuclear Waste Services (NWS) is expected to make an announcement in the near future on the specific Areas of Focus for the GDF headworks sites in Lincolnshire and Cumberland. This follows on from the news before Christmas that

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 [Council considers hosting agreement for proposed nuclear waste facility in Theddlethorpe](#)

other options for the GDF headworks are being considered in Lincolnshire, beyond the former **Theddlethorpe** gas works which has been the focus of interest to date⁵.

An update on the GDF siting process will be provided at this meeting by NWS.

3. International News

3.1 Canada has selected **Ignace** and the **Wabigoon Lake Ojibway Nations**, in northern Ontario, as the location for its Geological Disposal Facility (GDF)⁶. This follows positive votes by both the local Ignace municipality (77% in favour)⁷ and the First Nation community.

Nuclear Waste Management Organization (NWMO) President and CEO Laurie Swami hailed the decision as an 'historic moment' adding that *'This project will solve an environmental issue and supports Canada's climate change goals. And today's decision was driven by a consent-based siting process led by Canadians and Indigenous peoples. This is what making history looks like.'*

The project will now move forward to the regulatory decision-making process. The NWMO has agreed to an Indigenous-led Regulatory Assessment and Approval Process that will be developed and implemented by Wabigoon Lake Ojibway Nation. This will assess the potential impacts of the project against community values, with conditions to mitigate any impacts designed by Wabigoon Lake Ojibway Nation and complied with by the NWMO. The project will also undergo the regulatory decision-making processes of the Canadian Nuclear Safety Commission and through the Government of Canada's impact assessment process.

A presentation on the Canadian GDF siting process, from their **Nuclear Waste Management Organisation (NWMO)** will be made to the March Steering Group.

3.2 The Radiation and Nuclear Safety Authority (STUK), Finland's regulator, has further extended its deadline for conducting its review of Posiva Oy's GDF operating license application to December 2025, despite expectations the review would be complete by the end of 2024. Once they have completed their review, the Finnish Government will make a final decision on whether to give the go ahead to the repository. If they do, the operating license will run until 2070.

⁵ [Other sites considered for Theddlethorpe nuclear waste disposal - BBC News](#)

⁶ [Canada selects location for used nuclear fuel repository - World Nuclear News](#)

⁷ [Ignace council votes in favour of potential nuclear waste repository | CBC News](#)

3.5 Groundwork has begun for the construction of Sweden's final repository for Spent Nuclear Fuel at Forsmark in the Osthhammer municipality⁸. *'It is a historic day for the Swedish nuclear waste programme. We are taking an important step and breaking ground for a final solution for the spent nuclear fuel'* said Stefan Engdahl, CEO of the Swedish waste management organisation SKB.

The construction of the used fuel repository will take ten years before deposition can begin, after which the repository will be gradually expanded over a long period of time. Surface work over the next two years will include the construction of rock storage and water treatment facilities, a canister bridge over the cooling water canal and forest clearance.

4. Committee on Radioactive Waste Management (CoRWM)

4.1 CoRWM has published its **Annual Report 23/24**⁹ and its **Programme of Work**¹⁰ for the coming year.

The Annual Report, CoRWM's twentieth, highlights the work the Committee has undertaken in assessing the waste implications of Small Modular Reactors (SMRs) and Advanced Modular Reactors (AMRs). It also reports on their continued dialogue with Nuclear Waste Services (NWS) around the potential need for an Underground Research Facility (URF or 'rock laboratory') and their wider work around the Geological Disposal Facility (GDF) and Near Surface Disposal (NSD).

Looking forward, their work programme in 2024/25 will include:

- Advice to the Scottish Government on their near-surface near-site storage and disposal policy for Higher Activity Waste (HAW).
- Reviewing the NDA's assumptions and strategy for managing the majority of radioactive wastes in the UK, especially its implementation of the UK's risk informed approach, along with the implications of long-term interim storage of radioactive waste, spent fuel and nuclear materials.
- Further work in considering the nature of radioactive waste outputs from small modular reactors (SMRs), and also advanced modular reactors (AMRs), particularly those which would generate novel wastes and spent fuels.

4.2 Nuleaf's Executive Director attended a CoRWM Plenary meeting in Edinburgh on the 27th November. During the meeting it was noted that:

- CoRWM has been in a dialogue with NWS and regulators around the potential need for an Underground Rock Facility (URF) where experiments around geology and waste emplacement could be undertaken. A paper has been drafted by CoRWM but will not be published until after the current Environment

⁸ [Sweden breaks ground for used fuel repository - World Nuclear News](#)

⁹ [CoRWM: annual reports - GOV.UK](#)

¹⁰ [Committee on Radioactive Waste Management \(CoRWM\): programmes of work - GOV.UK](#)

Agency consultation on Guidance for Requirements of Authorisation (GRA) is completed (See 4.2).

- An updated Position Paper on retrievability of waste is in development.
- CoRWM is assessing the challenges and issues arising from the development of a repository at the farthest distance offshore (around 20km). This includes an assessment of additional costs which are likely to be significant.
- The Committee has been engaging with the Scottish Government prior to the launch of a consultation on their Higher Activity Waste (HAW) policy in 2025.
- Members of the Group participated in a site visit to Wylfa during which they met with the Wales Nuclear Forum. A report on the visit can be found here¹¹.

¹¹ [CoRWM visits Wylfa nuclear power station - GOV.UK](#)