

**Meeting:** Nuleaf Steering Group  
**Date:** 11<sup>th</sup> December 2024  
**Item:** 7  
**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
- Regulatory 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 2018<sup>1</sup>, with the equivalent policy for Wales published in January 2019<sup>2</sup>. The **National Policy Statement**, governing the planning aspects of the GDF in England, was published in July 2019<sup>3</sup>.

## **1. Geological Disposal Facility (GDF) Siting Process**

**1.1 Mid Copeland GDF Community Partnership** has published the results of its annual residents' survey. Over half of the survey participants (53%) would support the potential construction of a GDF in the Mid Copeland Search Area, while 12% would be opposed. This compares with 56% and 15% respectively in last year's

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

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

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

survey. The net support for the construction of a GDF in the Mid Copeland Search Area stood at +41 from this survey, the same figure as last year.

When asked about potential advantages to a local GDF, more than half (56%) of respondents said increased job opportunities; 17% said improved safety of existing nuclear waste and 15% said investments in local environmental improvements. The most common perceived disadvantages related to local disruption – 24% said potential increased traffic or congestion and 22% said potential disruption and dirt produced by construction.

1.2 A similar exercise has been undertaken in **South Copeland**. In this case 36% were supportive of a GDF in the Search Area, with 31% opposed. One third of those interviewed were neutral. The survey showed a level of uncertainty in relation to nuclear waste management with only 27% aware of the UK's current storage method for its most hazardous radioactive waste at interim surface and ground-level storage facilities. A greater proportion of respondents (38%) believed it was already held in vaults deep underground in the UK, and 30% admitted that they did not know.

1.3 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 area<sup>4</sup>. The Agreement was the subject of a report considered by the County Council's Executive on the 3<sup>rd</sup> December, and a verbal update on any outcome of this discussion will be given to Steering Group at this meeting.

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**.

1.4 The BBC has published articles on the GDF siting process. The first covers the general siting process and quotes Nuleaf Chair, Cllr David Moore<sup>5</sup>. The other focusses on Theddlethorpe, and includes the perspectives of those against the development, featuring a recent report published by a local opposition group, Guardians of the East Coast (GOTEC)<sup>6</sup>.

## 2. Nuclear Waste Services (NWS) Update

2.1 NWS Chief Executive Officer **Corhyn Parr** will be leaving her post at the end of March 2025, triggering the search for a replacement<sup>7</sup>. David Peattie, Chief Executive Officer at the Nuclear Decommissioning Authority commented *'I am extremely grateful to Corhyn for her substantial contributions to the NDA group over the past*

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<sup>4</sup> [Council considers hosting agreement for proposed nuclear waste facility in Theddlethorpe](#)

<sup>5</sup> [Where will the UK bury nuclear waste for 100,000 years? - BBC News](#)

<sup>6</sup> [Theddlethorpe nuclear waste site 'would be disaster for seaside' - BBC News](#)

<sup>7</sup> [NWS CEO Corhyn Parr to step down in March 2025 - GOV.UK](#)

*six years. Corhyn is a formidable leader within our sector, and we wish her every success in her future endeavours.'*

2.2 NWS has announced that it is looking at other options for the GDF headworks in Lincolnshire, not just the former **Theddlethorpe** gas works which has been the focus of interest to date<sup>8</sup>.

NWS stated that '*competing interests*' in the Theddlethorpe site had '*matured*' over the past year and that a range of studies was being carried out in the search area which includes the electoral wards of Mablethorpe and Withern and Theddlethorpe. Communities director **Simon Hughes** commented that '*No decisions on these options have been made at this stage, we will publish an update early next year and our teams will be out in communities to explain our findings, hear feedback and consider next steps.*'

The two local authorities involved, **Lincolnshire County Council** and **East Lindsey District Council**, have proposed that a referendum be held by 2027. In contrast, the local MP, **Victoria Atkins**, who is opposed to the development, described the widening scope of the plans as '*deeply worrying*', adding that '*I, alongside many of my constituents, oppose this nuclear waste dump in our area.....I urge the community partnership to hold a referendum in the next 12 months so that residents can have their say and take control of our area's future.*'

### **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)<sup>9</sup>. This follows positive votes by both the local Ignace municipality (77% in favour)<sup>10</sup> and the First Nation community, the **Wabigoon Lake Ojibway Nations**<sup>11</sup>.

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-

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<sup>8</sup> [Other sites considered for Theddlethorpe nuclear waste disposal - BBC News](#)

<sup>9</sup> [Canada selects location for used nuclear fuel repository - World Nuclear News](#)

<sup>10</sup> [Ignace council votes in favour of potential nuclear waste repository | CBC News](#)

<sup>11</sup> <https://www.nwmo.ca/News/Wabigoon-Lake-Ojibway-Nation-confirms-it-is-a-willing-host-community-for-Canadas-repository#>

making processes of the Canadian Nuclear Safety Commission and through the Government of Canada's impact assessment process.

A total of 22 communities signalled an interest in the siting process with this being reduced to two over time. The other potential host community **South Bruce**, also voted yes, though by a much narrower margin, with 51% giving their consent<sup>12</sup>. A decision was also required by Saugeen Ojibway Nations, representing indigenous people in South Bruce but that will not now take place.

3.2 Nuleaf's Executive Director, along with Lincolnshire County Council's Head of Infrastructure Vanessa Strange, participated in a GMF Europe site visit to **Oskarshamn** in Sweden, on the 25<sup>th</sup> and 26<sup>th</sup> September. The town is the location of the Aspö rock laboratory and waste encapsulation plant. The rock laboratory has led much of the research that has informed the development of a final repository for spent nuclear fuel in Sweden. Aspö will close permanently in spring 2025 with the final repository planned for another community, Östhammar.

3.3 Staying in Sweden, the GDF siting process in the country took a major step forward on the 24<sup>th</sup> October after the national **Land and Environment Court** granted an environmental permit for the construction and operation of the repository and encapsulation plant<sup>13</sup>. The repository will be located at Forsmark/Osthammar, while the encapsulation plant is located at Oskarshamn (see above). This decision enables preparatory work to start, although tunnelling cannot commence until the Radiation Safety Authority (SSM) provides an approved safety report. It is expected the facilities will become operational in the mid-2030s.

The permit applies to all Sweden's past and current nuclear reactors but does not apply to any nuclear waste or spent fuel from a new nuclear programme.

3.4 The Radiation and Nuclear Safety Authority (STUK), Finland's regulator, is expected to publish its opinion on whether to grant an operating license for the repository by the end of 2024, at which point the Government will make a final decision on whether to give the go ahead. If they do, the operating license will run until 2070. Posiva CEO Ilkka Poikolainen commented: *'Posiva's operation now takes a significant step toward the start of the actual final disposal operation. This is a momentous occasion also to our employees and cooperation partners.'*

3.5 The BBC have published an in-depth article on GDF siting processes around the world<sup>14</sup>.

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<sup>12</sup> <https://www.ans.org/news/article-6524/south-bruce-votes-yes-on-hosting-canadian-repository/>

<sup>13</sup> [Environmental permit granted for Swedish repository - World Nuclear News](#)

<sup>14</sup> [How to build a nuclear tomb to last millennia - BBC Future](#)

## 4. Regulatory update

4.1 The Environment Agency (EA) and Office for Nuclear Regulation (ONR) have issued their joint annual report on regulatory scrutiny and engagement<sup>15</sup>. They conclude that there has been good progress in many areas, but that there were some gaps in engagement related to a number of areas including site evaluation.

4.2 The Environment Agency, Natural Resource Wales (NRW) and the Northern Ireland Environment Agency (NIEA) have launched a joint consultation on draft guidance covering:

- Disposal facilities for solid radioactive waste: **guidance on the requirements for authorisation (GRA)**
- Guidance on the staged regulation of geological disposal facilities

The draft guidance documents explain what an operator must demonstrate to get an environmental permit or permits for such facility. The consultation closes on the **28<sup>th</sup> February 2025**<sup>16</sup>. Nuleaf will be drafting a response for comment and is happy to provide feedback on the draft submissions of any of our members. A parallel consultation is being undertaken in Scotland, as their GRA does not cover deep geological disposal.

## 5. Committee on Radioactive Waste Management (CoRWM)

5.1 CoRWM has published its **Annual Report 23/24**<sup>17</sup> and its **Programme of Work**<sup>18</sup> 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.

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<sup>15</sup> [Regulatory scrutiny and engagement for geological disposal: annual report 2023 to 2024 - GOV.UK](#)

<sup>16</sup> <https://www.gov.uk/government/consultations/regulation-of-solid-radioactive-waste-disposal-facilities-proposed-guidance/consultation-summary-guidance-on-the-requirements-for-authorisation-and-staged-regulation-for-the-disposal-of-solid-radioactive-waste>

<sup>17</sup> [CoRWM: annual reports - GOV.UK](#)

<sup>18</sup> [Committee on Radioactive Waste Management \(CoRWM\): programmes of work - GOV.UK](#)

- 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.

5.2 Nuleaf's Executive Director attended a CoRWM Plenary meeting in Edinburgh on the 27<sup>th</sup> 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 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 here<sup>19</sup>.

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<sup>19</sup> [CoRWM visits Wylfa nuclear power station - GOV.UK](#)