

**Meeting:** Nuleaf Steering Group  
**Date:** 2<sup>nd</sup> June 2021  
**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 Geological Disposal Facility and activities at RWM. It covers:

- Geological Disposal Facility (GDF) Siting Process;
- RWM Update;
- CoRWM Update; and
- International situation.

## 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 **Cumbria County Council** has decided not to become involved in the GDF siting process in Copeland<sup>4</sup>. The County Council's local committee for Copeland had asked the Council Cabinet to consider joining the Copeland Working Group or delegating the decision to the local committee. A non-binding motion calling on the

<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>

<sup>4</sup> [County council declines to take part in search for underground radioactive waste disposal facility \(cumbriacrack.com\)](https://www.cumbriacrack.com)

Council Leader to join the Copeland Working Group was passed, but the proposal was formally rejected by the County Council's Cabinet on the 18<sup>th</sup> March. It is likely that the County will now also decline to join the parallel Working Group in Allerdale.

1.2 The **Copeland Working Group** has published a series of 4 initial evaluation reports for the local authority and the three interested parties in the area<sup>5</sup>. These provide an early assessment of whether each of the areas identified by the interested parties has any potential to host a GDF, based on the six agreed Siting Factors. The reports conclude that the Copeland Area, and specific identified sites within in, have the potential to host a GDF, while noting that further work will be required to establish the actual suitability of the area and potential sites within.

1.3 The **Allerdale Working Group** website is now live and includes a virtual exhibition and a range of other information<sup>6</sup>. The Group also produces a regular newsletter, and anyone interested in receiving this can sign up via the website.

1.4 The **Nuclear Free Local Authorities** (NFLA) have published a paper on the GDF process in West Cumbria and proposals for a new deep coal mine in the area<sup>7</sup>. The mine proposal has now been called in by the UK Government and may well not proceed. However, the paper suggests that, if it was constructed, the mine might serve as a 'rock characterisation facility' or even that the mine shafts and tunnels could be used as access tunnels for nuclear waste disposal in a future GDF.

RWM has rejected any suggestion of a link between the two potential developments, stressing that it would not be feasible for the mine to be used as a 'characterisation facility' or as part of the GDF development given that there is no possibility of a repository being developed within such geology. The Copeland Working Group<sup>8</sup> has stated that *'A GDF will be a purpose-built, highly engineered facility designed specifically for radioactive waste. RWM will assess the suitability of any potential GDF location in a comprehensive evaluation process. The design and safety features must meet the stringent requirements of independent UK nuclear and environmental regulators. A coal mine would not meet these requirements.'*

## 2. RWM Update

2.1 RWM has won an award at the annual **Women in Nuclear** event for its work in promoting equality, diversity and inclusion<sup>9</sup>. The organisation is now close to achieving the UK Industry target of 40% female workforce by 2030.

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<sup>5</sup> <https://copeland.workinginpartnership.org.uk/working-group-area/>

<sup>6</sup> <https://allerdale.workinginpartnership.org.uk/>

<sup>7</sup> [https://www.nuclearpolicy.info/wp/wp-content/uploads/2021/03/Rad\\_Waste\\_Brfg\\_86\\_GDF\\_and\\_Cumbria\\_coal\\_mine.pdf](https://www.nuclearpolicy.info/wp/wp-content/uploads/2021/03/Rad_Waste_Brfg_86_GDF_and_Cumbria_coal_mine.pdf)

<sup>8</sup> <https://copeland.workinginpartnership.org.uk/frequently-asked-questions/>

<sup>9</sup> [RWM celebrate success at industry awards - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/rwm-celebrate-success-at-industry-awards)

2.2 The minutes of the last **Regulatory Interface Management (RIM)** group meeting, held in September 2020, have been published<sup>10</sup>. RIM discusses regulatory and land-use planning matters related to geological disposal. Its members include RWM along with Defra, the Environment Agency, ONR and the Planning Inspectorate.

2.3 Nuleaf's Executive Director held an introductory meeting with Simon Hughes, RWM's new **Community Engagement and Siting Director** on the 10<sup>th</sup> of May. Simon worked for the Environment Agency for 25 years on nuclear and non-nuclear regulation, and more recently in the water industry with a focus on stakeholder engagement and planning<sup>11</sup>. The meeting covered the work of Nuleaf and the potential ways in which we could continue to advise RWM and engage in the GDF siting process. It was agreed that Phil and Simon would meet quarterly from now on.

2.4 RWM has published a summary report on work they have undertaken on developing **Large Waste Transport Containers (LWTC)**<sup>12</sup> to enable the transportation of Higher Activity Waste (HAW) to the GDF. Large containers reduce the need for size reduction of HAW items prior to packaging and transport. This work is now being taken forward and developed further.

### 3. CoRWM Update

3.1 **CoRWM** (Committee on Radioactive Waste Management) has published a new position paper on the **policy, legal and regulatory issues for a GDF**<sup>13</sup>. The paper considers the unique challenges of regulating a GDF and makes recommendations. These include that Government should:

- As a matter of urgency, make a clear statement of policy on matters related to a GDF, Near Surface Disposal (NSD) and other relevant aspects of radioactive waste management, preferably in a single document.
- Provide clarity as to the relationship of policy to the Radioactive Waste Inventory, including for materials not currently classified as waste.
- Subject the policy to rigorous scrutiny and public debate.
- Provide clarification on the implications of the potential earlier availability of a NSD facility for the approval and regulation of a GDF.
- Consider the policy, legal and regulatory implications of near-shore disposal, including public international law.
- Consider whether NSD, if it is to be pursued, should be brought within the 2008 Planning Act system.

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<sup>10</sup> [Regulatory Interface Management \(RIM\) group - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

<sup>11</sup> <https://www.gov.uk/government/people/simon-hughes--2>

<sup>12</sup> [NDA RWM 168 Large Waste Transport Container Summary Report.pdf \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>13</sup> [Policy, legal and regulatory issues for a geological disposal facility \(GDF\) and associated radioactive waste management issues: CoRWM position paper - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

## 4. International situation

4.1 Nuleaf has been engaging with other European countries to understand their approach to **Community Partnership Agreements (CPA)**, that is agreements between the nuclear industry and communities/local authorities. These are an important mechanism for setting out the investment and added value that will flow to communities. They are used in other European countries in relation to GDF siting processes and wider waste management and new nuclear programmes.

As part of this work, Nuleaf's Director met on the 24<sup>th</sup> of May with Ted Lundqvist, Director of KSO (the Swedish equivalent of Nuleaf) and Stig Bjerne of SKB NU, a subsidiary of the Swedish GDF development body SKB. RWM also participated in the meeting.

The two Swedish municipalities involved in the GDF siting process signed an agreement in 2009 which will deliver around €195 million to communities. Of this Östhammar, the proposed site of the GDF itself, will receive 25% but will benefit from the direct investment related to the development. Oskarshamn receives 75% and will also host the encapsulation plant. A decision on whether to proceed with the GDF is currently with the Swedish Government and is expected soon. It is only after a positive decision is made that most of the funding will be accessible.

4.2 Next door in Finland work has begun on the first disposal tunnel for their repository<sup>14</sup>. Located at Onkalo on the Baltic coast, this will be the first in the world to dispose of spent fuel. It is estimated that 100 deposition tunnels will be excavated over the century long operational phase, with a total length of 35 kilometres. Used fuel will be placed in the bedrock at a depth of around 450 metres, with emplacement beginning in the mid-2020s.

4.3 In Canada, borehole investigations have commenced at the two sites that are still under consideration for a repository<sup>15</sup>. These are Ignace and South Bruce, both in Ontario. The Canadian process, like its UK equivalent, is based on community consent, and there is both support and organised opposition to the proposal around the sites, including from First Nation communities.

The developer (NWMO) plans to make a final decision in 2023 and has recently published a **Five Year Strategic Plan** up to 2026<sup>16</sup>. The plan sets out how the organisation can move into an implementation phase and has been released alongside NWMO's **Annual Report**<sup>17</sup>.

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<sup>14</sup> [Work starts on first disposal tunnel at Finnish repository : Waste & Recycling - World Nuclear News \(world-nuclear-news.org\)](https://www.world-nuclear-news.org/Work_starts_on_first_disposal_tunnel_at_Finnish_repository_Waste_Recycling)

<sup>15</sup> [Test drilling resumes for nuclear waste site near Ignace - Timmins News \(timminstoday.com\)](https://www.timminstoday.com/test-drilling-resumes-for-nuclear-waste-site-near-ignace/)

<sup>16</sup> [Latest NWMO implementation plan looks beyond site selection | The Nuclear Waste Management Organization \(NWMO\)](https://www.nwmo.ca/latest-nwmo-implementation-plan-looks-beyond-site-selection/)

<sup>17</sup> [The NWMO 2020 annual report celebrates progress and resilience | The Nuclear Waste Management Organization \(NWMO\)](https://www.nwmo.ca/the-nwmo-2020-annual-report-celebrates-progress-and-resilience/)