

Meeting: Nuleaf Steering Group
Date: 8th December 2021
Item: 10
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 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 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 have been significant developments in the GDF siting process in both Cumbria and Lincolnshire.

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>

Copeland Working Group announced on the September 29th that they are proposing two Search Areas in the borough. One Search Area covers the electoral wards of Gosforth & Seascale and Beckermet. The second includes the electoral wards of Millom and Black Combe & Scafell. Following consideration of a Working Group paper by the Copeland Executive, it was confirmed on the 15th November that Community Partnerships would be established for each Search Area.⁴

On the 5th October **Allerdale Working Group** announced a proposed Search Area within which the process for identifying a suitable site for a GDF⁵ would be given further consideration. This covers approximately 230 square kilometres, comprising 13 Allerdale District electoral wards. Following on from this, the Working Group voted unanimously on the 9th November to establish a Community Partnership to take forward the process into the next phase, with this being endorsed by the local authority executive on the 24th November⁶.

Community Partnerships are likely to take 3-6 months to establish, and will involve representative groups, organisations and individuals along with at least one Principal Local Authority. Once the Partnership is up and running, Search Area communities will be eligible to benefit from Community Investment Funding of £1million per annum. There will also be much wider engagement with the community.

In both Copeland and Allerdale the Lake District National Park, and the proposed park extension, is excluded from the Search Areas. However, deep geology beyond the coast is being considered for the siting of the underground elements of a GDF.

1.2 The GDF siting process has also been progressing in **Lincolnshire**, with an announcement on the 12th October that a Working Group⁷ had been set up in the county, based around Theddlethorpe, a former gas terminal. This is the first time that a community outside West Cumbria has formally entered the current or previous GDF siting processes.

RWM will be a member of the Working Group, along with Lincolnshire County Council, East Lindsey District Council (ELDC) and Theddlethorpe Parish Council. Jon Collins, ex leader Nottingham City Council, has agreed to be the independent Chair.

The Group will now begin the process of dialogue with the local community. A website has been launched⁸, and the first in a series of walk-in meetings began on the 27th October.

⁴ <https://cumbriacrack.com/2021/11/16/next-step-in-hunt-for-nuclear-waste-disposal-site-in-copeland/>

⁵ [Allerdale GDF Working Group proposes search area for further consideration - Working Group Allerdale \(workinginpartnership.org.uk\)](https://www.workinginpartnership.org.uk/allerdale-gdf-working-group-proposes-search-area-for-further-consideration)

⁶ <https://www.newsandstar.co.uk/news/19739573.allerdale-bosses-vote-form-community-partnership-nuclear-waste-disposal-talks/>

⁷ [RWM welcomes formation of Theddlethorpe GDF Working Group - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/rwm-welcomes-formation-of-theddlethorpe-gdf-working-group)

⁸ [Working Group Theddlethorpe \(workinginpartnership.org.uk\)](https://www.workinginpartnership.org.uk/working-group-theddlethorpe)

2. RWM Update

2.1 It has been announced that RWM is undertaking work to commission non-intrusive marine geophysical surveys⁹ in coastal waters around where Community Partnerships are formed. Work could begin in summer 2022, earlier than originally envisaged, and will provide three dimensional images of the deep geology, either below the land or seabed.

2.2 RWM held its inaugural GDF conference on the 1st December, at Central Hall in London. It focussed on how RWM is:

- Starting to work with communities
- How communities can benefit from offering to host the GDF
- Preparing to deliver one of the largest, most technically complex and exciting infrastructure projects of our time.

2.3 The Environment Agency and the Office for Nuclear Regulation (ONR) have issued annual reports providing regulatory advice to RWM and highlighting where they would like to see improvement. These can be viewed here¹⁰.

3. CoRWM Update

3.1 An online documentary by the BBC and Open University explains the UK's radioactive waste legacy and plans for geological disposal, as well as wider issues around nuclear power and climate change. The programme features Dr Claire Corkhill of CoRWM and Prof. Andy Blowers among others. It can be viewed here¹¹.

3.2 Philip Matthews was asked to join a meeting of CoRWM's Subgroup 3 on the 19th November. The discussion covered an exchange of updates from CoRWM and Nuleaf and a discussion of a range of issues including the potential for an 'inshore' GDF with the vaults located under the sea.

3.3 CoRWM has published a briefing note on **Geological disposal of radioactive wastes: the inventory for disposal**¹². The Inventory for Geological Disposal includes components of both the Radioactive Waste Inventory and Radioactive Materials Inventory, but, crucially, not their entirety. This relationship is explained in Figure 1.

⁹ [Progress in GDF Siting Process: Marine Geophysical Surveys - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/geological-disposal-scrutiny-of-rwms-work-annual-reports?utm_medium=email&utm_campaign=govuk-notifications&utm_source=3e3419af-8285-4129-a950-9427540a7072&utm_content=immediately)

¹⁰ https://www.gov.uk/government/publications/geological-disposal-scrutiny-of-rwms-work-annual-reports?utm_medium=email&utm_campaign=govuk-notifications&utm_source=3e3419af-8285-4129-a950-9427540a7072&utm_content=immediately

¹¹ [BBC iPlayer - Rethink the Future - Series 1: 8. The Nuclear Dilemma](#)

¹² [Geological disposal of radioactive wastes - the inventory for disposal: CoRWM briefing note - GOV.UK \(www.gov.uk\)](#)

The paper also explains the implications of proposals for a Near Surface Disposal (NSD) facility which might reduce the inventory destined for a GDF.

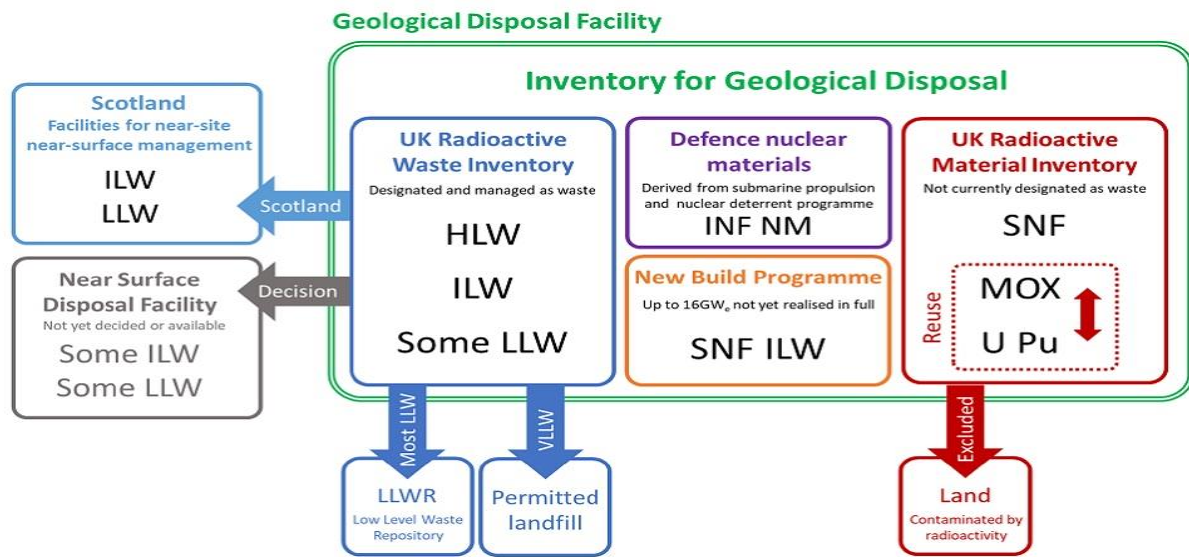


Figure 1: The Inventory for Geological Disposal

4. International situation

4.1 The **EURAD Civil Society Group**, of which Nuleaf is a member, met over three days in early October to discuss uncertainties around the site and geosphere aspects of geological disposal. The meetings, part of the UMAN (Uncertainty Management) strand of work, considered theoretical scenarios related to:

- rock faults discovered during GDF operation;
- long term climate changes (e.g. future glaciation events thousands of years in the future); and
- the discovery of valuable rare earth elements near to a GDF in the year 2150.

For each scenario the processes for addressing uncertainty, dealing with competing priorities and engaging with government and stakeholders were explored.

4.2 EURAD has also held two online webinars. These were on the **US Nuclear Waste Management and Disposal Strategy** and the **GDF siting process in Italy**, Recordings of both events are available¹³.

4.3 **Andra**, the national radioactive waste management agency for France, has launched a YouTube site containing a wide range of English language films on all

¹³ [News | Eurad \(ejp-eurad.eu\)](https://www.eurad.eu/news)

aspects of their work including the French GDF siting process. It can be found here¹⁴.

4.3 The German Government¹⁵ has announced the closure of their storage facility for radioactive waste, based in a former salt mine at **Gorleben** in Lower Saxony. The site had been proposed as a potential GDF but in 2020 the German Federal Company for Radioactive Waste Disposal (BGE) judged that Gorleben did not meet the geological criteria for such a development.

In contrast to the UK, the German process is not based on communities volunteering to come forward: rather, BGE has named 90 areas around the country as potential sites for a GDF and these are currently being assessed based on a range of criteria. The company plans to find a site by 2031 and begin emplacement of waste by 2050.

¹⁴ [Andra international - YouTube](#)

¹⁵ [Germany to shut controversial Gorleben nuclear waste facility | News | DW | 17.09.2021](#)