



CoRWM Open Plenary - 29th November 2022

Timing: 10:00 - 12:00

Chair: Nigel Thrift (CoRWM Chair) and then Derek Lacey

Members: Penny Harvey, Ray Kemp, Mark Kirkbride, Derek Lacey, Simon Webb, Clare Bond and Catherine MacKenzie,

CoRWM
Secretariat

BEIS: Dawn Armstrong, Anastasia Aidoo and Shubhnit Seera

**Guest
Speaker:** Dr Dave McCarthy (British Geological Survey)

Apologies: Claire Corkhill and Stephen Tromans

Attendees: Roy Payne, David Billing, Catherine Draper, Marion Fitzgerald, Mary Bradley, Jonathan Cook, David Brazier, Eileen McKeever, Bruce Cairns, David Moore, Deborah Naylor, Cathy Emery-Scheib, Bethany Rance, Petra Tjitske Kalshoven

Agenda:

1. Meeting open, welcome and introductory comments (Chair)

Chair's recent meetings

2. Declaration of Interests

3. Approval of Minutes from the March Open Plenary and June Special Open Plenary

4. Annual Update on Subgroup Activities and Plans

Key topics:

- a) SG 1 Working with Communities (Penny Harvey)
- b) SG 2 GDF Geology and Delivery (Mark Kirkbride)
- c) SG 3 Planning and Regulation (Ray Kemp)
- d) SG 4 Scottish Government Activities (Clare Bond)
- e) SG 5 Welsh Government Activities (no update)
- f) SG 6 Storage of Waste, Spent Fuel, and Materials (Derek Lacey)



5. Presentation

Speaker: Dr Dave McCarthy (Head of Geological Disposal of Radioactive Waste at British Geological Survey – Geological disposal of radioactive waste in the UK, the role of a geological survey)

6. Questions from the Public

7. Any Other Business

8. Next Meeting: London – March 21st 2023



Agenda item 1., Meeting open, welcome and introductory comments

1. Nigel Thrift (NT) welcomed attendees to the Open Plenary, and detailed the recent increase in CoRWM's number of visits post-pandemic, with CoRWM members visiting the Onkalo GDF in Finland, attending the IAEA General Conference in Vienna, and more.

Agenda item 2., Declaration of Interests

2. Simon Webb (SW) works for a company assisting with programme management issues, which is working on nuclear decommissioning and defence projects in Cumbria.

Agenda item 3., Approval of Minutes from the March Open Plenary and June Special Open Plenary

3. Approved.

Agenda item 4., Annual Update on Subgroup Activities and Plans

a) SG 1 Working with Communities

4. SG1 have been:
 - a. Supporting clarity of communication between BEIS and NWS and NWS and Community Partnerships/General Public.
 - b. Making comparisons between the geological disposal facility (GDF) project and other large major infrastructure projects.
 - c. Promoting the importance of social science research to NWS. SG1 finalising a document on the contribution of social sciences and humanities research to the GDF process.
 - d. Working closer with other Subgroups on a number of issues:
 - i. Joint interest with SG2 on the communication of the data obtained from the seismic surveys.
 - ii. Interest in SG6's discussions on Right-to-Left planning for major projects.
 - e. Following the progress and challenges of Community Partnerships:
 - i. Penny Harvey (PH) has visited Theddlethorpe, Mid and South Copeland.
 - ii. Allerdale and Mid Copeland have a strong membership, Theddlethorpe are growing their membership as a non-nuclear community.
 - iii. Anxiety around seismic surveys is apparent in South Copeland.



- iv. NWS needing to manage the tensions between building trust with communities and the team needing to deliver metrics on engagement continually doing survey work.
 - v. PH referred to GDF Watch and the US Department of Energy starting a series of webinars open to the public. NuLeaf is engaging with communities. CoRWM is to also keen engage but wary of potential “consultation fatigue” from the partnerships.
5. SG1 have recently met with NWS, notably discussing their approach to social media.
6. PH and NT and members of NWS visited Onkalo, hosted by POSIVA, meeting with the mayor of the area who discussed the tax benefits in place for the community compared to the community funding in place in the UK. The differences between the Finnish and UK siting processes were compared.
7. Pete Roche and PH discussed the implications of the local government reorganisation in Cumbria, with more time needed to see the extent of the change. Dave Moore detailed that there is a clear indication that the Allerdale and Copeland partnerships will continue to be supported, with issues on boundaries left to the partnerships to resolve.

b) SG 2 GDF Geology and Delivery

8. On October 28th, the Committee published two documents:
 - a. Implications of inshore siting of a geological disposal facility
 - b. Geological disposal facility (GDF): high level cost reviewBoth are on the CoRWM website.
9. The CoRWM Annual Report for 2022 is being finalised and will be published on the CoRWM website in due course.
10. SG2 have been looking into and have an interest in:
 - a. The recent seismic surveys conducted by NWS as part of the GDF programme, and the communication of the results. SG2 will look to provide an evaluation paper in future.
 - b. GDF site evaluation– how rock masses are characterised, what the product of work may look like e.g boreholes and their layouts.
 - c. Whether there is a requirement and at what stage would there need to be an Underground Research Laboratory (URL) or equivalent for the GDF programme.
 - d. Retrievability from a GDF – looking to review/update CoRWM’s 2014 commentary with an updated inventory.
 - e. Maintaining a watching brief on near surface disposal (NSD) as NDA explores its potential as well as borehole disposal.
11. SG2 continue to engage with NWS on a quarterly basis.

c) SG 3 Planning and Regulation



12. SG3 have been interacting with the wider Committee on a series of issues. CoRWM attended a workshop with NWS at Harwell which provided a useful insight into overall programme planning for a GDF and how that will be managed moving forward.
13. SG3 have had discussions with BEIS on the Energy Security Bill measures to license an inshore GDF and measures to amend nuclear decommissioning framework.
14. SG3 had meetings with the Office for Nuclear Regulation and Environment Agency to discuss how the licensing process will be managed for the GDF.
15. SG3 have opened discussions with the NWS legal team and will discuss legislative and permitting matters for a GDF in future.
16. SG3 have been forming a 2 to 3 year work programme, thinking about the topics, format and audience for the work being produced. Current topics of interest for SG3 are the GDF licensing process regarding an inshore GDF, near surface disposal and its relation to the Inventory for Geological Disposal, underground rock laboratories, and the transport of legacy waste from Sellafield to any potential GDF site.

d) SG 4 Scottish Government Activities

17. SG4 have been attending Scottish Site Stakeholder meetings. Main item of engagement with Scottish Government is the Higher Activity Waste strategy, with SG4 meeting with the Scottish Government after the Open Plenary.

e) SG 5 Welsh Government Activities

18. No update.

f) SG 6 Storage of Waste, Spent Fuel, and Materials

19. SG6 have been undertaking a study into the disposal, management, and storage of depleted natural and low enriched uranium (DNLEU).
 - a. A deeper understanding of the inventory, from both existing material and potential future material from commercial enrichment activities, will need to be developed.
 - b. SG6 agree with Government and NDA Strategy that there is a potential for reuse of some of the inventory, though a substantial part will need to be disposed of. A GDF is a suitable facility for disposal, though the large quantity of material will take up a significant section of the inventory.
 - c. Looking at the NWS' (then RWM) Generic Disposal Safety Case for a GDF which was subjected to regulatory scrutiny, there is confidence a



safety case can be made for the disposal of this material in a GDF.

Other disposal options such as reuse in the disposal of other materials, and near surface disposal, warrant further investigation.

- d. A paper on this is currently under review and will be published on the CoRWM website.
- 20. SG6 have also been working on their 3-year plan, with an eye on the NDA's updated strategy. Topics include the NDA's work on treatment and storage in light of the new First Waste Emplacement date (FWE) for the GDF.
- 21. Pete Roche and Derek Lacey (DL) discussed CoRWM's interest in advanced nuclear technologies, with CoRWM having an interest in SMR/AMR and fusion technology, and the waste considerations thereof.
- 22. Johnathan Cook and DL discussed the alternatives to GDF disposal of DNLEU, with considerations of alternatives worthwhile.

Agenda item 5. and 6., Presentation and Questions from the Public

- 23. DL introduced guest speaker, Dr Dave McCarthy (DM), Head of Geological Disposal of Radioactive Waste research at the British Geological Survey (BGS), who shared a presentation on the "".
- 24. DL and DM discussed the BGS' international collaborations, with BGS utilising their specialist expertise in a series of different projects globally.
- 25. Johnathan Cook and DM discussed the use of bentonite cement to restrict groundwater flow in an access tunnel.
- 26. Petra Tjitske Kalshoven and DM discussed the effect of activities from other projects in Lincolnshire and Cumbria on surveying, as well as how natural resources in the area impact site selection, with any areas with resources to be avoided.
- 27. Marion Fitzgerald questioned whether the National Geological Survey had ruled out Cumbria as a suitable site for a GDF, as heard from some opposition groups. DM stated that this was not his understanding. Specific segments may have been deemed unsuitable, but an area cannot be ruled out without a detailed site investigation.
- 28. Simon Webb and DM discussed the timescales involved to obtain a good geological view of a site, with DM stating how data interpretation could take a very long time with no complete level of certainty, with the best way to establish a good geological view being the construction of an underground rock laboratory. As an estimate, DM stated he cannot see the UK going any faster than the 40 years it took for Finland to complete the siting and construction of the Onkalo facility. Comprehensive seismic testing will need to be completed for the two final sites before any decisions would be made, with an underground rock laboratory in both locations helping the process massively.



Agenda item 7., Any Other Business

29. None.

Next Open Plenary: London – March 21st 2023