

CoRWM Open Plenary Minutes – 15th March 2022

Timing: 10.00-12.00

Chair: Nigel Thrift (CoRWM Chair)

Members: Clare Bond, Claire Corkhill, Penny Harvey, Ray Kemp, Mark Kirkbride,

Derek Lacey, Catherine Mackenzie, Geraldine Thomas, Stephen

Tromans and Simon Webb

Attendees: Martin Walkingshaw (LLWR) Phillip Matthews (Nuleaf), Catherine

Draper (Nuleaf), Melanie Gibbons (N/A), Eileen McKeever (NWS), Bruce Cairns (NWS), Cherry Tweed (NWS), Eva Chua (NWS), Tom Rookes (BEIS), Penny Dunbabin (BEIS), Marion Fitzgerald (Allerdale Borough Council/Allerdale Community Partnership), Brian Thomson (BEIS), Bolade Kerr (BEIS), Pete Roche (Nuclear Waste Advisory

Associates)

CoRWM Secretariat

BEIS: Mariana Ghosh and Shubhnit Seera

Agenda:

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

Chair's recent meetings

- 2. Declaration of Interests
- 3. Approval of Minutes from November 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 (Gerry Thomas)
- f) SG 6 Storage of Waste, Spent Fuel, and Materials (Derek Lacey)

5. Presentation

Speaker: Martin Walkingshaw (<u>LLWR</u>)- '<u>Thinking Differently About Radioactive</u>
<u>Waste in the UK – the Low Level Waste Repository Site and Nuclear Waste</u>
<u>Services'</u>

- 6. Questions from the public
- 7. Any other business



8. Next Meeting: 17th May 2022, London (TBC)

Close of Meeting

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

Chair's recent meetings

- 1. Nigel Thrift (NT) welcomed speaker Martin Walkingshaw (MW) and the numerous quests attending online and in-person.
- 2. NT stated that position papers on an Inshore GDF and a GDF costs will be published in the coming months.
- 3. NT discussed the difficulties in implementing a newsletter.
- 4. NT thanked Mariana Ghosh for her work with CoRWM.

Agenda item 2., Declaration of Interests

- 5. CC stated she has:
 - a. Undertaken paid consultancy under NWS.
 - b. A family member employed by NWS.
- 6. SW stated that as part of his role at Nichols Group, he has oversight on relevant staff at Sellafield:
 - a. Acting as Critical Friend to an infrastructure programme
 - b. As an interim, filling a leadership role in a site Alliance.

Agenda item 3., Approval of Minutes from November Open Plenary

7. Approved.

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

- a) SG 1 Working with Communities
- 8. Penny Harvey (PH) discussed the key focus for the subgroup supporting the Working with Communities policy. PH stated the recent activity for the subgroup revolved around a Workshop held with NWS/RWM on the 17th of February.
- 9. PH discussed the tension between the delivery and engagement team within RWM regarding the speed of the delivery of the programme.
- 10. PH commented on the dual nature of RWM in acting as a deliverer accountable to the government and policy while also being accountable to communities.



- 11. PH discussed suggestions made to RWM/NWS on obtaining comparative material from international facilities and from other parts of NWS.
- 12. PH questioned how NWS or communities withdraw from partnerships.
- 13. PH discussed outreach work undertaken by SG1 members, referring to NWS's first annual GDF conference in December 2021 and a debate hosted by the New Scientist on "The UK's nuclear waste and the geological solution" held on February 23rd, 2022. PH stated the debate was more of an information event rather than an opportunity to have a conversation.

b) SG 2 GDF Geology and Delivery

- Mark Kirkbride (MK) welcomed Clare Bond (CB) to SG2 following Neil Hyatt's departure.
- 15. MK stated SG2 received their regular update from NWS, with 4 areas of focus:
 - a. Updates on progress of GDF siting, preliminary exploration programme and preparation for geophysics
 - b. Presentation and discussion on historical and technical context of Underground Rock Laboratories (URL)
 - c. Update on package work delivery and the appointment of consultants
 - d. Offshore drilling Technological challenges, long term monitoring and maintenance.
- 16. MK discussed the status of a paper being prepared by CoRWM on constructing a GDF under the seabed, in and thanked Derek Lacey (DL) for his role in reworking the document.
- 17. MK stated that a technical note on retrievability of radioactive waste from a GDF is being drafted.
- 18. MK stated that a paper on tunnel length and construction methods for a GDF has been drafted, adding that construction of a 20km tunnel within the 22km waters zone is possible.
- 19. MK stated that the GDF costs paper is in its final stages now that the cost envelope has been issued through NWS.
- 20. MK stated that a note on URLs is being drafted, looking at Nirex and the RCF as well its overlap with Claire Corkhill's (CC) work on the GDF safety case.
- 21. MK discussed the areas of focus for 2022:
 - a. Impacts of the geological setting on the GDF design, construction, and operation
 - b. Waste package types
 - c. Safety case criteria and considerations



d. Transportation and view of safety case for moving material dependant on where the GDF is located.

c) SG 3 Planning and Regulation

- 22. Ray Kemp (RK) thanked Stephen Tromans (ST) for his role as chair and welcomed Catherine Mackenzie (CM) as a new member to SG3.
- 23. RK commented on the various interactions had, discussing:
 - a. Near-Surface Disposal with NDA
 - b. How a GDF can be defined in legislation with the BEIS policy team.
- 24. RK questioned whether an inshore GDF will require an underground rock laboratory and how this will fit into the planning, permitting and Nuclear Site License (NSL) of the process.
- 25. RK discussed how the various workstreams within CoRWM link and referred to a paper that CoRWM are preparing on the Evolving Context as a way of providing oversight.

d) SG 4 Scottish Government Activities

- 26. CB stated she attended several induction meetings with Scottish Government and the Scottish nuclear site stakeholder meeting since she joined CoRWM in January.
- 27. CB stated that SG4 will consist of her and Derek Lacey, with PH assisting on occasion.
- 28. CB stated that the Scottish government is reviewing the 2016 strategy on implementation of its higher activity waste policy.

e) SG 5 Welsh Government Activities

- 29. Gerry Thomas (GT) provided an update to recent activities and stated that:
 - a. The low-level radioactive waste exclusion policy has been approved by ministers.
 - b. The Post-Brexit Radioactive Substances Common framework agreement has been through its first round of scrutiny.

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

30. DL welcomed Stephen Tromans and Simon Webb as new members to SG6 following Neil Hyatt's departure.



31. DL provided the following update:

a. Magnox reprocessing

NDA have provided regular briefing to CoRWM on the reprocessing of magnox fuel at Sellafield. Covid restrictions and plant maintenance have resulted in a significant reduction in the rate at which the small amount of remaining fuel has reprocessed over the last 2 years and NDA have considered whether to cease reprocessing on several occasions. NDA has chosen to continue operation to minimise the amount of fuel that will remain while it is confident that the reprocessing plant can operate safely and reliably. The fuel that will remain when the plant is shut down will be stored in self shielded boxes prior to conditioning for disposal.

b. Near Surface disposal of intermediate level waste

At the beginning of this year NDA provided an update on their work on NSD which they had included in their strategy 4 package. The update helped CoRWM to understand the role that near surface disposal might play in the management of some of the less hazardous ILW. CoRWM understands that an at-surface facility offers the greatest opportunities at present and will continue to scrutinise and offer advice as the NDA work progresses.

c. Uranium

During 2021/22 we have taken a specific interest in the management of uranium. Uranium is a material which is not currently designated as waste because it has a potential for reuse, but it seems inevitable that some of the material will not have any economic value and will be declared as waste at some point in the future. CoRWM has completed a study of the inventory of depleted and low enriched uranium and the different options that have been considered for reuse and disposal. We have also begun to study the safety of the material during interim storage and in a GDF. In the coming year we plan to meet with NDA, regulators and others with a view to producing a position paper.

d. Fusion

Last year CoRWM provided advice to government on the management of waste from fusion technology. The waste inventory from a nuclear fusion power plant is very different to that from fission nuclear power plant in that it does not contain any heat generating material. The technology does however result in activated metal components which will be ILW 100 years after operations have ceased. These wastes can be managed within the existing UK framework for managing radioactive waste, and efforts can be made through R&D and material selection to minimise the quantities of ILW.



e. Other Advanced Nuclear Technologies

The UK Government also has an interest in other advanced nuclear technologies, referred to as advanced modular reactors, CoRWM will begin to study the implications of these technologies for radioactive waste management.

- 32. Pete Roche (PR) asked whether there has been any work on SMR waste inventory. DL stated SMRs will produce a similar waste profile seen in existing reactors.
- 33. Melanie Gibbons (MG) asked whether there will be an impact from the implementation of NSD upon retrievability. DL stated the waste envisaged for NSD consists of short lived, lightly contaminated ILW which is unattractive and could go into a GDF but does not require that level of shielding.

Agenda item 5., Presentation

Speaker: Martin Walkingshaw (<u>LLWR</u>)- '<u>Thinking Differently About Radioactive</u>
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- 34. NT introduced the guest speaker, MW, who shared his presentation.
- 35. ST and MW discussed the features that contributed to the low cost for the Pu project that can be learned from as well as and whether there is engagement with their commercial customer base to encouraging them to minimise waste.
- 36. MK and MW discussed the impact local government reorganisation in Cumbria might have upon developments on the site.
- 37. PH and MW discussed how confidence in LLWR has been fostered in communities, with MW stressing the importance of transparency, visibility and accessibility.
- 38. Penny Dunbabin (PD) asked about any technical challenges and any potential future technologies. MW discussed challenges in the nature of the site, with a differing geology than expected requiring reworking of models, degraded munitions, live wires and other hazardous materials in a brownfield site. MW also discussed investigations into waste packages.
- 39. Marion Fitzgerald (MF) discussed comments made at a recent Nuleaf AGM surrounding confusion from the merge into Nuclear Waste Services happening alongside the launch of a new community partnership with both LLWR and the partnership having their own community investment funding. MW discussed efforts from LLWR/NWS in engaging with the public on the changes.
- 40. CC asked whether there has been any assessment of the carbon footprint on the cement used. MW discussed the importance in contributing to the NDA's net-zero ambitions, engineering standards of implementing low carbon cement,

CoRWM Doc. 3821



bringing in electric vehicles, energy efficiency of buildings but stressed that building new surface stores is the biggest carbon contributor and should be avoided.

41. PR asked about the decision-making process and timetable from the UK Government on going forward with NSD. MW stated the new policy framework is being prepared for consultation and will not be out until May with the response likely next year. The consultation on the new policy framework will include proposals on the risk-informed approach to radioactive waste management and proposals that waste producers consider the waste hierarchy for higher activity waste as well as low level waste.

Agenda item 6., Questions from the public

42. None

Agenda item 7., Any other business

43. None

Next Meeting: 17th May 2022, London (TBC)