NOTE OF THE MEETING BETWEEN COMMITTEE ON RADIOACTIVE WASTE MANAGEMENT (CORWM) AND THE RADIOACTIVE WASTE MANAGEMENT DIRECTORATE (RWMD) OF THE NUCLEAR DECOMMISIONING AUTHORITY (NDA)

7 NOVEMBER 2013

Attendees

CORWM: Laurence Williams (Chair), Francis Livens (Deputy Chair), Lynda Warren, Stephen Newson, John Rennilson, Paul Davis, Simon Harley, Rebecca Lunn, Helen Peters, Gregg Butler, Janet Wilson, Laura Butchins (secretariat),

Dialling In: Brian Clark

RWMD: Bruce McKirdy, Alun Ellis, Peter Lock, Andrew Craze, Elizabeth Atherton, Chris Finch, Andy Parkes, Jon Martin, Steve Barlow (different members of RWMD attended at different times depending on the topic being discussed)

Aims of the meeting

- 1. The aim of the meeting was to discuss RWMD's:
 - Role, organisation, capability and key priorities
 - Generic designs and safety cases and their planned evolution through the siting process
 - Work with waste producers and NDA on higher activity waste management
 - Work to expand the knowledge base to support implementation of geological disposal.

RWMD ran through a series of slides to enable the discussion.

Geological Disposal Facility (GDF) Siting Process

Awareness raising

- 2. There was debate around who should lead during the awareness raising phase, noting the Department of Energy and Climate Change (DECC) has a role to explain and promote the policy and must show strong support for it. The regulators also need to be appropriately positioned so as not to undermine their independence, but CoRWM felt they need to be much more visible than they are now.
- 3. CoRWM felt there needs to be careful consideration given to how approaches from individuals, groups or communities would be handled during this period to avoid, e.g. accusations of 'secret' meetings during this 'national' phase. CoRWM felt there needed to be clear thought about how to manage communities that want personal engagement early in the awareness raising stage.
- 4. CoRWM outlined that a key aspect of the siting process is gathering information to make a safety case. There was debate concerning the provision of information relating to geology and safety. CoRWM questioned the value of providing regional geological summaries. CoRWM noted this could imply geology is more important than safety whereas the message should be safety first, to which geology contributes.
- 5. CoRWM expressed concerns about 3D models of the geology and how to communicate the uncertainty associated with those models. CoRWM believe that it is not appropriate to

- develop 3D models at this stage and felt that the pictures without a detailed explanation of the uncertainty and how the models were developed would not be beneficial to communities.
- 6. CoRWM feel that the name geological disposal puts too much focus on geology and it may be better to change it to a deep disposal facility, although it was agreed that it would be too late to make the change at that time.
- 7. CoRWM do not think there should be phases in the siting process. Communities would have the right to withdraw throughout the process and therefore there is no need for phases which would create decision points.
- 8. CoRWM outlined that they did not think the Government should say that there will be one geological disposal facility, but that it was important to recognise that it will be the safety case that will determine the capacity of the site in terms of inventory and that some sites may only be able to accommodate some parts of the inventory.

Learning Phase

- 9. CoRWM asked for more clarity about what is meant by 'reasonable prospects' and urged RWMD not to overstate what could be done given the potential lack of geological information at this stage. There was debate about whether the geological analysis was closer to an unsuitability test, as per the previous British Geological Survey (BGS) screening or whether it was going further.
- 10. It was also questioned whether a statement of 'reasonable prospects' would be related to inventory, recognising that some sites may not be able to take the whole inventory.
- 11. CoRWM thought that caution should be used in relation to how accurately socioeconomic impacts can be established, noting that local views must be sought.

Focusing

- 12. There were different interpretations within the Committee of the diagram in the Consultation Document concerning the intended timing of boreholes, e.g. were they all drilled before the end of the focusing phase. There was discussion of whether further boreholes might be drilled from surface after underground construction activities had started.
- 13. There was also discussion around whether there could be an early borehole to just provide basic geological information. The discussion continued around whether such a borehole would require planning permission through the Nationally Significant Infrastructure Projects' (NSIP) regime and permitting as a radioactive substances activity.
- 14. Allowing a RoW after regulatory permissions had been granted was questioned by CoRWM as it could be seen to undermine confidence in the regulatory regime, e.g. if withdrawal was linked to safety.

RWMD structure and governance

15. CoRWM were interested in the governance arrangements for RWMD and the Managing Radioactive Waste Safely (MRWS) project and would like to discuss this further. RWMD outlined how the current governance includes oversight by the NDA and DECC.

CoRWM doc. Note of the meeting between CoRWM and RWMD November 2013

- 16. CoRWM were pleased that RWMD were focusing on stakeholder engagement and communications and that the director role was for engagement and communications. CoRWM believe that stakeholder engagement is very important and needs to be at the heart of the MRWS process.
- 17. CORWM asked for a meeting to discuss the engagement and communications plans and the social science research RWMD is involved in. CoRWM do not want to be referred to as stakeholders because of their independent scrutiny role.

Action: organise a meeting on stakeholder engagement, communications and social science research.

Action: provide CoRWM with a note on the social science research RWMD has been involved in.

18. CoRWM asked for more information about the roles of the RWMD directors and the management board.

Action: RWMD to send a copy of the RWMD organisation chart and terms of reference of the Management Board and job descriptions of the RWMD Executive.

Packaging

- 19. CoRWM asked whether the current Letter of Compliance process is very conservative because there is no current site for a disposal facility. RWMD outlined that the assessments are not excessively conservative but they bound many different geological environments and disposal concepts.
- 20. RWMD outlined that Nirex looked at the situation when they were investigating Sellafield and compared what requirements would be needed for a generic disposal facility and a site specific one and found there were not many differences for intermediate level waste (ILW). The assumption at the moment is that a disposal facility could be in any of the three generic geological environments that RWMD has identified.
- 21. CoRWM asked about the situation with regard to Scottish waste and RWMD outlined that the Scottish Environment Protection Agency (SEPA) and the Scottish Government have agreed that all wastes in Scotland should still be packaged in line with geological disposal because it has similar requirements to ongoing storage. However, post closure issues and anything to do with segregation are highlighted in the assessments.
- 22. CoRWM asked who considers the cost implications of containers and who decides on the relationship between the cost of the containers and RWMD's specifications. RWMD outlined this is something that the NDA and Site Licence Companies (SLCs) considered. RWMD sets the requirements for packaging and focuses on the implications for geological disposal whereas the NDA looks across the whole estate and the whole lifecycle of the wastes to consider costs.
- 23. RWMD outlined that they are doing work on upstream optioneering to identify cheaper or more efficient packaging proposals across the estate. CoRWM outlined that they were very

pleased with this work that RWMD was doing on upstream optioneering because it is building trust between the waste producers and RWMD.

- 24. CoRWM outlined that RWMD is the only organisation looking at the long term and across all waste streams including those outside the NDA. RWMD outlined how new build wastes are assessed. CoRWM raised a concern that there is a risk that NDA will just focus on the short term and that there could be a situation where you end up with bespoke packages for each particular waste stream that would cause problems for a GDF. RWMD outlined that that pressure has not been something that has been experienced to date.
- 25. RWMD outlined how it has been looking at the Low Level Waste Repository model for a national strategy and policy but there is no desire to follow this model for higher activity wastes within government at the moment. Therefore RWMD is focusing on growing the upstream optioneering work and developing solutions.

Implementing Geological Disposal

- 26. RWMD outlined the licensing process for a geological disposal facility and that there would be an initial site evaluation and environmental permit application to undertake the first borehole that will be needed as part of the site investigation work. The assessments will use existing geological information about the area and the information gathered from the non intrusive investigations in the area and RWMD will provide the Office for Nuclear Regulation (ONR) with a preliminary safety report at this stage as well.
- 27. RWMD outlined that the borehole investigations will be done in stages and that the permissions would be requested in stages and that the designs and safety case would be updated as the investigations developed and this would include work in the laboratory. CoRWM asked for a diagram showing this.

Action: RWMD to send the diagram of the stages in the site investigation programme.

- 28. When RWMD felt enough work had been done from the surface, because of decreases in cost effectiveness or because of potential damage to the site, then that would signal the end of the focusing phase and RWMD would look to identify the preferred site for undertaking construction. At that stage a single safety report would be produced.
- 29. CoRWM raised an issue about terminology and that where possible RWMD should use established terminology when talking about the safety case, but use different terminology if it is referring to something that is different to the assessments used for existing sites or where it would not be helpful.
- 30. CoRWM raised the issue about how the disposal facility would be de-licensed and how you would demonstrate that there was no danger at that stage. CoRWM raised concerns that the geological disposal facility still needs to be prescribed as a nuclear activity that needs licensing.
- 31. RWMD outlined that construction of the facility will also be staged and that the permissions will be staged. RWMD outlined that there will be further investigations underground to confirm what was understood from the surface investigations and to update the safety case.

- 32. The permissions will be sought for the upper boundary of the waste that could be put into the facility so an envelope approach will be used when applying for the permissions and the planning permissions. Therefore, any modifications within that envelope will only be a change of scope rather than a whole new application.
- 33. CoRWM pointed out that the government needs to be careful that the National Policy Statement does not define the inventory in great detail because otherwise if the inventory changes this will be a material change to the policy and that would need to be consulted on again.

Design

- 34. CoRWM asked why there was a 500m separation between the two different disposal concepts. RWMD pointed out that this is an assumption and it is felt to be sufficiently far apart so that there is no significant interaction between the two concepts. However, once sites are being investigated the separation distance will depend on the nature of the rock and the groundwater flow at a specific site.
- 35. RWMD has looked at different scenarios to develop its assumptions and these are felt to be reasonable assumptions at this stage in the process and they will be tested and refined as the assessment process progresses and as information is obtained. RWMD has tested the sensitivity of its assumptions and feels that they are reasonable at this point in time. CoRWM felt that there was a need to explain why the assumptions have been made and what underpins them.
- 36. CoRWM wanted to understand how the safety case and design develop in parallel and thought it would help to see this in a diagram.

Action: RWMD to send a diagram showing how the safety case and design develop in parallel.

Safety Case

- 37. CoRWM felt it was important to look at the safety case functions in the different concept designs and the different environments for example bentonite depends on the water chemistry and the erosion rate and RWMD could outline when it is possible to make bentonite thicker and therefore cope with changes in those parameters and when this is not feasible.
- 38. RWMD outlined that it was developing a safety narrative that would outline what the barriers are in the different geological concepts and how they work in the different concepts. The aim of RWMD's work is to identify what is important in demonstrating safety for the different concepts so that when we move to site characterisation we can gather information and evaluate the aspects of the site that we know are important. The site characterisation programme is needs based and will focus on obtaining the information on a specific site that will then feed into the safety case.

Action: Provide CoRWM with a link to the Status reports.

39. CoRWM were keen that RWMD made the safety case the key topic of discussion and put geology within the context of the safety case to decrease the importance of the geology and

make it part of the bigger picture. Currently people identify safety with geology and therefore use geology as a shorthand for safety.

- 40. CoRWM again raised their concerns about putting out geological information about the UK as a whole when there is limited detailed information across the UK at depth.
- 41. CoRWM asked about the processes that would be used to determine the feasibility of sites and to gather the information to feed into the safety case. RWMD outlined that they had done work in preparation for the old MRWS stage 4 that could be applied to the focusing phase of the new proposed process. CoRWM were keen to find out more information about that and asked for a meeting to discuss it.

Action: organise a meeting to discuss the implementation of the siting process.

42. CoRWM asked when they would receive an update on the how RWMD are addressing their comments on the generic Design System Safety Case (DSSC).

Action: RWMD to provide an update on how it is addressing CoRWM's comments on the generic DSSC.

- 43. CoRWM outlined the benefits of the SKB (Swedish Nuclear Fuel and Waste Management Company) Technical Plan as a mechanism for increasing public confidence because it gives visibility of the feedback from the regulators to SKB and also provides stakeholders with the opportunity to feed in issues to the regulator and also SKB.
- 44. The secretariat noted that a catch up meeting needed to be arranged between Laurence Williams and Bruce McKirdy.

Action: set up a meeting between Laurence Williams and Bruce McKirdy.

- 45. The secretariat asked when CoRWM would receive an update on the RWMD issues management process.
- 46. **Action:** RWMD to provide CoRWM with information about when they can expect and update on the issues management process.
- 47. CoRWM asked about the work done on partnership working and community benefits that underpinned the White Paper.

Action: RWMD to send CoRWM the paper on UK experience of partnership working.

MEETING CLOSE