



Committee on Radioactive Waste Management

CoRWM's Response to Radioactive Waste Management Limited's Consultation: *Site Evaluation – How we will evaluate sites (England)*, Submitted March 2019.

Part 1 – Information about CoRWM

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| Company Name or Organisation (if applicable) | Committee on Radioactive Waste Management (CoWRM) |
| <p>If you are responding on behalf of an organisation or interest group how many members do you have and how did you obtain the views of your members:</p> <p>Current membership is 10 inclusive of chairman.</p> <p>CoRWM was represented at all RWMs Site Evaluation events held in England and Wales in February and March 2019. A draft of his response has been prepared by the chair of CoRWMs sub-group 2 and circulated to all members for comment and addition prior to discussion at our plenary meeting in London on 20th March. A final draft was circulated to all members following final revision taking into consideration the discussion at this meeting for any final comments prior to submission.</p> | |

Part 2 – CoRWM’s Comments

Question 1:

Are there any other sources of high level Requirements other than Siting Process, National Policy Statement and Legal Requirements identified that you think should be reflected in the Site Evaluation and why?

No additional high level requirements identified by the committee.

Question 2:

Do you agree with the Siting Factors we have identified? Are there any other Siting Factors that should be included and why?

Safety – yes we agree with these factors.

Community - yes we agree with these factors.

Environment - yes we agree with these factors. There is perhaps a need to explicitly include human health as a factor here.

Engineering Feasibility - yes we agree with these factors. There is a need to bear in mind that if cost is not a consideration then a GDF could be engineered to meet safety requirements in many rock types/locations as long as a site can be characterised and the Safety Case made.

Transport - yes we agree with these factors. Cost of transport between current locations at which waste is stored and the site of a GDF will be an element of this.

Cost – We are not sure that cost is a specific factor. It is a major part of engineering feasibility and a significant consideration in transport as a result of which there is a risk of ‘double accounting’ this factor. There is a need to ensure that any desire to keep costs down does not compromise any of the other factors or the GDF as a whole.

Question 3:

Do you agree with the Evaluation Considerations we have identified? Are there any other Evaluation Considerations that should be included and why?

Safety

Safety Case requirements – Surely there is a need to be able to respond to all requirements that impact on the Safety Case and not just the high level management ones?

Construction safety – There is not only a need to design and build a GDF to an appropriate Safety Case but this needs to be done so that it meets or exceeds all relevant legislation. Construction is likely to be the most hazardous part of building and operating a GDF and it is essential that all risks are minimised. It would be useful to be explicit about this here.

Operation safety – Likewise operations need to meet all relevant legislation.

Post-closure safety – The process of GDF closure is surely part of the operational phase of a GDF. This consideration should be that post closure the performance of a GDF is predicted to meet, or exceed, the Safety Case.

Community

These are important considerations for the potential host community and would benefit from further unpacking to reflect their importance when compared to, for example, those included under Engineering feasibility.

Community wellbeing – agreed.

Host community vision – This is an important element and perhaps merits further explanation.

Environment

Environmental impact – agreed.

Protected habitats and species – agreed.

We think that the environmental components are less thoroughly covered that they could be. While we realise that the end of (NI/IED) licensing/handover discussions will inevitably involve addressing environmental aspects we wonder if some form of cross-reference to the “Interim End State” approach for “conventional” nuclear sites and their restoration would be appropriate in the SE document. This would include the need for an environment transition plan etc and would address the need for site/headworks - as well as deep facility - management to ensure any longer term environmental permitting or simple compliance assessment and achievement demonstration was in place. Anticipating the nature and levels of reassurance required at end state from this point is obviously challenging but the best practice standards and expectations of the time should be met and/or exceeded and reviewed in the context of the original and revised operating licence, as a target.

Given that the surface and underground elements of a GDF may be many kilometres apart it would be helpful to state this fact here and that sub-surface activities at depth are unlikely to have any impact on surface habitats during operations and, if the GDF is performing as expected, post closure.

Engineering feasibility

Sustainable design – agreed.

Constructability – agreed.

Security – agreed. Given the importance of security this aspect should be emphasized more.

Safeguards – agreed.

Waste conditioning and packaging – agreed. Would re-packaging in some way be considered in this case if needed?

Inventory – agreed. There is a need to be explicit as far as practicable as to what inventory a GDF

will eventually contain.

Retrievability – agreed.

Transport

Transport safety – agreed.

Transport security – agreed.

Transport impact – agreed. There are circular arguments here! The avoidance of transport implies that a GDF will be built where the waste currently resides. Moving waste is likely to be considered by the communities along transport routes to be a negative impact on their environment (in the wider context) and one for which there are no benefits for them while both the GDF host and existing storage facility communities are likely to get tangible benefits. CoRWM has produced a position paper on Transport considerations (<https://www.gov.uk/government/publications/transport-considerations-for-radioactive-materials-corwm-position-paper>) which covers some of the transport related issues.

Cost

Construction costs – agreed but with the proviso that costs should not in any way compromise the safety of a GDF or the process of finding a host community.

Lifetime costs – agreed. The wider economic considerations should be included so as to allow for such things as the costs of long term storage to be considered.

Schedule of waste receipt – agreed. Overall waste shipments over the full lifetime of a GDF will be modest but it is important that their shipment is managed in such a way as to meet the needs of all relevant communities including those along transport routes. Some discussion on the practicalities of how waste shipments will be undertaken could be included here, whether by rail, road, sea etc. or a combination of these though we realise that the actual options employed will be a site specific consideration.

Question 4:

Is there anything else that you think we should consider in our site evaluations and why?

While it is perhaps premature to provide details of how sites will be selected from those that come forward for consideration it would be useful to provide some information on how sites in different areas and with different potential host rock geologies etc. will be differentiated in order to identify those to be taken forward. Consideration of how the information may be 'weighted' to help this process (e.g. are all factors equal, do some have more influence than others etc.) would also be helpful in allowing potential communities to understand how they will be judged against each other. Similarly, some commentary on the number of sites that will be considered at each part of the process and at what points these will be compared with a view to reducing the number of sites moving through the process would be beneficial.

Communities will come forward when they are ready to do so and this is likely to mean that they will

enter the process at different times and have local factors that will determine the rate at which they are willing to progress through the process once they have engaged in it. It is important that some information on how this will be managed is given so that a potential host community is not deterred by entering the process later than others if they think that they cannot catch up or will be excluded from further consideration before they are in a position to make an informed decision on participation. If this happens there is a risk that a good site in a willing community may be excluded by default.

While the role of geology is not an important part of the Site Evaluation process it is important for a GDF and it would be helpful if a summary could be provided here. Similarly it may be helpful to have some more background information on the process as a whole for finding a GDF such as current Government policy, Working With Communities and, for example, how a potential GDF site would be progressively evaluated (desk-based studies, non-intrusive investigations, borehole drilling etc).

The language used in the Site Evaluation document is very technical and consideration should be given to 'humanising' it to aid understanding, make it user friendly and to encourage effective public engagement. Additionally, benchmarking construction of a GDF against other nuclear facilities, similar projects elsewhere in the world and major infrastructure projects in other sectors would also be helpful.