

**Question 1:** To what extent do you think our proposed approach to providing national-scale existing information about geology relevant to long-term safety is appropriate? Please give your reasons.

It is appropriate but only because that is the way that the government - for better or worse - has framed the approach to site selection. That is not to say that it is necessarily the most useful or productive approach. While recognizing that RWM's hands are tied in this respect, it needs to be said that, worldwide, it is socio-political issues, not geological properties, that are the show-stoppers for geological disposal. Of course, those that oppose geological disposal will cite uncertainties over long-term safety as the reason for their opposition but this is mostly a fig leaf that masks the real reasons: Nimbyism, contrariness, opposition to nuclear power, professional jealousy etc. No matter how good the site is in geological terms, uncertainties will always remain and those that oppose the siting and construction of a GDF, whatever their reasons, will try to exploit these uncertainties to their advantage. Well you would, wouldn't you?

**Question 2:** To what extent do you think that the proposed national information sources are appropriate and sufficient for this exercise? Please give your reasons.

Geology was invented as a science in the UK and it has been the subject of systematic scientific study here for more than 200 years. BGS was the first National Geological Survey to be created and it still ranks with the best. If we do not have the information needed to support a site selection process, then nobody has. Of course, some people will subscribe to the latter view - that nobody has adequate information. Such arguments are easily defeated.

**Question 3:** To what extent do you agree or disagree with the proposed form of the outputs from geological screening? What additional outputs would you find useful?

The outputs are well organized and presented but the linkage to long-term safety needs to be made in the text, not an Appendix (in the Bristol workshop my group missed this completely). Care will be needed to prevent certain geological features (eg past glaciations, presence of folded structures) segueing into exclusion factors for siting. An obvious omission is the potential for exploitation of shale gas reserves

**Question 4:** Do you have any other views on the matters presented in the draft Guidance?

1. The use of the word "screening" is potentially misleading because it gives the impression (to me at least) that RWM is trying to find a needle in a haystack - the very small number of sites in the country that would be suitable for hosting a GDF. People need to be aware that, prima facie, most of the country could be suitable. 2. More information is needed to explain the concept of long-term safety. 3. There is no clear correspondence between Table 1 and Table 2 - are they supposed to be related? It would be helpful if they were. Perhaps this is how the link between rock properties and long-term safety (see Q3) could be made. 4. More needs to be made of the independent status and reputation of BGS and IRP. The intention (if it is the case) to subject the matter to international independent peer review could be usefully mentioned. Some explanation of the role of the regulatory authorities would also be helpful. 5. Mention of uncertainties is mostly in the context of geological properties and the need to

resolve these as the programme moves forward. What needs to be said is that there will always be unresolved uncertainties. The "trick" is to identify those that have an impact on GDF constructability or long-term safety and then to reduce them by further investigation to a level where the uncertainty is inconsequential. One should acknowledge that there will be sites that could safely host a GDF but that, because of their geological or hydrogeological complexity, it would not be technically and/or economically possible to demonstrate this with adequate confidence.

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Do you agree to your responses to this consultation being published?

Yes