

The Geological Society

Question	Response
Letter	<p>Thank you for inviting the Geological Society to comment on the West Cumbria MRWS Partnership's public consultation on 'Geological disposal of radioactive waste in West Cumbria?'. As the consultation is aimed principally at local individuals, communities and stakeholders, and many of the areas covered are outside our area of expertise, we did not think it appropriate for the Geological Society to make a full formal response. Instead, we felt it was more likely to be helpful to you if I wrote as I am now, setting out the Geological Society's position on some matters of geoscience in the process, and making some observations about the role we see for ourselves now and in the future.</p> <p>The Society keeps an active watch on the way in which geoscience is used in the MRWS process, and on deliberations and decision-making about how it is to be used in future stages. We regularly respond in detail to consultations from DECC, NDA, parliamentary committees and others, and meet with representatives of CoRWM and NDA to discuss these matters. Overall, we are content with the current place of geoscience in the process, the approach which has been taken to geological work thus far, and its integration with other factors and inputs.</p> <p>But we will make (and have made) critical comments where we feel this is warranted. Our experience is that when we make such comments, we are listened to, and our comments are taken on board. We fiercely defend our independence and authority, and this is also highly valued by those who consult with us. An example is DECC's 2011 consultation on plans for phase 4 of the MRWS process (Desk-based Identification and Assessment of Potential Candidate Sites for Geological Disposal). We were concerned that the type of geoscientific work which will be required at that stage, and the geological factors which ought to be considered, were not sufficiently well-defined in the document. As a result of our comments, we have since had detailed discussions with NDA to understand better their plans in this area, to provide help with strengthening them, and to ensure that these are more effectively communicated in future public documents. We would be happy to supply you with consultation responses and other documents which we have generated to date, and to discuss with you any of the issues we have raised in them.</p> <p>The Society is also involved in developing and delivering the R&D agenda, as well as keeping the wider geoscience community informed about the MRWS process, for instance through convening conferences and meetings for NDA, alone or with other societies. And we help to communicate relevant geoscience to non-specialists, such as through our October 2008 meeting 'The Geological Disposal of Radioactive Waste: How geologists understand the Earth beneath our feet' (see resources at www.geolsoc.org.uk/geological_disposal), which was attended by local authority representatives from West Cumbria.</p> <p>We do not see geoscience inputs to the process as being 'in competition' with other scientific and technical inputs, social and ethical considerations, and public and stakeholder engagement (PSE). Weighting and integrating these factors is not a zero-sum game. Rather, we regard timely deployment of appropriate high-quality geoscience and its communication to a variety of audiences as essential to ensuring that PSE and other inputs are meaningful and effective, and as a vital part of the 'tool kit' for building public and stakeholder confidence in decision-making. The Geological Society is committed to continuing to play its part in monitoring the place of geoscience in the process, and communicating the science to others. We hope that this strengthens the Partnership's confidence that the geological work done so far is sufficient and appropriate; and that future geological work will be capable of supporting effective deliberation and decision-making should the Partnership decide to enter the siting process.</p> <p>The Society agrees with the approach and criteria set out in the consultation document regarding geoscience, for the purposes of deciding whether</p>

to proceed with the process. And we agree with the Partnership's assessment of the integrity of the BGS report, following its iteration in response to the feedback from other geoscientists who have been involved in the process. In particular, the Partnership is correct in asserting that the consensus in the geoscience community is that the whole of West Cumbria cannot be ruled out at this stage on geological grounds. In light of the comments above, we are as confident as we can be at this time that, should the entire area in fact turn out to be unsuitable, the use of geoscience in the MRWS process in future will be robust enough to reveal this in a timely manner.

Geologists are comfortable and confident in dealing with uncertainty, both in terms of inadequacy or incompleteness of data, or the conceptual and structural interpretation of those data – but we recognise that the nature of this uncertainty can be difficult for non-specialists to understand, and that this can undermine confidence in situations where important decisions have to be made with a high level of public and stakeholder confidence. We are currently working with the NDA to ensure that geological uncertainty in the process is dealt with appropriately, and that public and stakeholder concerns about such uncertainty are addressed. There may be lessons to be learned from experience overseas, such as Sweden where a major project to identify and constrain a geological uncertainty is getting underway, as part of the regulator's review of SKB's licence applications.

Geoscience will also be key to constructing a rigorous safety case, and to effective planning and regulation. Insofar as they relate to our geoscience expertise, we are content with the approach the Partnership has taken to these issues, as well as to the NDA R&D programme, and with the assessment it has made at this stage that its criteria in these areas have been met.

Please do not hesitate to let me know if you wish to discuss any of these matters further, or if the Society can help in other ways as the Partnership decides whether to enter the siting process.