



Department
of Energy &
Climate Change

Call for Evidence

Managing Radioactive Waste Safely: Review of the Siting Process for a Geological Disposal Facility

Response form

13 May 2013

Call for Evidence

Please use this form to answer questions on the Call for Evidence on Managing Radioactive Waste Safely: Review of the Siting Process for a Geological Disposal Facility.

The closing date for the submission of responses is **10 June 2013**.

Responses can be returned by email (preferable) or post.

Email address: radioactivewaste@decc.qsi.gov.uk

Or by post to: The Managing Radioactive Waste Safely team
Department of Energy and Climate Change
55 Whitehall
London
SW1A 2EY

In order to help us analyse responses, please provide details of your organisation.

When the call for evidence ends, we may publish or make public the evidence submitted. Also, members of the public may ask for a copy of responses under freedom of information legislation.

If you do not want your response - including your name, contact details and any other personal information – to be publicly available, please say so clearly in writing when you send your response to the call for evidence. Please note, if your computer automatically includes a confidentiality disclaimer, that will not count as a confidentiality request.

Please explain why you need to keep details confidential. We will take your reasons into account if someone asks for this information under freedom of information legislation. But, because of the law, we cannot promise that we will always be able to keep those details confidential.

The responses to this Call for Evidence will inform a public consultation that will follow in the autumn.

We would like to keep stakeholders who are interested in the MRWS process up to date on developments. If you would like to be kept up to date please sign up at the end of the form.

Introduction

1. The UK Government's policy for the long-term management of higher-activity radioactive waste is geological disposal¹. In 2008 the Managing Radioactive Waste Safely (MRWS) White Paper² was published which outlined a framework for implementing geological disposal based on the principles of voluntarism and partnership.
2. Three local authorities formally expressed an interest in the MRWS programme: Copeland and Allerdale Borough Councils, and Cumbria County Council. In January 2013, the three local authorities voted on whether to proceed to stage 4 of the process. The two boroughs voted in favour, but the county voted against. The Government had in 2011 given a specific undertaking that the existing site-selection process would only continue in west Cumbria if there was agreement at both borough and county level. The county's decision therefore ended the existing site selection process in west Cumbria.
3. Shepway District Council in Kent had also taken soundings from local residents, but subsequently decided against making a formal expression of interest in the current MRWS process.
4. The Government remains firmly committed to geological disposal as the right policy for the long-term safe and secure management of higher-activity radioactive waste. The Government also continues to hold the view that the best means of selecting a site for a geological disposal facility (GDF) is an approach based on voluntarism and partnership.
5. Evidence from abroad shows that this approach can work, with similar waste disposal programmes based on these key principles making good progress in countries like Canada, Finland, France and Sweden.
6. The fact that two local authorities in west Cumbria voted in favour of continuing the search for a potential site for a GDF demonstrates that communities recognise the substantial benefits that are associated with hosting such a facility – both in terms of job creation and the wider benefits associated with its development.

Purpose of the call for evidence

7. In line with the Secretary of State's written Ministerial statement of 31 January 2013³, Government has been considering what lessons can be learned from the experiences of the MRWS programme in west Cumbria and elsewhere. We are now inviting views on the

¹ Radioactive waste disposal is a devolved matter. The Scottish Government has a separate policy and supports long-term interim storage and an on-going programme of research and development. The Welsh Government has reserved its position on geological disposal of radioactive waste while continuing to play an active part in the MRWS process. The Department of the Environment in Northern Ireland supports the MRWS programme.

² Managing Radioactive Waste Safely: A Framework for Implementing Geological Disposal
<https://www.gov.uk/government/publications/managing-radioactive-waste-safely-a-framework-for-implementing-geological-disposal>

³ See <https://www.gov.uk/government/speeches/written-ministerial-statement-by-edward-davey-on-the-management-of-radioactive-waste>

site selection aspects of the ongoing MRWS programme in this call for evidence, particularly from those who have been engaged in (or have been interested observers of) the MRWS process to date. The responses to this call for evidence will inform a consultation that will follow later in the year.

Background

8. Higher-activity radioactive wastes are produced as a result of the generation of electricity in nuclear power stations, from the associated production and processing of the nuclear fuel, from the use of radioactive materials in industry, medicine and research, and from military nuclear programmes.
9. As one of the pioneers of nuclear technology, the UK has accumulated a substantial legacy of higher activity radioactive materials. Some of it has already been processed and placed in safe and secure interim storage on nuclear sites. However, most will only become waste over the next century or so as existing facilities reach the end of their lifetime and are decommissioned and cleaned up safely and securely.
10. These higher-activity wastes can remain radioactive, and thus potentially harmful, for hundreds of thousands of years. Modern, safe and secure interim storage can contain all this material – but this method of storage requires on-going human intervention to monitor the material and to ensure that it does not pose any risk to human or environmental health. While the Government believes that safe and secure interim storage is an effective method of managing waste in the short to medium term, the Government is committed to delivering a permanent disposal solution.
11. In October 2006, following recommendations made by the independent Committee on Radioactive Waste Management, the Government announced its policy of geological disposal, preceded by safe and secure interim storage. The Government subsequently announced that it would pursue a policy of geological disposal with site selection on voluntarism and partnership. This remains Government policy.

Geological disposal

12. Geological disposal involves isolating radioactive waste in an engineered facility deep inside a suitable rock formation to ensure that no harmful quantities of radioactivity ever reach the surface environment. It is a multi-barrier approach, based on placing packaged wastes in engineered tunnels at a depth of between 200 and 1000m underground, protected from disruption by man-made or natural events.
13. Geological disposal is internationally recognised as the preferred approach for the long-term management of higher-activity radioactive waste. It provides a long-term, safe solution to radioactive waste management that does not depend on on-going human intervention.

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Room M07
55 Whitehall
London
SW1A 2EY

Name	REDACTEDREDACTEDREADCTEDRE DACTEDREDACTEDREDACTEDREDA CTEDREDACTEDREDACTEDREDACT EDREDACTEDREDACTEDREDACTED
Organisation / Company	Galson Sciences Ltd
Organisation Size (no. of employees)	
Organisation Type	REDACTEDREDACTED
Job Title	REDACTEDREDACTED
Department	N/A
Address	REDACTEDREDACTEDREDACTEDRE DACTEDREDACTEDREDACTEDREDA CTEDREDACTEDREDACTEDREDACT EDREDACTEDREDACTEDREDACTED
Email	REDACTEDREDACTEDREDACTED
Telephone	REDACTEDREDACTED
Fax	REDACTEDREDACTED

Would you like to be kept informed of developments with the MRWS programme?	Yes
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Would you like your response to be kept confidential? If yes please give a reason

No

The Government is interested in your views on the geological disposal facility site selection process outlined in the 2008 Managing Radioactive Waste Safely (MRWS) White Paper. To assist us you may wish to consider the following issues in your response:

- What aspects of the site selection process in the MRWS White Paper do you think could be improved and how?
- What do you think could be done to attract communities into the MRWS site selection process?
- What information do you think would help communities engage with the MRWS site selection process?

What aspects of the site selection process in the MRWS White Paper do you think could be improved and how?

One of the main issues that surfaced during the latter stages of the process in Cumbria was the suitability or otherwise of the geology in the area. This should not have been so important given the results of the BGS survey, so why was it? In our opinion the question of identifying potentially suitable geology should have been addressed earlier in the process, in keeping with much overseas experience. If a high-level screening process was carried out prior to the call for communities to come forward, the issue should have a much lower profile. However, in order to do this successfully, it will be necessary to explain the screening criteria in a clearer way, and to involve relevant stakeholders in their application. Screening criteria should not, of course, be solely geology based, and should include a range of socio-economic factors as well, again in keeping with international experience and guidance, as well as on the required waste transport distances, which depend on where the waste is currently situated. The balance between optimum geology and optimum location should be more clearly recognised. The criteria should be based on internationally agreed criteria as recommended by the International Atomic Energy Agency.

We would therefore suggest the following:

- Conduct open discussion of the proposed siting criteria (both geological and socio-economic) through a series of regional fora across England, Wales and Northern Ireland, with details of what a geological disposal facility (GDF) would look like and what the surface requirements would be in terms of land area.
- Involve all interested scientific organisations in these discussions (British Geological Survey, Geological Society etc.), as well as representatives of local authorities (Local Government Association, NuLeAF etc.), non-governmental organisations (NGOs), and nature conservation bodies.
- Report the outcome of these deliberations in a subsequent series of public meetings around England, Wales and Northern Ireland, to explain them in clear terms.

- Following development of these criteria, conduct an open and transparent process to identify those areas of the country (England, Wales and Northern Ireland) where potentially suitable sites may exist. Then, and only then, invite communities in these areas to come forward to explore the possibility of becoming involved. At this stage communities around existing nuclear sites could also be approached directly (subject to potential suitability having been demonstrated).
- There should be firm deadlines accompanying the revised process to reflect the requirements of the 2011 European Commission Waste Directive. These should be agreed with relevant stakeholders and then adhered to. Previous attempts to accelerate initially stated dates only served to arouse concern.

The process in Cumbria suffered from difficulties regarding the decision-making process. The current process requires involvement of several local planning authorities with different responsibilities (County and Borough) and there was a failure to reach agreement to proceed to Stage 4. Although the local (Borough) councils were in favour, the main planning authority (County) was not, with different factors at play. Given the national importance of GDF development, we would suggest that consideration be given to involvement of the Planning Inspectorate, as part of its National Infrastructure Planning remit, recognising the national importance of GDF development as a national infrastructure project under the terms of the Planning Act 2008. There would then be a requirement for a National Policy Statement concerning repository development and the associated investigations, into which the relevant local authorities will have input due to their role in the planning process. As discussed below, we would also suggest that responsibility for identification of initial siting areas (i.e. the current Stages 1-4) should perhaps be transferred to RWMD, as implementers of government policy. The decision-making process should continue to be staged, and public consultation and review encouraged at each decision point.

In addition to these possible improvements and amendments, we consider that the UK needs to bolster its research programme examining specific UK geological environments and how they relate to the range of potential disposal options seen elsewhere. Generic options have been developed, but the UK programme would benefit from focused research, possibly using a number of existing and potential (UK) natural analogues for various GDF components. In particular, the development of underground research laboratories (URLs) in other countries has played an important role in building confidence in gaining experience in sub-surface investigation and site characterisation, understanding of relevant geological environments and in the siting process. RWMD should increase its current participation in work in these facilities, and demonstrate its relevance to the UK situation. Wide dissemination of the results of this work would continue to build public confidence in deep disposal as a suitable management option.

What do you think could be done to attract communities into the MRWS site selection process?

Experience in west Cumbria suggests that despite the Partnership's best efforts, there was a degree of mistrust of both the current process and the authorities involved in it. This mistrust focused on issues covered in the White Paper (community benefits, right of withdrawal), but which were not sufficiently clarified there. Experience from currently successful overseas programmes (e.g. Sweden, Finland, US Waste Isolation Pilot Plant) demonstrates that trust is a major aspect in their success. We would therefore offer the following as ways of improving the level of trust amongst potential host communities:

- Pass legislation to guarantee the form, level and type of community benefits, including both short-term involvement and longer-term benefits, building on the principles developed by the West Cumbria Partnership and agreed to by government. This would guarantee that all reasonable costs incurred by organisations and communities in taking part in a new process would be covered by government from the very beginning.

- Provide clear comparisons between the costs of doing nothing (but having to build new and expensive storage facilities) and the proposed suite of community benefits, which, being generally longer-term in nature, can be discounted, thereby appearing as a lower overall cost but with a much greater benefit.
- Provide increased clarity concerning the right of withdrawal, especially regarding by whom it could be exercised. This may vary as the process progresses, recognising that the ultimate host community could be quite small, but on which the impact would be large. Enshrine this in legislation if necessary, informed by transparent discussions with the Local Government Association and others. Allow for local referenda at specified points. Emphasise that there will always be opportunities to challenge the science and decisions irrespective of the right of withdrawal, and that as emphasised in the 2008 White Paper, no site found to be unsuitable, even after underground investigations, would be developed. Early involvement of the regulators, as proposed below, would serve to reinforce this.
- Establish an independent body comprised of a small number of respected independent individuals (or possibly even a single person) to act as mediator and provider of information. This body would ensure all views were represented in national and regional discussions in a balanced way.

What information do you think would help communities engage with the MRWS site selection process?

One of the difficulties during the process in west Cumbria surrounded the issue of dialogue and information provision. DECC wished to demonstrate that the process was 'community-led', and therefore only responded to requests for information subsequent to the initial letter of invitation. This approach resulted in an information vacuum locally, which was easily filled by opposition voices. It also did not help that much of the language in the 2008 White Paper was as mentioned, rather non-specific regarding issues such as community benefits and the definition of an affected community, leading to various interpretations, which RWMD was unable to comment on with any certainty. Given RWMD's mandate and *raison d'être* as an implementing organisation, local understanding and confidence in the process might be improved if RWMD staff were more openly involved as concept 'champions'.

There is a clear need for more political support nationally for progress in the MRWS site selection process. It is not sufficient to simply send a letter to local authorities and then stand back. Such contact should be clearly indicated as the first step in an agreed schedule-driven process, following the national screening exercise already referred to. This is a trans-generational issue and should also be a trans-governmental issue with cross-party support. This would not conflict with the independent mediator role suggested above.

We suggest that the appropriate UK organisation – we suggest RWMD as implementer – takes a leaf out of the approach being followed in Canada, and becomes more proactive in its interaction with both national and local stakeholders and communities. This could be achieved by:

- Organising national and regional information and discussion meetings to explain the issues more clearly. The original CoRWM process developed a high level of confidence amongst stakeholders that their views were important.
- Endeavouring to demonstrate that GDF development addresses a national need, and is therefore a national issue.
- Making it clear that the most likely major impact on potential host communities would be the surface facilities. Opposition forces in Cumbria managed to conflate these and the underground footprint of a GDF

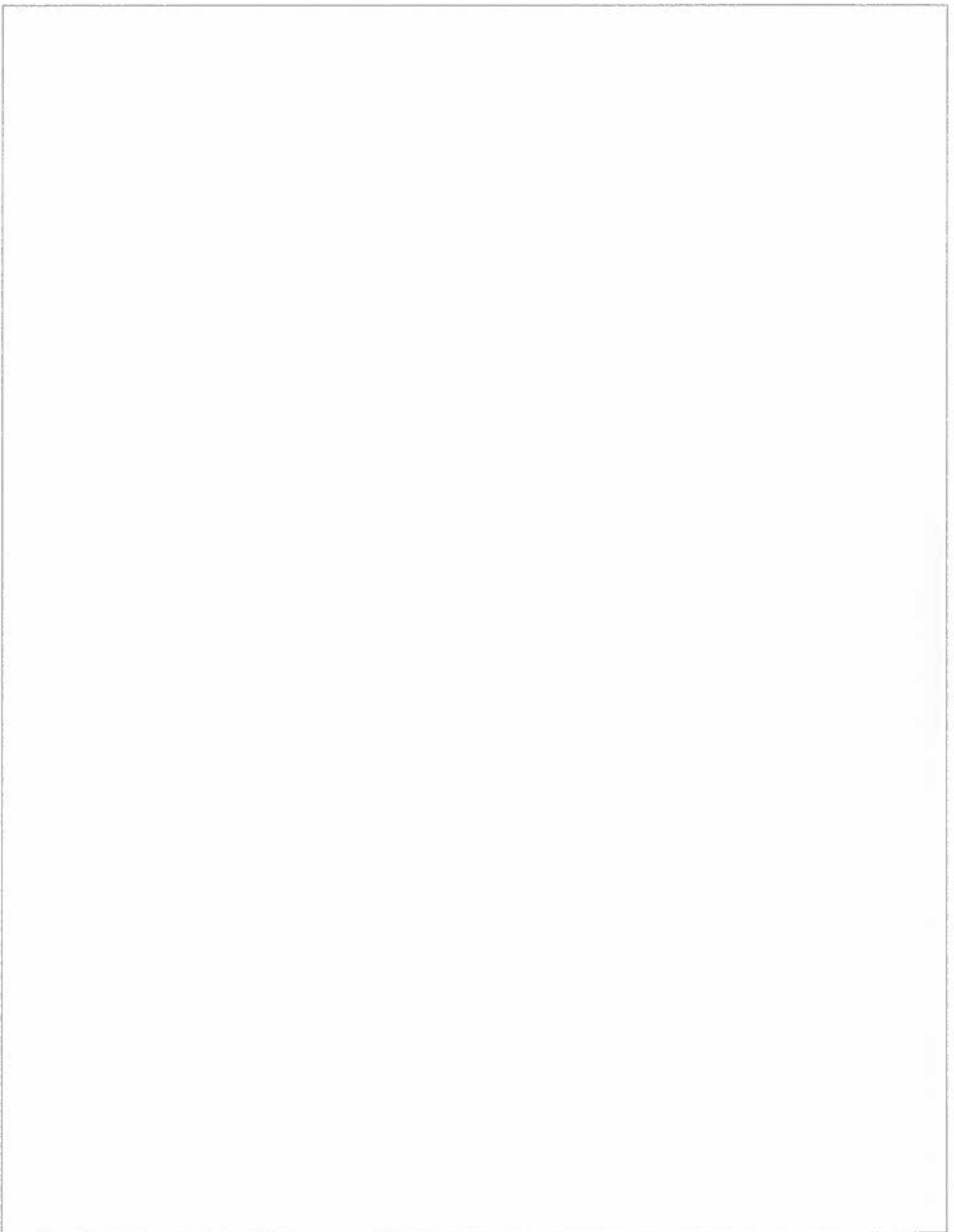
in such a way as to confuse and concern local people.

- Involving the regulatory authorities more, allowing them to discuss safety-related aspects in response to public concerns. The regulators should be seen as an 'honest broker' concerned with safety and thus able to demonstrate independence from policy.
- Providing more details of international experience and progress in siting and developing similar facilities. This would help to explain the approach being taken in the UK.
- Considering the possibility of supporting potential host communities in the UK to develop links with communities in other countries that have accepted and even welcomed GDF development, to encourage learning and information exchange.

We have responded above to the three specific questions posed in the Call for Evidence. We would, however, point out that there are several other relevant issues not related to these specific questions, and we suggest that DECC considers the possibility of holding a series of one-day workshops to explore these and the range of responses to the Call in more detail. For example, should DECC or RWMD actually have responsibility for driving the siting process forward in terms of public communication? DECC has responsibility for developing policy, but shouldn't RWMD have a responsibility for implementing that policy? This would allow development of an open and transparent relationship between RWMD and potential siting communities much earlier in the process.

Finally, efforts should be made to stress the importance to UK society of the safety-related aspects associated with the need to develop a GDF for higher activity radioactive wastes, irrespective of the requirements related to potential new nuclear build. Environmental NGOs that have traditionally opposed GDF siting efforts should be challenged to propose alternative strategies and to justify the safety impacts of doing nothing. The whole UK public has benefited in terms of nuclear electricity production, and the whole UK public must take responsibility for the resultant waste.

Galson Sciences Ltd 10th June 2013



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