

Response form

Please use this form to respond to this 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.gsi.gov.uk

Or by post to: The Managing Radioactive Waste Safely team
Department of Energy and Climate Change
Room M07
55 Whitehall
London
SW1A 2EY

Name	
Organisation / Company	
Organisation Size (no. of employees)	N/A
Organisation Type	
Job Title	
Department	N/A
Address	
Email	
Telephone	
Fax	

Would you like to be kept informed of developments with the MRWS programme?	Yes
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?

Government must communicate to the public that the repository is now a major national necessity that is becoming time critical, due to the hazard from old and decaying assets (buildings), containing mobile nuclear waste on the existing sites. The repository defines the required waste product specification for the treated & conditioned wastes, currently being retrieved and processed e.g. at Sellafield and Dounreay. The nation is currently at risk of producing the wrong waste products until the repository location and design is finally determined. There is a major risk of major abortive spends to the tax payer and risk of re work. That aside, assuming the correct products are made then very expensive surface or near surface stores will have to be built pending the repository availability with significant financial consequences e.g. 14no. ILW stores @ £250m plus operational & decommissioning costs say at least £5 billion to the tax payer, plus other site and overhead costs

Therefore the safety, environmental, security and financial consequences of delaying the repository must be better communicated and articulated for the public and all stakeholders.

A strategy of voluntarism will not work due to the nation's current mind frame and the central and local government structure. The threat to the nation of not dealing with nuclear waste is not understood due to poor communication and therefore lack of awareness.

More work must be done to provide a whole value proposition to targeted communities. In other words a wholly underpinned technical and business proposal providing the correct science, engineering, safety case, environmental case, security etc, is absolutely essential. It should also have the full support of all regulators. They often pull in different directions so where does that put the lay person in having trust with any viable proposal. In addition to this tangible benefits to suitable communities must be offered and delivered. This will be range from sustainable jobs (operating the repository) to other benefits e.g. infrastructure and supporting institutions, for instance research and the local supply chain.

Only when the correct solution has been determined and community benefits defined then the government should approach & negotiate with suitable councils. A fundamental for any host community is of course suitable geology.

Finding wholly homogeneous rock (e.g. unfractured and almost impervious) is virtually impossible in the UK. Cumbria is certainly not ideal (hence GDF rejection in the mid

1990s, inter alia). Therefore the repository integrity must depend upon man made engineered barriers. Given the enormous volume of waste at Sellafield, and its physical, chemical and radioactive diversity, it is wholly impractical to transport it all elsewhere. This has to be faced up to. The nation may need more than one repository in the UK to overcome local prejudices i.e. people will keep their waste but will not willingly accept it from elsewhere. Allerdale and Copeland are wholly receptive to a repository in their area but for obvious tourist industry reasons Cumbria CC are currently against. Government has to find a way of resolving this disparity between Cumbria CC and the West Coast councils. A part of the way forward is to address the misunderstandings and uncertainties held by many over the disposal of nuclear waste in the ground. The latter can only be resolved by providing a holistic and viable technical solution with integrity as previously mentioned.

An example of the many uncertainties are the route paths of man made radioactive isotopes back to the ecosystem. Some of the many hundreds of waste forms contain actinides with half lives of hundreds of thousands of years. For instance, it will have to be wholly demonstrated that isotope Carbon 14 from radioactive decay cannot escape as a gaseous carbon dioxide and enter the food chain. If we cannot guarantee the migration of such isotopes from the repository then we do not have the right to bury this material only to be dealt with by future generations. We have no idea of the capability of society in say 300 years time. Looking backwards it would 1713 AD. Will society advance as much again as it has hitherto, it could of course decline, who knows? These are the moral and ethical issues that must be articulated. The public is not ignorant hence the need for improved communication and transparency.

We may need to construct long life near surface stores if robust safety case for a deep repository cannot be made with regulators. Concept designs exist for 1000 year stores (c.f. current surface stores of 125 year maximum extended life)

A step change in delivery strategy is required because we appear to be no further on with resolving the siting of suitable repository. CoRWM's recommendations were a compromise. Voluntarism will never work unless undertaken in the manner I have outlined e.g. targeted negotiation with a holistic value proposition.

I have always held the view that the NDA should not be responsible for delivering the repository. Under the Energy act they have a clear set of drivers to clean up & decommission the existing nuclear sites. A separate autonomous body should take the repository forward as there is arguably a conflict of interest within the NDA. They were not set up for delivering this kind of major undertaking. A body similar to Olympic Delivery Authority should be formed with appropriate leadership, a lot of lessons can be learned from this for the benefit of delivering a timely repository

Therefore a sound strategy is required to take it forward, involving media, stakeholders and regulators. From this we will provide realistic programmes and finally projects, the biggest being the repository itself.

The above requires significant leadership as we are running out of time.

The majority of the public listen to good media communicators with a care for the environment e.g. Sir David Attenborough and Michael Palin. The nuclear industry as it currently stands will not deliver a repository even with the perfect technical answer unless more advocacies are secured from the many sectors of the public and local government.