



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.gsi.gov.uk](mailto:radioactivewaste@decc.gsi.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 disposal<sup>1</sup>. In 2008 the Managing Radioactive Waste Safely (MRWS) White Paper<sup>2</sup> 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 2013<sup>3</sup>, Government has been considering what lessons can be learned from the experiences of

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<sup>1</sup> 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.

<sup>2</sup> 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>

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

the MRWS programme in west Cumbria and elsewhere. We are now inviting views on the 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.

# 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.

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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	SPAND (Solway Plain Against Nuclear Dump)
Organisation Size (no. of employees)	
Organisation Type	
Job Title	
Department	
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?

### **National Geological Survey**

The single greatest failure of the MRWS site selection process was ignoring geological suitability until stage 4 of the six stage process, beyond the most rudimentary screening in stage 2. The introduction given in this form misleads by stating:

*4. ....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.*

This is incorrect. Unlike MRWS, Finland, France and Sweden all considered geological suitability **before** seeking expressions of interest. The 2008 White Paper also misleads on this point. While Canada's process may appear at first glance to resemble MRWS, in that Canada did allow volunteers before a systematic geological survey was carried out, it cannot be compared with the situation in England and Wales. There is a vast area of potentially suitable unfaulted Precambrian basement rock, known as the Canadian Shield, around fifty times the size of England and Wales combined. Much of this is in areas of low relief, which unlike West Cumbria produces the required low hydraulic gradient (slow movement of groundwater). DECC and NDA's claim that Canada followed a similar approach to MRWS is at best disingenuous.

The 2008 White Paper may have placed voluntarism above geological suitability as a reaction to the failure of the American process at Yucca Mountain following the 1987 'screw Nevada' bill, where they focussed on geology and all but ignored local opinion. However, the MRWS approach of focussing on local opinion and ignoring geology until a very late stage is also seriously flawed, arguably more so, since it has confined the UK's search to one of the least geologically suitable areas.

If MRWS is to retain any credibility, a national geological survey must take place **before**

seeking expressions of interest from areas which are amongst the most suitable. In order to retain public trust, this should be a peer-reviewed survey carried out by geologists with no link to the nuclear industry. It should be noted that BGS's role in stage 2 of MRWS has been questionable. In particular, the change to the Screening Report between draft (July 2010) and final (October 2010) versions which brought the Solway Plain back into play has never been fully explained. The draft version only became available to us when Professor Smythe received a leaked copy, having first been denied it through official channels.

The NDA has described this as a 'change of interpretation of criteria', but was unable to provide further details of how and why this change took place. In our view this falls well below the standard of openness and transparency required. What appears to be scientific manipulation of this kind was part of the reason for the complete breakdown of trust in MRWS that has taken place in West Cumbria and the Solway Plain in particular.

### **Voluntarism**

The assumption underlying the MRWS process is that the public are in favour. DECC continues to ignore all other evidence and highlight a MORI poll conducted in early 2012 as evidence of public support. The most startling aspect of the poll was that 80% of those responding knew little or nothing about the proposal. It would be reasonable to assume that those who did know about it were more likely to respond, hence only a tiny minority of Cumbrians were aware of the process. This highlights the almost complete failure of the MRWS consultation process. In January 2013, the NDA acknowledged that the consultation had failed at the public meeting in Keswick.

Wider public opposition to the proposal began in autumn 2012, well after this MORI poll was conducted, including the formation of SPAND, NOEND and a Keswick group, and yet this widespread opposition is being ignored by those who seek to justify this process on the basis of the flawed MORI poll. Partly due to these groups, awareness of MRWS is now much greater, as is the level of opposition. Eddie Martin, then Leader of Cumbria County Council, has been quoted as saying that of the huge numbers of people who contacted him in the run up to the January 2013 decision, the ratio of opposition to support was around 20 to 1. The one area to call a public vote, Ennerdale, recorded 94% opposition to stage 4 (on a 74% turnout), i.e. about 20 to 1 as well. In advance of this vote, a well-attended public meeting was held including representatives from DECC, NDA, Copeland, Sellafield, ONR, together with opposition groups, where the public had ample opportunity to hear all sides of the debate, so this was a well-informed vote which overwhelmingly opposed the process.

Voluntarism should not involve the local decision makers being pressurised by DECC – they are supposed to be acting in the interests of their electorate. In the last few days of January right up until a few minutes before the meeting at which the decision was taken, members of DECC including Baroness Verma, applied relentless pressure to Cumbria CC cabinet members to ignore the wishes of their electorate and vote to proceed to stage 4.

If an MRWS process is going to begin in another part of the country, lessons need to be learned from the failed consultation in West Cumbria. Voluntarism should mean that the people can choose to say no.

### **Excluding Environmentally Sensitive Areas**

The search area in West Cumbria included an AONB, several SACs, a RAMSAR site, a National Park and several other protected areas. In fact over 80% of the search area remaining after the initial screening (stage 2) was within at least one of these protected areas. These areas should have been screened out from the start. This is something which Nirex understood and yet this seems to have been deliberately ignored by MRWS.

Had the process continued to stage 4, and a potential site been selected which was within, or adjacent to on one of these protected areas, **the law requires that all other unprotected sites in the UK are ruled out before a protected site can be considered.** This is a fundamental defect in the MRWS voluntarism model and this reinforces the need to conduct a proper national survey of the geology at the very start of the process, i.e before expression of interest at MRWS stage 1. We know that a significant area of the UK is potentially suitable and this has even been correctly highlighted by Nirex, therefore **protected sites must be ruled out by law.**

The NDA and DECC have recently accepted the need to carry out a Strategic Environmental Assessment of the entire country before a protected site can be considered and yet they have unthinkingly followed the White Paper and allowed the process to reach the end of stage 3 without carrying this out. This is a catastrophic failure of the MRWS voluntarism process and highlights the need to return to the drawing board. Having spent millions of pounds and a great deal of time designing the MRWS process, it is hard to understand how this was overlooked by DECC, NDA and CoRWM.

### **Grooming**

An internal Nirex Report from October 2004 to promote geological disposal has come to light. This report includes the advice that:

**“We have to be sure that opinion leaders are carefully recruited and groomed” p15**

**“Investigate ways of using other organisations e.g BGS, Geological Society...” p17**

**“Embark on programme to change the image of Nirex so it will be considered a concerned, caring, soundly based and scientifically founded organisation” p18**

**“Design strategy to:**

- **bolster and, if possible enlist MPs who support our policy**
- **convince those MPs who are indifferent or soft against**
- **isolate or convince those MPs who are against” p17**

While we would expect DECC to deny all knowledge of this rather embarrassing report, and claim that Nirex has nothing to do with the current process, that isn't entirely true. Some of the



same people are involved with MRWS today, and the behaviour of DECC / NDA seems to very closely follow the advice in the report. One employee of Nirex from that time has managed to get himself into the position as MP for Copeland and needless to say, is a fanatical supporter of the plan.

If DECC / NDA is to gain the public's trust, it will have to stop using these methods. In particular the grooming of senior local councillors needs to stop. One way to prevent this grooming or lessen its effect is to ensure that all council votes on MRWS matters are full council votes, not just executive/cabinet members.

MRWS must also avoid conflicts of interest. In the failed West Cumbrian process, the Allerdale and Copeland leaders also chaired WCMRWS. Any normal process would exclude them from the council votes on the process, but not this one. Any future process must address this conflict of interest by excluding any councillor directly involved in MRWS from any council vote on the matter.

### **Town and Parish Councils**

If the views of town and parish councils are ignored then there is a strong possibility of an urban majority choosing to impose a GDF on a rural minority many miles away from them, against their will. The Solway Plain for example is about 20 miles from Workington where 5 of the 7 executive members of Allerdale have their seats. Therefore under the current system, they could ignore the overwhelming rural opposition to the GDF.

85% of town and parish councils across Allerdale and Copeland which voted, opposed the move to stage 4, and yet executive members of these councils were able to ignore their opinions. The town and parish councils had to rely on Cumbria County Council to reflect their strong opposition and stop the process.

If this is a voluntary process, town and parish councils must be given the option to withdraw from the site selection process at any time.

### **Secure Interim Storage**

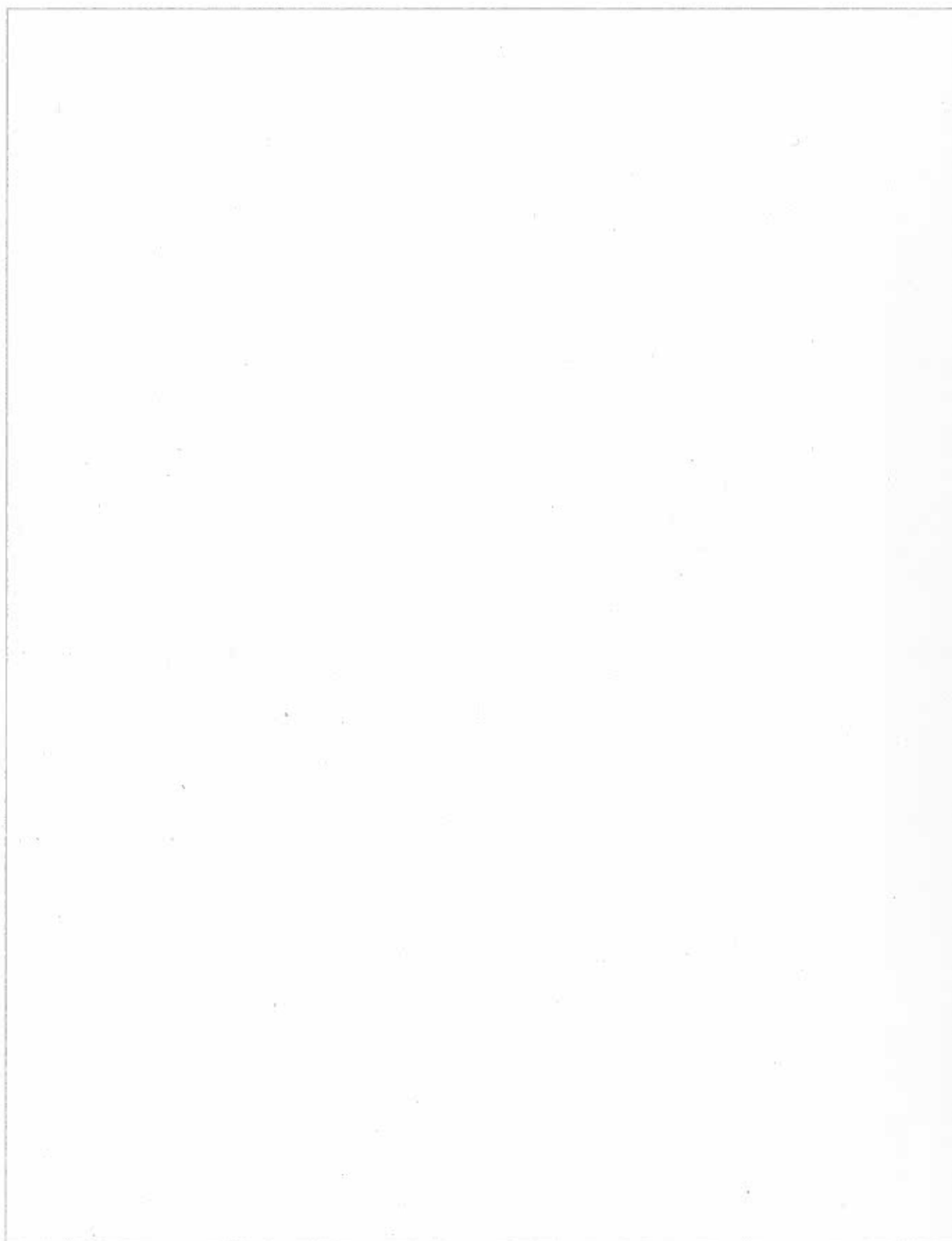
The National Audit Office has recently reported that Sellafield's nuclear waste storage poses an intolerable risk and that for 50 years the site operators have failed to develop a long-term plan for the waste.

Even if a GDF site was found after a proper national search, some of the higher activity wastes including plutonium cannot be buried for well over a hundred years. There is an urgent need for secure interim storage on the Sellafield site. This will also allow research into the principles of geological disposal to continue. We know for example that the NDA's preferred KBS-3 storage concept has been found to be severely flawed by research published in Sweden in 2011, causing a major rethink in Sweden, yet NDA/MRWS appear not to have noticed this and are pressing ahead assuming that the concept works.

### **Summary and Recommendations**

- 1. The first action of MRWS has to be to conduct an independent and detailed national survey of the geology to highlight the most geologically suitable areas for a GDF. This should be peer-reviewed.
- 2. MRWS must screen out all environmentally sensitive areas and areas adjacent to them which would be impacted by construction of a GDF.
- 3. MRWS should seek expressions of interest exclusively from areas which are both geologically suitable and not environmentally sensitive.
- 4. MRWS/DECC must clean up its act and allow voluntarism to succeed or fail without applying undue pressure. The grooming, manipulative and pressurising behaviour which has been very visible in West Cumbria has to stop. All votes must go to full council to help prevent the culture of grooming senior councillors.
- 5. MRWS must allow towns or parishes to exclude themselves from consideration at any time for any reason.
- 6. The Right of Withdrawal must be enshrined in law.
- 7. A benefits package should be drawn up in the form of a sovereign wealth fund, sufficient to provide a substantial improvement to the wider area for the full life of the waste. It is an absolute disgrace that there are significant areas of child poverty in close proximity to the current storage site for nuclear waste at Sellafield. These areas have been failed, and continue to be failed by their politicians and councillors, many of whom have close links to the nuclear industry. Where are the community benefits for storing this waste for the last 60 years and why should any volunteer community believe it will be different this time?
- 8. Opposition groups should receive funding to allow them to take independent scientific and legal advice from experts throughout the process as in Sweden, rather than depending on these experts to give their time freely as a matter of principle.
- 9. There is an urgent need for secure interim storage on the Sellafield site to remove the intolerable risk identified by the NAO.

If all of these recommendations are set out and followed with full transparency, it should enable potential volunteers to have sufficient trust the process and enable a good chance of success.



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