Department of Energy & Climate Change

Implementing Geological Disposal: Annual Report

April 2013 – March 2014

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Introduction and background

Introduction

1. In its November 2010 response[1] to the House of Lords Science and Technology Select Committee's report *Radioactive Waste Management: a Further Update*[2] (March 2010), the Government committed to producing an annual report to Parliament, setting out the Government's progress in relation to the management of higher activity radioactive waste. This is the fourth annual report.

Background

2. In July 2006, the Committee on Radioactive Waste Management (CoRWM) recommended that geological disposal, coupled with safe and secure interim storage, was the best available approach for the long-term management of the UK's legacy of higher activity radioactive wastes. CoRWM's original task was to make recommendations that not only provided for safety and security, but which would do so in a way that would be acceptable on environmental and societal grounds, and at a cost that was not disproportionate. CoRWM stated that the Government's aim should be to progress disposal as soon as practicable, consistent with developing and maintaining public confidence.
3. Geological disposal involves isolating radioactive waste within engineered, multi-barrier facilities, typically between 200m and 1,000m deep, inside a suitable rock formation, to ensure no harmful quantities of radioactivity ever reach the surface environment.
4. In June 2008, the UK Government published the White Paper, *Managing Radioactive Waste Safely: A Framework for Implementing Geological Disposal*.
5. Three local authorities formally expressed an interest in the Geological Disposal Facility (GDF) siting process: Copeland and Allerdale Borough Councils, and Cumbria County Council (in relation to the geographical areas of Copeland and Allerdale only).
6. On 30 January 2013, the councils in west Cumbria took individual decisions on whether to participate in the next stage of the siting process. This was not a decision on whether to host the facility, but on whether to carry out further work to identify and assess potentially suitable sites in west Cumbria. Allerdale Borough Council's Executive and Copeland Borough Council's Executive voted in favour of further participation in the process. Cumbria County Council's Cabinet voted against. An earlier agreement had been reached by DECC and councils in west Cumbria about how the MRWS siting process would operate in west Cumbria, requiring 'three green lights' of agreement at the Borough, County, and Central Government level for the process to proceed. Therefore, Cumbria County Council's decision brought that MRWS site selection process in west Cumbria to a close.
7. Shepway District Council in Kent had also taken soundings from local residents, but subsequently decided against making a formal expression of interest in the process.

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[1] http://www.parliament.uk/documents/lords-committees/science-technology/ScienceGovandPolicy/RespRWM.pdf

[2] http://www.publications.parliament.uk/pa/ld200910/ldselect/ldsctech/95/95.pdf

8. Responding to the outcome of the votes in west Cumbria, the Secretary of State for Energy and Climate Change announced that the UK Government would reflect on the experience of the process in west Cumbria[3], to see what lessons could be learned about the operation of the GDF siting process with a view to identifying any particular aspects of the siting process where improvements could be made. He made it clear that no potential changes to the approach on site selection (as set out in the 2008 MRWS White Paper) would be introduced without further public consultation.
9. The Secretary of State also made clear that the UK Government remains committed to geological disposal as the right policy for the safe and secure management of higher activity radioactive waste, and continues to hold the view that the best way to find a site for a GDF is an approach based on voluntarism and partnership-working with interested communities.
10. The key principle underpinning the siting of a GDF is, and will always be, safety. A GDF can be built in a range of geological environments which exist across the UK, and no facility will be built and operated unless the demanding safety case requirements of the independent statutory regulators are met.

[3] http://www.parliament.uk/documents/commons-vote-office/January_2013/31-1-13/6.DECC-ManagementofNuclearWaste.pdf

2013-14 update

Siting process review

11. In reviewing the GDF siting process Government has reflected on the experience gained since 2008, talking to the local authorities and others who had been involved, to see what lessons could be learned. Government has also engaged with individual academics, NGOs, industry bodies and international counterparts to learn from broader experiences and similar programmes around the world.

Call for evidence

12. On 13 May 2013 the UK Government announced a 'Call for Evidence', to enable a wider range of stakeholders to input into its review.
13. The Call for Evidence closed formally on 10 June 2013. It invited views on potential adjustments to the siting process for a GDF that was outlined in the 2008 Managing Radioactive Waste Safely (MRWS) White Paper, particularly from those who had been engaged in (or interested observers of) this process. Respondents were asked to consider the following questions:
    - 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?
14. All responses to the Call for Evidence were published online[4].

Public consultation

15. Informed by this period of evidence gathering, the UK Government, Welsh Government and Northern Ireland Executive issued a consultation document in September 2013 looking at aspects of the siting process that could be revised or improved, in order to help communities to engage in the process with more confidence, and ultimately to help deliver a GDF.
16. The consultation was launched on 12 September 2013 and closed formally on 5 December 2013[5].

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[4] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/285444/2014-02-07_Summary___Consultation_on_Review_of_the_Siting_Process_for_a_Geological_Disposal_Facility_-_Final.pdf

17. The consultation was published online. Members of the public were able to respond through an online response tool, by email and by sending postal replies. Government also held a web chat to answer questions about the consultation proposals, and held 15 consultation engagement events across the country, including deliberative workshops with a representative spread of members of the public (see next section).

18. In general, the amendments to the siting process that were proposed in the consultation aimed to support the improved provision of information to communities, at a much earlier stage in the process, on issues such as geology and socio-economic impacts. The consultation also proposed that a revised process should offer a clear commitment to an ongoing right of withdrawal for any communities that become involved, with a final decision involving the local population directly.

Stakeholder events

19. DECC ran a number of engagement events with the public and stakeholders during its consultation to obtain feedback on the proposals and provide the opportunity for people to explore the issues and proposals with Departmental representatives. . The events complemented the consultation rather than any inputs received constituting formal responses to the process, although contributions made during all events were very helpful to the policy development process and allowed Government to understand in more detail people's views on the issues.

20. The workshops were guided by independent facilitators, with DECC staff giving presentations and providing support throughout the day. Representatives from other organisations such as the Nuclear Decommissioning Authority (NDA), the Office for Nuclear Regulation, the Environment Agency and the Committee on Radioactive Waste Management (CoRWM) were also on hand to aid the discussions around individual tables for each of the workshop sessions and, where appropriate, to explain what their respective roles might be in a siting process.

Summary of responses to the Consultation

21. There were 719 responses to the consultation in total, 301 of which were part of a letter-writing campaign.

22. In February 2014, Government published a Summary of Responses to the consultation[6]. This Summary of Responses was a factual report of responses to the consultation, highlighting the main themes raised in those responses. This made it different from a Government Response document, because it did not draw any conclusions with regards to changes to the siting process. The Summary of Responses document stated that a formal Government Response and White Paper would follow later in 2014.[7]

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[5] Because of a technical issue with one of the email addresses listed in the consultation document, responses submitted by email (rather than through the online form) were also accepted up to 19 December 2013.

[6] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/285444/2014-02-07_Summary___Consultation_on_Review_of_the_Siting_Process_for_a_Geological_Disposal_Facility_-_Final.pdf

[7] Published alongside this Annual Report.

23. In addition to the Summary of Responses document, Government published all the responses to the consultation online[8], in the interests of openness and transparency.

Publication of the United Kingdom Radioactive Waste & Materials Inventory 2013

24. The 2013 United Kingdom Radioactive Waste & Materials Inventory[9] was published in February 2014 in order to provide comprehensive and up-to-date information on radioactive waste and materials as at 1 April 2013. It is part of an ongoing programme of research jointly conducted by DECC and the NDA.

25. DECC and NDA commissioned the 2013 Inventory to provide information on the status of radioactive waste stocks (at 1 April 2013) and forecasts of future arisings in the United Kingdom. Additional information on radioactive materials which may become wastes is collated. Its aim is to provide data in an open and transparent manner for those interested in radioactive waste and material issues.

International developments

26. Geological disposal is the preferred approach internationally for safely and securely managing higher activity radioactive waste in the long-term. There are a number of geological disposal programmes in other countries, at various stages of development. In September 2013, the Radioactive Waste Management Directorate (RWMD) of the NDA published a report reviewing different national approaches to siting processes for the geological disposal of intermediate level, high level radioactive waste and/or spent fuel[10]. The report focussed on:

    - how each country undertook, or is undertaking, the siting process for geological disposal facilities (GDFs)
    - the roles of local decision making bodies, national governments and the body responsible (the developer) for implementing a GDF
    - the level and timing of payment of benefits to local communities.

27. The countries covered in the report have defined waste management processes for deep GDF's for the disposal of intermediate, high level radioactive waste and /or spent fuel as follows:

    - Canada – GDF for spent fuel
    - Canada – low and intermediate level waste disposal in the Municipality of Kincardine
    - Finland – GDF for spent fuel
    - France – underground research laboratory and GDF for long lived high level and intermediate level wastes
    - Japan – geological disposal of high level waste and some types of transuranic waste
    - Sweden – GDF for spent fuel

[8] https://www.gov.uk/government/consultations/geological-disposal-facility-siting-process-review
[9] http://www.nda.gov.uk/ukinventory/
[10] http://www.nda.gov.uk/publication/geological-disposal-overview-of-international-siting-processes/

- Switzerland – GDF for high level, low level and intermediate level waste
- US – the Waste Isolation Pilot Plant (WIPP); a GDF for defence-related waste containing long-lived radionuclides
- US – Yucca Mountain; a GDF for spent fuel and high level waste.

28. The provisions and requirements of the European Union's 2011 Directive on radioactive waste and spent fuel management (Council Directive 2011/70/Euratom) were implemented in the UK by the deadline of 23 August 2013 using our existing legislative regime. The Directive, which came into force in August 2011, requires responsible and safe management of spent fuel and radioactive waste from generation to disposal. The programme of work to establish a geological disposal facility in the UK is an important element of demonstrating UK compliance with the overarching aims of the Directive.

Setting up RWM as a Wholly Owned Subsidiary of the NDA

29. On 1 April 2014 the NDA's Radioactive Waste Management Directorate became a wholly-owned subsidiary of the NDA (changing its name to Radioactive Waste Management Ltd or RWM) in preparation for becoming a Site Licence Company (SLC) capable of holding the relevant environmental and operational licenses for the development and delivery of a GDF. NDA remains the implementing body for Government policy on radioactive waste but RWM Ltd is the delivery body (the 'developer') responsible for developing the plans for the implementation and construction of a GDF.

Work of the Committee on Radioactive Waste Management (CoRWM)

30. CoRWM have continued to provide advice to, and scrutiny of the MRWS programme as a major component of their work programme. The Committee's work over 2013/14 has focussed on the following areas (percentages denote the proportion of time CoRWM has spent on each issue):

- Providing advice to DECC on the GDF Siting Review (75%)
- the current status of interim storage of radioactive waste and implications for geological disposal (5%)
- Siting and Stakeholder Engagement to implement geological disposal (5%)
- components of a safety, security and safeguards case for geological disposal (5%)
- status of Spent Fuel and Plutonium Management and implications for geological disposal (2%)
- Radioactive Waste Management Options (2%)
- Providing advice to Scottish Government on the implementation of Scottish Higher Activity Waste policy (5%)
- CoRWM Outreach (1%)

CoRWM's engagement strategy

31. CoRWM reviewed its stakeholder engagement strategy, and in November 2013, reopened all of its plenary meetings for the public to observe. CoRWM has also engaged widely to gather evidence to progress the various work streams, and to communicate the outputs to stakeholders.

CoRWM's website

32. More information is available on CoRWM's website: https://www.gov.uk/government/organisations/committee-on-radioactive-waste-management

Next steps

33. These will be set out in the White Paper and formal Government Response to the GDF siting process review to be published in summer 2014.

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