

## **RESPONSE TO DEPARTMENT OF ENERGY & CLIMATE CHANGE**

### **Managing Radioactive Waste Safely: Call for Evidence on the Siting Process for a Geological Disposal Facility**

#### **Summary**

It is Government policy that the long-term solution for the management of higher-activity radioactive wastes is geological disposal. Reliance on interim surface storage is not sustainable in the longer term. The Environment Agency is keen that progress is made in the development and delivery of geological disposal and so welcomes this Call for Evidence.

The Environment Agency believes that the current Managing Radioactive Waste Safely (MRWS) siting process could be improved. In particular we believe:

- the MRWS process should seek to maintain a national dialogue, as well as local dialogues, on the need for progress to be made with securing a solution to geological disposal, and the broader implications for waste storage and transport.
- organisations involved in the siting process should ensure that information which is relevant to the development of a geological disposal facility is made openly available and used, irrespective of the particular 'stage' of the process. For example, information on geological setting, screening on current land-use, etc.

#### **1.0 INTRODUCTION**

- 1.1 Together with the Office for Nuclear Regulation, the Environment Agency will be responsible for regulating any future geological disposal facility for radioactive waste in England. We will not permit any geological disposal of radioactive waste unless we are satisfied that it will ensure the proper protection of people and the environment, now and in the future, and meet regulatory standards. More generally, the Environment Agency is responsible for the regulation of radioactive waste disposal from nuclear and non-nuclear sites.
- 1.2 The Environment Agency is also a statutory consultee for the Strategic Environmental Assessment and the Environmental Impact Assessments that will be required in support of any planning permission for such a development.

## **2.0 THE ROLE OF THE ENVIRONMENT AGENCY**

**2.1** Solid radioactive waste can be divided into two broad types, according to the hazard and risk it poses, and hence the most appropriate management and disposal route:

- Low-level radioactive waste is generated by the nuclear industry as well as small users of radioactive substances, such as hospitals and universities. It is generally much less hazardous than Higher Activity Waste and is usually suitable for immediate disposal in near-surface facilities.
- Higher Activity Waste is generated by the nuclear industry and comprises high level waste, intermediate level waste and certain low-level waste. Higher Activity Waste is not suitable for disposal in near-surface facilities.

**2.2** Government policy for the long-term management of Higher Activity Waste is for geological disposal. We support geological disposal as the strategic way forward. No Higher Activity Waste disposal facility exists in the UK, despite several decades of effort to secure a facility. Current arrangements rely on interim storage of the waste at nuclear sites, requiring ongoing management and investment. Some Higher Activity Waste will remain hazardous for several hundreds of thousands of years and, unless disposed of, presents a significant potential risk to people and the environment, placing a burden on future generations for continued safe management.

**2.3** In 2008 the Government published a White Paper setting out an approach to implementing geological disposal through a process reliant upon community engagement and volunteerism. Government has stated that once a site has been identified, the Nuclear Decommissioning Authority will be the organisation responsible for developing a geological disposal facility.

**2.4** The process to date has involved the Environment Agency helping to clarify for local authorities and the public its role in the regulation of the development of a geological facility. This role was supported by the Department of Energy and Climate Change (DECC) and the Environment Agency recognised as independent and capable of strong regulation, vital to any siting process.

**2.5** Having a community offer to host a geological disposal facility does not guarantee that such a development will take place in that location. The disposal facility would require an environmental permit; obtaining such a permit would depend on there being a suitable and satisfactory environmental safety case. Also, a community may choose to accept some but not all Higher Activity Waste, leaving open the possibility that other facilities may be needed.

**2.6** The Environment Agency provides advice to help ensure that all the relevant environmental issues associated with a potential development are taken into account at an early stage to ensure that a geological disposal facility is sustainable. The Environment Agency has existing contacts and relationships with communities and organisations at local, regional and national levels. These could be used to facilitate the interactions and dialogue over the development of a geological disposal facility.

### **3.0 ENVIRONMENT AGENCY RESPONSE TO CONSULTATION QUESTIONS**

- 3.1 The following provides some further observations on the MRWS siting process. These are offered on the basis of our involvement in the process to-date.

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

- 3.2 We believe the roles of organisations such as DECC, the Nuclear Decommissioning Authority's Radioactive Waste Management Directorate and the Committee on Radioactive Waste Management should be clearly identified, delineated, defined and communicated to differentiate their responsibilities, particularly those which are advisory in nature and those which have decision-making powers.
- 3.3 Further clarity on the role of the regulators during the early stages of site selection and in advance of the formal regulation could also usefully be made. We believe consideration should be given to the part Government can play in ensuring that the independence of the regulators is made more visible.
- 3.4 Organisations involved in the siting process should ensure that information which is relevant to the development of a geological disposal facility is made available and used, irrespective of the particular 'stage' of the process. For example, information on geological setting, screening on current land-use, etc.
- 3.5 We believe the Nuclear Decommissioning Authority should continue to develop the Radioactive Waste Management Directorate into a separate organisation, capable of becoming a site licensee company, thereby demonstrating a strong commitment to establishing an implementation organisation with sound footings. It will also help improve its visibility.

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

- 3.6 We believe consideration should be given to how some of the inherent uncertainties identified by the West Cumbria MRWS Partnership can be bounded or reduced. For example, the nature and quantity of the waste disposal inventory, community benefits, impacts during characterisation and facility development, early consideration of geological suitability, community veto and the application of the local or centralised planning system.
- 3.7 To help facilitate engagement, a 'partnering agreement' could be developed between any local authority interested in discussing potential suitability of their areas and the lead organisation for siting (i.e. the Radioactive Waste Management Directorate of the Nuclear Decommissioning Authority). This could transparently lay out the responsibilities and roles of all organisations involved and the scope/limits of the discussions/investigations agreed to

during the existence of the partnership as well as issues like decision points, process for withdrawal or continuation.

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

- 3.8 We believe consideration should be given to how best to initiate early discussions and information exchanges with local authorities. A proactive approach with local authorities may be useful, as well as a more general discussion on the process with other groups, for example learned societies.
- 3.9 Social media and digital platforms provide both a significant opportunity and challenge to communications and engagement during the early stages of site selection when significant uncertainties and unfamiliarity (with MRWS) are likely to exist. Consideration should be made as to how they can be used more actively to support engagement, particularly in circumstances where opposition groups may actively be using such approaches.

**Further information**

Further information or background to this response can be obtained from

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