

Review of the Siting Process for a Geological Disposal Facility

Quintessa Response to the September 2013 Consultation

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This document sets out Quintessa's responses to the questions posed in the consultation document 'Review of the Siting Process for a Geological Disposal Facility' issued by the Department of Energy and Climate Change in September 2013.

1 Do you agree that a test of public support should be taken before the representative authority loses the Right to Withdrawal? If so, what do you think would be the most appropriate means of testing public support, and when should it take place? If you do not agree with the need for such a test, please explain why.

▲ While it is sensible to have a demonstration of local support from those directly affected by the project, it should probably not be a referendum because:

- this would just provide a snapshot of opinion on a long-term issue;
- it would be very difficult to determine the appropriate time to hold a referendum, and the hiatus associated with such an event would distort the technical programme required to deliver the project in a cost-effective manner;
- there is a danger that the results of a public vote could be distorted by pressure groups with a national, non disposal, rather than local agenda;
- it is a multi-faceted and complex issue that requires a breadth and depth of knowledge from those invited to express their opinion; and
- even after the test of public support relevant information about the site will continue to become available.

- ▲ Instead it would be appropriate for local opinion to be determined through a Citizen's Panel who would have the time to assess all relevant information throughout the course of the project, and so could assess the level of public support over an extended period, including whether support was growing or waning as more information became available.
- ▲ A commitment needs to be made in the White Paper regarding the timetable for enshrining the right of withdrawal in statute. Further clarification is needed concerning the latest stage in the process at which the right of withdrawal ceases. This is one area in which the new proposals are less clear than the current MRWS process. Perhaps the loss of the right of withdrawal should be linked to the approval by Regulators of one of the submissions required under the staged permitting process.
- ▲ More clarity is needed on the nature of the proposed engagements with communities and stakeholders. In the previous process many people in West Cumbria didn't feel engaged. There needs to be a step change in the quality and proactivity of the engagement process and associated education programmes (see also Question 2). Information needs to be supplied as early as possible in the process and we are pleased to see that the DECC proposals have tried to address this.
- ▲ It is important that there is a proactive champion for the project to ensure that all of the relevant information is available to those directly affected by the project when they are asked to express their support, or not, for the project.

2 Do you agree with the proposed amendments to decision making within the MRWS siting process? If not, how would you modify the proposed phased approach, or, alternatively, what different approach would you propose? Please explain your reasoning.

- ▲ The process is untried and untested, with the attendant concern that it might lead to another wasted decade. The process should be reviewed periodically with the aim of determining whether it is likely to succeed, and if not Government should change the process.
- ▲ The Government needs to define clear failure criteria at the start of the process and review them periodically, for example a cut-off date for expressions of interest to enter the learning phase. It may or may not be appropriate to include these in the MRWS paper.

- ▲ The district council or equivalent is an appropriate level of decision-making body. While the GDF project is a national project that will benefit the whole country, there needs to be a mechanism to ensure that the opinions that count most in the process are those of the local community who will experience both the benefits and the detriments of the project. The project must not become a political football with the decision effectively being made by external pressure groups from outside the area that have an agenda that goes beyond the immediate issue of solving the current waste problem.
- ▲ Geologically suitable areas do not necessarily follow administrative boundaries. Provision needs to be made for an area that covers parts of more than one district to be readily considered in the process. Furthermore, it is still not clear whether the volunteer community covers the footprint of the excavations or the footprint of the whole area that might be impacted in the long term. The location of potential future discharges could be many tens of miles from the footprint of the excavations and in a different district to the surface facilities and excavation footprint. Further clarification is required.
- ▲ The issue of needing to carry out site investigation work outside the area covered by the representative authority has not been addressed. It is likely that Government will have to compel neighbouring areas to cooperate.
- ▲ There will need to be very clear guidance about how individuals or organisations (local bodies) who are not part of local government will be able to express interest and a clear mechanism for providing support to them prior to the representative authority being consulted by Government.
- ▲ It is not clear how engagement prior to entering the learning phase, and during the learning phase, would be funded. The Government needs to make a clear commitment that all reasonable expenses incurred during these early stages will be covered by engagement funding. In the absence of such funding, there will be few enquiries for information.
- ▲ Why restrict the process to identifying a single site in any area? There may be more than one suitable site in a given area, and we may need more than one site to provide an optimised disposal solution (see Question 6).
- ▲ The Government needs to remember that the UK is not Sweden or Finland. Have all of the appropriate lessons been learned from other countries, for example France, which is in many ways more similar to the UK than Sweden or Finland in terms of public behaviour. It should also be noted that the Swiss Government has adopted a different approach that includes a degree of compulsion on the local communities to solve the national radioactive waste disposal problem. It appears that Japan is now moving in the same direction. While, a pure volunteer approach is to be aspired to, the Government must not be afraid to change policy should the

process stall again. Why is the GDF project different to HS2 in terms of the way it is to be imposed on communities?

- ▲ While the process must be allowed to proceed at a pace with which the local people are comfortable, Government should play a stronger role in ensuring that the process keeps moving. The project needs to be removed from political control now that a decision has been taken to proceed with geological disposal. We cannot afford further years of delaying tactics by opponents and decisions being delayed to fit the political cycle.
- ▲ The indicative timescales given for early parts of the programme are too ambitious, especially the start of the learning phase. For example, it is unlikely that a professional and comprehensive engagement programme would be completed within a year of the publication of the White Paper unless much of the material to be disseminated is already in preparation, especially if it is to provide area-specific information that is sufficiently detailed to be useful at this stage. It is likely to take most local bodies a further year to engage with DECC, especially if the approach is not led by the council who would become the decision-making body.
- ▲ The engagement process needs to explain why it is important that the country proceeds with geological disposal as soon as practicable. Lack of progress is being used as a political football in regard to building much needed nuclear power stations. The costs and additional dose that will be incurred by having to repackage existing wastes, build new stores and move wastes need to be set out. Sellafield are about to start spending money on replacing stores that may not be needed if the UK has a site for even some waste in the near future.
- ▲ The engagement process needs to be highly professional and there needs to be an associated education programme including online courses. It will need to involve communications specialists.
- ▲ The pre-learning phase information should also contain a discussion of the different ways in which safety can be provided by a range of different types of site and for different types of waste.
- ▲ Generally in the public health arena people ask why they are being engaged if the risks are so small. It is primarily about educating people, for example about the risks posed by a GDF (all stages) compared with the risks of other things they do every day. In particular, a distinction needs to be drawn between the dangers (e.g. from terrorism) of having radioactive waste on the surface and the safety of it being located deep underground. There is a need to provide context to the GDF, in particular comparing the 'do nothing' option with the disposal option, and to talk about the extremely stringent risk targets that will be enforced by the regulatory authorities.

3 Do you agree with this approach to revising roles in the siting process set out in the White Paper? If not, what alternative approach would you propose and why?

- ▲ We agree that the regulators should be given an enhanced role in the process, as they are the ones that people will look to for trusted opinions.
- ▲ RWMD should be moved to become an SLC as soon as practicable so that there are stronger incentives to meet milestones and keep the process moving.
- ▲ There is a role for an independent scientific panel of distinguished individuals such as the Blue Ribbon Commission on America's Nuclear Future. In this country the most appropriate body to lead such a panel would be the Royal Society.

4 Do you agree with this proposed approach to assessing geological suitability as part of the MRWS siting process? If not, what alternative approach would you propose and why?

- ▲ The initial 'geology' report should include all of the relevant geoscientific (e.g. hydrogeology, geochemistry, geophysics) information that is available, including pointing out the information gaps. It should also cover how a GDF could fit into the geology and potential GDF-geology interactions. Paragraph 3.19 perhaps suggests that the more comprehensive report is what Government has in mind but the term geoscientific should be used throughout in place of geological to avoid confusion.
- ▲ Paragraph 3.9 of the consultation document makes the point that there is no best or most suitable type of geology. This needs to be further expanded to make the point that we do not need to find the 'best'/'safest' site in the country from the geological perspective. The site has to be 'good enough' for the proposed wastes when considered in conjunction with the engineered barrier system that will be implemented; the baseline inventory contains a range of different waste types that place different requirements on the geological barrier. Long-term safety is important but, so long as a GDF meets regulatory requirements, it should not override everything as it relates to protecting people tens of thousands of years in the future from something small that might not happen. This should not be at the

expense of larger detriment to current and immediate generations that can be shown definitely will happen (e.g. doses from packaging, conventional safety risks from more complex engineering or a more difficult site). One of the consultation responses to the Dounreay NLLWF was 'why on earth are you spending so much of our money to prevent something so trivial that might never happen anyway?'.

- ▲ Shale gas is going to have important implications for areas of exclusion in order to minimise the impact of human intrusion into the GDF.

5 Do you agree with this proposed approach to planning for a GDF? If not, what alternative approach would you propose and why?

- ▲ It is sensible to make it a Nationally Significant Infrastructure Project as proposed as long as the tension between national and local interests can be resolved. A GDF is required to solve a national problem, as is recognised in the way the siting process is configured in some other countries, for example Switzerland.
- ▲ Transport should be a key element of planning, as moving large quantities of radioactive waste around the UK over many decades is likely to be the main environmental impact and possibly a major cost element of the proposed development.
- ▲ The paper needs to address the issue of gaining the necessary permissions to move large quantities of radioactive waste from Sellafield to a GDF through communities that are potentially opposed to the project. Potentially, the benefits package needs to be extended to these communities as well as to the host community as they are unlikely to see the benefits associated with GDF construction and operation, but will see the disbenefits of waste being transported.
- ▲ The issue of housing blight should be addressed, presumably as part of the Nationally Significant Infrastructure Project planning regime.

6 Do you agree with this clarification of the inventory for geological disposal – and how this will be communicated with the volunteer host community? If not, what alternative approach would you propose and why?

- ▲ The general approach is sensible, but the consultation document assumes that there is a single site for all of the Baseline Inventory. This assumption is unhelpful and too rigid. Experience suggests that it may be difficult to find a site that is suitable for the whole inventory, and making this a condition will rule out many sites that are potentially suitable for a component of the inventory. Thus it would be prudent to keep the door open for a combination of sites that together could take all of the Baseline Inventory. To have a site that will take part of the inventory (e.g. ILW) would be a huge step forward, even though it only solves half the disposal problem. The White Paper needs to make clear that the process will determine which elements, or which proportion, of the Baseline Inventory as it has evolved at the time could be safely accommodated at any given site. The preference is for a single site/facility for all wastes but this may not be practicable for a number of reasons. For example, it may not be appropriate to keep a GDF open for an extended period to accommodate all decommissioning waste and waste from a new generation of nuclear power stations.
- ▲ Putting a limit on the New Build capacity feels like a hostage to fortune. It would be far better to emphasise how the capacity of any site that is offered would be determined and the process that will be used to optimise the distribution of wastes between sites, if there is more than one site, to make best use of local conditions. It should be emphasised that local conditions rather than the baseline inventory will determine what is actually disposed of at any site.

7 Do you endorse the proposed approach on community benefits associated with a GDF? If not, what alternative approach would you propose and why?

- ▲ In general the proposal is reasonable but needs further clarification. For example, who will decide how the funds are spent?
- ▲ As noted above, detriment may be experienced by communities other than that hosting a geological disposal facility, e.g. those through which wastes will need to

be transported. The community benefits programme should therefore be clear about the types of communities that would be eligible for such benefits.

8 Do you agree with the proposed approach to addressing potential socio-economic and environmental effects that might come from hosting a GDF? If not, what alternative approach would you propose and why?

- ▲ The approach is reasonable, especially bringing as many activities as possible forward in time. The transport of radioactive wastes to the GDF should be a key issue in the proposed 'environmental, socio-economic, health and transport' report.
- ▲ Uncertainty will be a key issue for many people in potential host communities so it needs to be minimised as far as possible. The *possibility* that a major infrastructure project might be implemented in an area often causes more housing blight than the certainty that it will.

9 Do you have any other comments?

- ▲ The Government has done a good job in taking on board suggestions made in response to the Call for Evidence.
- ▲ A key factor in the success of the process is the level of trust that is placed in the people and organisations involved. Thus openness and transparency are paramount.