

Ingrams Farm, Fittleworth Road, Wisborough
Green, Nr Billingshurst
West Sussex RH14 0JA



LOW LEVEL RADIATION AND HEALTH conference

Consultation Comments

UK Government's radioactive waste management consultation

"There should be no commitment to a large programme of nuclear fission power until it has been demonstrated beyond reasonable doubt that a method exists to ensure the safe containment of long-lived, highly radioactive waste for the indefinite future"

*Flowers Report, Royal Commission on Environmental Pollution
6th Report, 1976*

The Low Level Radiation and Health Conference welcomes the opportunity to submit a comment to the UK Government's consultation on its 'Managing Radioactive Waste Safely' (MRWS) policy and siting considerations for developing a deep underground radioactive waste repository (1). Well, we've all been here before and such consultations have taken a number of forms. Basically we need:

- Public confidence in the process
- Clear and transparent decision making
- Understanding that a method exists as recorded above by the Flowers Report

Prior consultations and possible suggestions have included:

- **Sea disposal**

In the 1970s and 80s, low and intermediate level waste was disposed of at sea. This practice was outlawed by the London Dumping Convention (LDC) in 1983 after research about the leaking of the canisters in the sea off the USA and the UK, intense pressure and direct action. Even after the LDC banned the practice, it took trade union action and a united refusal to handle the waste to ensure that the UK did not flout the ban and continue its sea disposal regime.

- **Land disposal**

In the 1980s, several attempts were made by the Nuclear Industry Radioactive Waste Executive (NIREX) to secure a disposal solution for Low Level Waste and Intermediate Level Waste, at selected sites in eastern England, firstly in Elstow, Bedfordshire and Billingham in Cleveland; subsequently again in Elstow, South Killingholme in Humberside, Fulbeck in Lincolnshire, and Bradwell, Essex. These proposals were withdrawn owing to public opposition.

NIREX then compiled, but did not publish, a list of over 500 sites throughout the Britain which it had targeted as possible disposal sites, but it became increasingly interested in burying the waste at

either Dounreay or Sellafield, to the extent of compromising their own site selection criteria. By 1991, NIREX had focussed on Sellafield.

Rock Characterisation Facility Public Inquiry

In 1997, Inspector at the PI found against the proposed RCF and the Government refused NIREX permission to construct the proposed Rock Characterisation Facility (RCF) – a geological experimental project and a fore-runner to a repository – at Longlands Farm in Cumbria. There were three main grounds for refusal:

- adverse local environmental impact.
 - scientific uncertainties and technical deficiencies; and,
 - concern over the selection process by which a site whose geology was, in the Planning Inspector's view, "*unsuitable*", had been chosen;
- but in addition the Inspector referred to the
- Flawed approach being taken to scientific research by not peer-reviewing it.

The fact that the Public Inquiry provided an independent analysis of the scientific basis of disposal – and found that it was wanting – was a very important watershed in the credibility of the case for disposal. The information accrued for this PI was then "hidden away" and it became increasingly difficult to access and/or track down. Repeatedly "wrong briefings" have been made to the civil service about the RCF, the outcomes of the Hinkley Point Public Inquiry and the Fukushima accident where Fols established that the press had been advised to play down the impacts of the disaster..... ie approaches which are still being undertaken are not transparent, accurate or likely to contribute to building trust.

Following these setbacks, the government was left with no policy for the long-term management of nuclear waste. Both the House of Lords and the Radioactive Waste Management Advisory Committee (RWMAC) urged a fresh approach, one based on openness and transparency, greater public participation and which would be overseen by an independent body. Accordingly, in 2003, the Government established the Committee on Radioactive Waste Management (CoRWM) which took three years to complete a comprehensive and wide ranging examination of the options available for the management of the waste. In its report published in July 2006, it concluded as follows: "*Within the present state of knowledge, CoRWM considers geological disposal to be the best available approach for the long-term management of all the materials categorised as waste in the CoRWM inventory when compared with the risks associated with other methods of management*" (CoRWM, 2006, pp. 12-13). However, this first recommendation was accompanied by a further three qualifying recommendations as follows:

"A robust programme of interim storage must play an integral part in the long-term management strategy (Recommendation 2).

"There should be a commitment to an intensified programme of research and development into the long-term safety of geological disposal aimed at reducing uncertainties at generic and site-specific levels, as well as improved means for storing wastes in the longer-term" (Recommendation 4).

The commitment to ensuring flexibility in decision-making should leave open the possibility that other long-term management options (for example, borehole disposal) could emerge as practical waste in the UK. There have been many unsuccessful attempts to develop a policy on its management but there is, as yet, no acceptable solution.

For decades, most of the high-active waste has been stored at Sellafield in Cumbria in nitric acid that has to be constantly cooled and which presents a constant threat of 9/11 type attack while low and intermediate level material has had a history of disposal. Recently the House of Commons Audit committee was extremely critical of a failure by the NDA to inform them of their current plans or the associated bill.

Any proposals for the storage and/or disposal of existing legacy wastes or wastes arising from any proposed new build programme need to be subjected to critical appraisal and challenged, where appropriate, at every stage in the decision making process.

The research programme called for by CoRWM to reduce the uncertainties around disposal **has not yet been developed** with anything approaching the urgency, depth, visibility or seriousness CoRWM envisaged. The review of storage has not taken place in an open manner and is being undertaken by the agency which owns the stores, rather than by an independent, external agency. The Government has taken a selective rather than an integrated view of CoRWM's recommendations, interpreting the 'disposal' recommendation as a 'solution' not just for legacy wastes but for those arising from new build as well. CoRWM's concern that that *'the proposals might be seized upon as providing a green light for new build'* (*Ibid*, p.15) was well founded.

In January, Government proposed to introduce legislation intended to result in the construction of a further 10 gigawatts of nuclear-generated electricity capacity (Hinkley and Wylfa) and yet the CoRWM contribution to this GD consultation refers specifically to an **additional 75 MW of capacity**.....yet another example of obfuscation and playing with the "truth". The justification for this would rest, in part, on the government's **mis**interpretation of CoRWM's proposals for the long-term management of nuclear waste.

The consultation documents hinge on a centralising tendency. Given that in the mind of government the County Council arrived at the "wrong decision" after years of considering the evidence the role of a County Council is to be reduced as the decision-making body. We would advocate the Government returning to the drawing board with a policy that:

- fully considers long-term safe interim storage of waste,
- tackles the hundreds of technical and scientific issues of concern with 'geological disposal' and
- commits itself much more wholeheartedly to openness and transparency to encourage positive community support.

The previous process **failed** in part because of the complexity of the nuclear waste problem, but also because of the Government's refusal to accept most of the recommendations of its own advisory committee – the first version of the Committee on Radioactive Waste Management (CoRWM) which undertook a much broader approach drawing on widespread community engagement.

- CoRWM 1 recommended a high level of **public engagement** in any future process and particularly if any changes such as the inventory of nuclear wastes was changed. This has been ignored.
- There needs to be a consultation on the development of **interim storage** as this is a pressing problem before any GDF is finalised and/or constructed.
- There should be a **national debate** about the issues raised prior to inviting local communities to offer to host a GDF
- There is a need for a more rigorous and in-depth **national geological screening** of the UK to take place. It would also be very helpful for there to be a full publication of the NIREX list of potentially geologically suitable sites drawn up in the 1990s.

- RWMD has listed 900 outstanding scientific and technical issues, which need to be addressed, resolved and solved and the Nuclear Waste Advisory Alliance (NWAA) has listed over 100 such issues on their Issues Register. NWAA has been working with DECC and the NDA to make the process of addressing and answering these more open and transparent. This process is nowhere completed and/or available and yet is basic to undertaking any decisions on siting a GDF.
- Any assessment of community support for a radioactive waste proposal needs to be undertaken on the basis of informed consent.
- Funding needs to be provided so that Councils can commission independent advice and so that NGOs can provide a critical voice. The Research Councils have not made money available for Knowledge transfer arrangements to enable local communities to keep up to date with the latest research involved. Only late in the day have they become involved in providing money for undertaking some of the fundamental research
- In Port Hope, Canada, the local community insisted on funding a team to provide them with independent analysis of the current research findings with reference to uranium tailings. Such an arrangement needs to be incorporated into GDF investigations.
- Any public awareness campaign needs to be organised by an independent body and should be carried out on the basis that all sides of the debate are represented equally and fairly along with access to equal resources of finance and staffing.
- The Government should produce a **Baseline inventory** which does **not** include new build reactors and a Maximum Inventory which shows the impact of a 16GW new build programme. It should enshrine in any future process the principle that any community willing to host nuclear waste facilities should get a say in the inventory of waste committed to those facilities. Adding new build waste to a baseline inventory risks technical problems – the wastes from new reactors reaches higher temperatures, problems of scale and of timing
- The Government must re-visit CoRWM's idea of a **separate process** which can examine the ethics of producing more waste in the face of the uncertainties involved with nuclear waste management.
- The Government should ask an independent body to make a full assessment of the experiences of other countries in finding a long-term solution for the management of intermediate and higher level radioactive waste, such as Sweden, Finland and France. This should be published and made freely available to all those considering volunteering for a new repository process.
- The Swedes involve "critical voices" in their discussions and fund the NGO on radioactive waste which helps build confidence in the process and enables better decisions to be taken.

Specific comments:

Figure 1: Illustration page 7

The process in Sweden took 30 years to get from start to current position. The timetable is too short. I have visited Clab and Forsmark placed within hard rock surrounds. There is still doubt about the ability of steel canisters to last more than 100 years when 100,000 will be required. The key problem is to let the gas build up out but not let any water in to the canister.....this is just one of the problems which has not yet been addressed/solved.

1.22

CoRWM did put the proposal of adopting GD within the need to carry out research and the NDA has a developing programme which will be published next year. They are undertaking a more transparent approach to how they are addressing the key problem areas BUT the Research Councils have been slow to support such work and there is nothing I can find to address the associated social issues.

1.27

The language is wrong == GD *appears* as though it *may* provide etc. There is nowhere yet constructed nor any demonstration to confirm such an assertion. Where is the EVIDENCE? Much stress is placed on Evidence based policy – this needs to be

1.28

As stated, it is the Preferred Approach – yet to be proven. All the following are ASSERTIONS demonstrating INTENT.

Q1: Right of Withdrawal

The **Right of Withdrawal** (RoW) should be retained and remain the same as with previous policy commitments.

Q2: Decision-making

No

The alternative suggestions for **the role of elected bodies** in future are unacceptable. This is game-playing, undemocratic and an insult and will not encourage/development the trust you claim to want to re-build.

Q3: Revising roles

No

The **Inventory** considered by CoRWM1 was not the same as that now being presented in this consultation. It is unacceptable to include the possible future wastes on top of the existing legacy wastes without undertaking a further consultation. It is also still not clear what the total Inventory consists of particularly if Pu definition is changed from “possible future fuel” to wastes etc.

And what about the mention of 75 MW nuclear power station programme in the CoRWM2 response to this very consultation? Where’s that going? How much will there be? And the new proposed nuclear power station programme operates differently and produces wastes of much higher temperature so while they are cooling down an repository, if built, will need to be closed....or left accessible for retrieval.....how’s that going to work

Q4: geological suitability

Needs establishing first

The BGS has examined the UK and established that 30% might be suitable for a potential GDF. It would be a waste of time to explore with a local community the issues involved in siting a GDF while knowing or finding out subsequently that the site was not suitable geologically. Establishing the geological potential has to be a prerequisite as does the knowledge of the water movements underground.

Q5: National Policy Infrastructure approach

No

This has not been very acceptable nor worked very effectively so should *not* be used. As Sir Michael Pitt exclaimed:

Government planning supremo Sir Michael Pitt ... told developers to stop “intimidating” his major infrastructure planning unit with huge documents from project promoters.

Pitt urged promoters to cut the scope of their planning applications and reduce the detail in their environment impact assessments (EIAs) before submitting them to the Planning Inspectorate’s National Infrastructure Directorate.

His call came after electricity company EdF submitted a 36,000 page EIA as part of its planning application for a new nuclear power station at Hinkley Point. *“Is that proportionate?”* said Pitt. *“I think this is intimidating. It is for us and it certainly is for local authorities.”*

Pitt suggested developers were being over-cautious to ensure their projects are not delayed by judicial reviews, as has happened to High Speed 2. But he said this had to stop. “We can start streamlining.” Pitt said project promoters could limit the amount of documentation by developing **statements of common ground** with the statutory consultees such as local authorities. Doing this would enable his inspectors to focus on “areas of difference” during the statutory six month assessment period, he added. The process for a GDF would need a longer timetable to be effective.

Q6: Inventory

The Government should produce a Baseline inventory which does **not** include new build reactors. It also needs to produce an Inventory which shows the impact of a 75GW new build programme (as observed in the CoRWM response to this consultation). These two different types of arisings need to be dealt with separately.

- It should enshrine in any future process the principle that any community willing to host nuclear waste facilities should get a say in the inventory of waste committed to those facilities. Adding new build waste to a baseline inventory risks technical problems – the wastes from new reactors reach higher temperatures, there are associated problems of scale and of timing
- The Government must re-visit CoRWM’s idea of a separate process which can examine the ethics of producing more waste in the face of the uncertainties involved with nuclear waste management.

Q7: Community benefits

There are difficulties with this concept as to whether they are regarded as a “bribe” or for taking on the responsibility of safeguarding these wastes. In addition, future generations will have the burden /responsibility of this repository. What happens when radiation doses are reduced again will those exposed to excess levels then be compensated? (NB: Dose limits have continually been reduced since their introduction amounting to 5 lowered limits....and it’s only a matter of time before the 6th reduction is made.

Q8: Sustainable development

Any development should be subjected to an SEA and social, economic and environmental factors taken into account.

Q9: Any other comments?

A key finding from an evaluation of the MRWS was a lack of trust. This document does little to address this issue....and I have no desire to be contributing to the next consultation having had very sound contributions about public engagement and voluntarism not taken into account again. In fact, those who have contributed regularly to these consultations need themselves to be offered community benefits as compensation for the amount of time they have given to consideration of these very issues. Successful approaches to voluntarism and participation exist and need to be drawn on.

Submitted on behalf of the Conference Organising Group of the Low Level Radiation and Health which was established in 1985 by members of the public which has held 21 meetings drawing together specialists from the industry, the regulators, academia, researchers, campaigners and members of the public.