

Nuclear Free Local Authorities **RADIOACTIVE WASTE POLICY**

Briefing No.55 – Triennial Review of CoRWM

Prepared for NFLA member authorities, March 2015

Committee on Radioactive Waste Management Triennial Review 2015

i. Overview of Briefing

The Committee on Radioactive Waste Management (CoRWM) was established to provide independent scrutiny and advice to the UK governments on the long-term management of higher activity radioactive wastes. CoRWM is an advisory non-departmental public body, and it is sponsored by the Department of Energy & Climate Change (DECC).

DECC has announced the second Triennial Review of CoRWM, and is seeking the views of stakeholders who wish to contribute to the review. Such Triennial Reviews of non-departmental public bodies (NDPBs) are part of the UK Government's commitment to ensuring that NDPBs continue to have regular independent challenge.

The review is examining whether there is a continuing need for CoRWM's function and its current form and whether it should continue to exist at 'arm's length' from the Government. DECC also seek the review to examine whether CoRWM's control and governance arrangements continue to meet the recognised principles of good corporate governance.

Attached below is the NFLA response to the five questions posed by DECC, which has been developed by the NFLA Scotland Policy Advisor and NFLA Secretary. The consultation closing date for responding to the review is the 10th March 2015. Completed submissions should be emailed to ond@decc.gsi.gov.uk or sent by post to: Geological Disposal Team, Office for Nuclear Development, Department of Energy and Climate Change, Room M06, 55 Whitehall, London, SW1A 2EY.

NFLA submission to the CoRWM Triennial Review 2015:

1. Do the key functions performed by CoRWM continue to be necessary and appropriate for the successful management of higher activity radioactive wastes?

The role of the reconstituted CoRWM is to *“provide independent scrutiny and advice to the UK Government and Devolved Administrations on the long-term management of radioactive waste, including storage and disposal. CoRWM's primary task is to provide independent scrutiny on the government's and Nuclear Decommissioning Authority's (NDA's) proposals, plans and programmes to deliver geological disposal, together with robust interim storage, as the long-term management option for the UK's higher activity wastes.”*

Those who support the nuclear industry believe that it is possible to “dispose” of nuclear waste deep underground in a so-called deep geological repository. The philosophy of deep disposal is based on the concept of multiple barriers: the waste containers themselves; the grout surrounding the containers; the surrounding rocks; and dispersal of any radioactivity penetrating these barriers away from the surface environment. Deep disposal, they say, would put this dangerous waste out of harm's way, remove a potential target for terrorist attack, and avoid leaving a problem of our making for future generations to deal with.

However, in the NFLA's view, the 'deep disposal' concept is based on the eventual dilution and dispersion of radioactivity throughout the environment. Any deep underground repository would have targets set for doses of radioactivity to the public during the thousands or even millions of years the waste remains dangerous. A small miscalculation in the amount of radioactivity reaching the surface could have devastating consequences. Former salt mines at Asse and Morsleben in Germany which were both used as a repository for low and intermediate-level waste illustrate the problems that can occur. Both have suffered from ingress of water and both are in danger of collapse. The waste will probably have to be retrieved from both sites. (1)

The fact that there are uncertainties and the need for continuing research on geological disposal was acknowledged by the first CoRWM report in 2006. However, those who support the nuclear industry appear to believe that any uncertainties associated with the science of deep disposal can be reduced sufficiently by carrying out further research. To the NFLA, this is poor scientific method. It cannot be assumed that further research will produce the desired outcome. For instance the UK Nuclear Decommissioning Authority says "*further research will be carried out during a geological disposal facility development process in order to reduce uncertainties*". The Environment Agency points out that:

"[f]urther research has the potential to increase uncertainties, e.g. by revealing unforeseen complexities or additional processes influencing the system under study. While a well defined and executed research programme can answer fundamental questions, uncertainty is a normal characteristic of science, and as such, additional questions (and uncertainties) are often raised."(2)

Scientific research should be carried out with an open mind, not with the aim of proving that an initial view is correct. Strong initial impressions can structure the way that research results are interpreted. This is known as "confirmation bias". In the NFLA's view, there must be no suspicion that research findings are deemed acceptable regardless of what the research actually identifies, or that new evidence is simply made to fit.

In March 2010, NFLA note that the independent group Nuclear Waste Advisory Associates (NWAA) published an 'Issues Register' listing 100 issues which need resolution before a robust safety case could be made for deep geological disposal. (3) Further research on many of these issues might, in fact, show that it is not possible to produce a robust safety case for a deep geological repository.

The NWAA 'Issues Register' was complemented in September 2010 by an extensive literature search by Dr Helen Wallace for Greenpeace International. The report – 'Rock Solid' (4) – provided an overview of the status of research and scientific evidence regarding the long-term underground disposal of highly radioactive wastes. It identified a number of phenomena that could compromise the containment barriers potentially leading to significant releases of radioactivity.

In the NFLA's view, it is essential that CoRWM's remit is strengthened to make absolutely clear that its role of scrutinising "*proposals, plans and programmes to deliver geological disposal*" is NOT to assist in the implementation of the Government's programme but is to guard against any unscientific practices and confirmation bias in the research programme. CoRWM's remit should acknowledge that it is possible that further research may indicate that a robust safety case for deep geological disposal cannot be made.

- 2. Do the key functions performed by CoRWM continue to be necessary for the successful implementation of the Geological Disposal Facility Programme in particular? In respect of questions 1 and 2 you might wish to consider issues such as: is independent scrutiny and advice, over and above that already provided by the independent safety, security and environmental regulators, necessary for the successful long- term management of higher activity radioactive wastes and the delivery of geological disposal?**

In the light of the above response to question 1, the NFLA see Question 2 as a poorly drafted question from the "confirmation bias" point of view. To paraphrase the question is asking: "*Is CoRWM necessary for the successful implementation and delivery of geological disposal?*" This

should not be CoRWM's role, and it is worrying to NFLA that the idea that it might be is in the mind of ministers and officials at the Department of Energy and Climate Change (DECC).

Phrasing the question in this way suggests that DECC has already decided that deep geological disposal is going to be safe and therefore any research findings published in future will be deemed "acceptable" regardless of what the research actually identifies.

R&D activities should not simply be to "confirm" Government policy. CoRWM's remit should make clear that it needs to guard against confirmation bias which "*results in a situation where, once a view has been formed, new evidence is generally made to fit*".

Is stakeholder engagement and transparency of information important?

CoRWM is expected to undertake its work in an open and consultative manner; engage with stakeholders and publish advice (and the underpinning evidence) in a way that is meaningful to the non-expert. CoRWM must continue to inspire public confidence in the way in which it works.

CoRWM's first report noted that continuing public and stakeholder engagement will be essential to build trust and confidence in radioactive waste management including the siting of facilities.

According to CoRWM's work programme update end of quarter one 2014-15, dated July 2014 (It should be noted at this point that NFLA is very concerned that this document is the most recent report available on the website, and wishes to know from CoRWM and DECC why its website is not being updated at regular intervals?) members of the Committee have observed meetings to inform CoRWM's scrutiny role of the following bodies:

- i. the Nuclear Innovation and Research Advisory Board (NIRAB),
- ii. the Geological Disposal Programme Board (GDPB),
- iii. the Nuclear Waste Research Forum (NWRF),
- iv. the Nuclear Decommissioning Authority Research Board (NIRAB),
- v. the DECC- Non-Governmental Organisation (NGO) forum,
- vi. the Radioactive Waste Management Limited's (RWM) Technical Advisory Panel (TAP),
- vii. the Geological Disposal Facility Users Group,
- viii. the Scottish Government Higher Activity Waste Implementation Board, and
- ix. the Scottish Nuclear Sites Meetings

In the NFLA's view, CoRWM needs to be the interface between the public and stakeholders at these other meetings which are not being held in public. A full report back from these meeting should be given at CoRWM plenary meetings and transcribed into CoRWM's minutes so that they are available to members of the public and stakeholders to scrutinise.

3. If you consider that CoRWM's functions remain valid, are these functions best delivered by a Non-Departmental Public Body (NDPB)?

CoRWM's Work Programme update indicates that in future the Committee will:

- Provide advice on the GDF siting policy including on DECC's and RWM's engagement plans and activities (completion target date September 2017)
- Provide advice to DECC on the Regulatory Framework for a GDF with work not starting until June 2015.
- Provide advice to DECC on RWM's Generic System Safety Case approach for a GDF with work starting in September 2015.
- Inform CoRWM's understanding of the conceptual bases of safety cases.
- Provide advice to DECC on the communication and use of Safety Cases in the siting process. Initial discussions taken place with DECC (completion target date September 2017)
- Provide advice on the transition of Radioactive Waste Management Ltd to an effective GDF Delivery organisation.(completion target date December 2015)

- Consideration of the current status of the interim storage of radioactive waste, including plans for the retrieval of waste from legacy ponds and silos.
- Consideration of plans for spent fuel and plutonium and the implications for the GDF.
- Provide effective engagement with the public and other stakeholders to raise the profiles of CoRWM and help inspire confidence in its work.

In the NFLA's view, CoRWM should not just be carrying out scrutiny of these issues "on behalf of the public". It should also be facilitating access to independent expertise which would work for the public. If the public and stakeholders are to be properly engaged in these issues it needs access to funds which it can use to pay for independent expert advice.

For example, MKG is an environmental NGO primarily funded by the Swedish Nuclear Waste Fund which all waste producers contribute towards. MKG describes itself as representing an unbiased voice of reason in a debate where a specific method of disposing our nuclear waste is being presented as a definitive solution. MKG's funding model represents a useful model for the UK in trying to develop a fully open and transparent consultative process for nuclear waste management.

4. **What do you see as the benefits and risks of delivering the functions of CoRWM in these alternative ways? In particular, do you view any of these methods of delivery as beneficial, and why?**
5. **If you consider that an advisory NDPB is the right delivery mechanism for the functions of CoRWM, what improvements could be made to support the effective and efficient delivery of CoRWM's remit? *You might wish to consider issues such as: does CoRWM do a good job – does it offer value for money? Is CoRWM politically impartial? Do you trust CoRWM as a source of independent advice and authoritative information? Has CoRWM the necessary skills and experience to fulfil its remit?***

In the NFLA's view, CoRWM needs to be made more independent, not less. It needs to include a wider range of views and expertise than it currently holds. A common perception from more critical stakeholders of national nuclear policy is that the Government has chosen the members of the Committee which *it* expects will give the answers *it* wants. As such trust in the Committee as a source of information will be diminished.

For the NFLA, improvements that need to be made include:

1. Replace the existing website. CoRWM really needs its own independent website. This is URGENT, and ABSOLUTELY VITAL. It is an absurdity to the NFLA that a more recent quarterly report is not available on the website; nor does there appear to be any minutes of recent plenary meetings over the past few months. This invites the comment that Government expects us to believe that it can produce an adequate safety case for a facility which will contain radioactive waste for hundreds of thousands of years – a process akin to producing an accurate weather forecast for a particular day thousands of years hence, but it cannot yet run an adequate website.
2. CoRWM needs an improved secretariat, which is taken out of DECC and made fully independent.
3. CoRWM needs to hold frequent and accessible plenary meetings. And all the papers for these meetings and minutes need to be made readily available on the website. (As used to be the case.)
4. CoRWM needs to include in its work programme an investigation into how best it can implement a fully funded independent stakeholder advisory body similar to that undertaken by MKG in Sweden.
5. Membership of CoRWM needs to be drawn from a wider range of views and expertise. It needs to include critical voices of the deep geological disposal programme as well as experts in social sciences and stakeholder engagement.

References to the NFLA submission

- (1) Managing Spent Fuel from Nuclear Power Reactors: Experiences and Lessons from around the World, IPFM, September 2011.
http://fissilematerials.org/library/2011/09/managing_spent_fuel_from_nucle.html
- (2) Response to Nuclear Decommissioning Authority consultation radioactive waste management directorate proposed research and development strategy, Environment Agency, November 2008, page 6 http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/static/documents/Research/1976_RWMD_Proposed_RD_strategy.pdf
- (3) Nuclear Waste Advisory Associates Issues Register, March 2010.
<http://www.nuclearwasteadvisory.co.uk/wp-content/uploads/2011/06/NWAA-ISSUES-REGISTER-COMMENTARY.pdf>
- (4) Rock Solid? A scientific review of geological disposal of high-level radioactive waste
<http://www.greenpeace.org/eu-unit/Global/eu-unit/reports-briefings/2010/9/rock-solid-a-scientific-review.pdf>
- (5) Response to Nuclear Decommissioning Authority consultation radioactive waste management directorate proposed research and development strategy, Environment Agency, November 2008, page 5 Footnote 1
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