



**Cyfoeth
Naturiol
Cymru**
**Natural
Resources
Wales**

Ein cyf/Our ref:
Eich cyf/Your ref:

Ty Cambria / Cambria House
29 Heol Casnewydd / 29 Newport Road
Caerdydd /Cardiff
CF24 0TP / CF24 0TP

Ebost/Email:
ceri.davies@cyfoethnaturiolcymru.gov.uk
ceri.davies@naturalresourceswales.gov.uk

Ffôn/Phone:
03000 654248

Radioactivity and Pollution Prevention Branch
Welsh Government
Crown Buildings
Cathays
Cardiff
CF10 3NQ

18th August 2015

Dear Sir/Madam,

WELSH GOVERNMENT CONSULTATION: Geological Disposal of Higher Activity Radioactive Waste: Community Engagement and Implementation Processes

Thank you for consulting Natural Resources Wales on the consultation for community engagement and implementation processes for geological disposal of higher activity radioactive waste. We recognise this follows the Welsh Government's adoption of a policy for the geological disposal of higher activity radioactive waste in May 2015.

Natural Resources Wales supports the consultation process and we provide our responses to the consultation questions overleaf. This follows our previous response to the Welsh Government review of the afore-mentioned policy, which we provided to Welsh Government in January 2015. Our response to the policy review to which we reference, is included as an annex.

Please contact me if you wish to discuss any aspect of our response in more detail.

Yours sincerely,

Ceri Davies
Executive Director of Knowledge, Strategy and Planning

Response to Consultation Questions

QUESTION 1. Do you agree that the Welsh Government should adopt siting processes and arrangements for engaging with potential volunteer host communities that are compatible with those adopted for England and Northern Ireland providing they are consistent with the needs of Welsh communities?

- Please give your reasons.
- If you consider that the Welsh Government should adopt a different approach please indicate what alternative arrangements you consider would be appropriate and what advantages you consider they would offer.

In its role as the lead environmental regulator for Wales, Natural Resources Wales (NRW) is involved in numerous multi-regulatory work streams associated with the regulation of radioactive substances in the UK. We work closely with a range of organisations across the UK on the complex issues around radioactive waste management and disposal in the United Kingdom. This includes:

- UK Government;
- Welsh Government;
- DECC;
- nuclear operators;
- the Office for Nuclear Regulation (ONR);
- the Environment Agency (EA);
- the Scottish Environmental Protection Agency (SEPA);
- the Northern Ireland Environmental Protection Agency (NIEA);
- the Nuclear Decommissioning Authority (NDA); and
- Radioactive Waste Management Ltd (RWM).

As part of this, NRW are engaged in the scrutiny and oversight of the Geological Disposal Facility (GDF) programme that Radioactive Waste Management Ltd (RWM) are tasked by the UK Government to deliver. NRW works closely with its partner regulatory organisations involved in this programme, those being the EA, the NIEA and the ONR.

Natural Resources Wales recognises that the UK and Scottish Governments both have a clear policy on the management and disposal of Higher Activity Wastes (HAW). In Wales and England, the preferred policy is for an engineered deep underground Geological Disposal Facility (GDF). However, the Scottish Government policy favours the long-term management of HAW within near-surface facilities.

NRW supports the proposal from the Welsh Government to adopt the siting processes and arrangements for engaging with potential volunteer host communities that are compatible with those adopted for England and Northern Ireland. These are set out in the UK Government White Paper *Implementing Geological Disposal* (July 2014) and as established under the Managing Radioactive Waste Safely (MRWS) programme in England and Northern Ireland. This is consistent with the Welsh Government's recent policy decision (May 2015) to support engineered deep underground geological disposal of HAW.

Furthermore, NRW considers that by adopting similar arrangements to England and Northern Ireland, it establishes a consistent policy across the UK (with the exception of Scotland). It enables a clear, consistent and joined up approach on the long term management of HAW and spent fuel declared as waste within Wales, England and Northern Ireland. This helps to facilitate and support the progress of a consistent and cost

effective GDF programme, providing transparency for all interested parties including the general public. It enables further progress to be made across the UK in identifying realistic and practicable solutions for the long term management and disposal of HAW.

NRW consider that creating a separate structure for siting arrangements and processes for a GDF in Wales would be counter-productive, being less likely to deliver a consistent and cost effective programme. It would also avoid any unnecessary divergence in administrative and procedural arrangements. This aids the screening, siting and consultation and engagement phases, irrespective of which country of the three the location of a prospective host community was to be identified.

Furthermore, NRW also supports the proviso as stated in the consultation that adopting the same arrangements as England and Northern Ireland would be; '*subject to those arrangements meeting the needs of Wales and the interests of communities in Wales*'. NRW recognise though that the arrangements for England may not be completely suitable for the issues and interests for communities in Wales. We suggest Welsh Government ensure that the arrangements proposed for England and Northern Ireland do consider Welsh communities needs and interests adequately. We would encourage dialogue between Welsh Government and DECC on this matter including engagement with the Community Representation Working Group (CRWG) set up by DECC, or at least considering the use of learning outcomes from it to develop further consultation arrangements in Wales.

In summary, NRW supports the Welsh Governments preferred option for working with potential volunteer host communities in Wales and adopt siting processes and arrangements for engaging with potential volunteer host communities that are compatible with those adopted for England and Northern Ireland.

QUESTION 2. Do you agree that geological disposal should only be taken forward with volunteer communities willing to engage, without prior commitment, in discussions about potentially hosting a GDF?

- Please give your reasons

As mentioned in the response to Question 1, Natural Resources Wales support the proposal that Welsh Government adopt the arrangements and processes as set out in the UK Government White Paper *Implementing Geological Disposal* (July 2014). This includes the established philosophy that geological disposal should only be taken forward with volunteer communities willing to engage, without prior commitment, in discussions about potentially hosting a GDF. NRW supports the view of The Welsh Government that it considers that '*in Wales geological disposal can only be delivered in partnership with willing potential host communities through open and informed discussions*'.

QUESTION 3. Do you agree that communities should have a right of withdrawal from discussions which can be exercised at any point prior to a public test of community support?

- Please give your reasons.

Yes. Natural Resources Wales believe that community support is vital to the success of any GDF programme and that they should have the freedom to withdraw at any point ahead of the public test. Communities should be able to receive and assimilate the

information provided to them and then respond in what they perceive as the best interests of the community they represent.

QUESTION 4. Do you agree that there should be a public test of community support after discussions and the provision of information to a potential host community and before construction of a GDF starts?

- Please give your reasons.

Yes. Natural Resources Wales support the proposal as the success of any proposal is dependent on community support. Any proposal should be based on the cohort comprising the community voicing their support for the proposal based upon the information provided. We suggest that Welsh Government may like to consider as part of reviewing the arrangements, clarifying what is defined as community in terms of a Welsh context as it may not be as simple as matching the same arrangements as set for England.

QUESTION 5. The Welsh Government would welcome constructive proposals for how the public test of community support should be structured in Wales?

- Please give your reasons.

To ensure that the process of the public test is transparent, and meets the needs of Wales, it is important that the public test is inclusive. Given the complex nature of Welsh Communities it is important that a clear understanding of what comprises a community is understood. Since any GDF will have UK significance having clearly agreed approaches for engaging with the community is vital. We would support the development of approaches enabling wider feedback on the process to best design the approach used in Wales.

QUESTION 6. Do you consider that potential volunteer host communities should be given access to information such as the national geological screening and information about the science and engineering of geological disposal in advance of engaging in discussions about potentially hosting a GDF?

- Please give your reasons.

Yes. Natural Resources Wales support the proviso that geological disposal in Wales should only be delivered in partnership with willing potential host communities. This must be through open and learned discussions, including access to key information in order to make an informed decision about potentially hosting a GDF.

QUESTION 7. Do you consider that communities in discussion about potentially hosting a GDF should have independent access to expert advice during those discussions when they consider it is necessary?

- Please give your reasons.

Yes, Natural Resources Wales support this proposal. Communities need to be given sufficient access to independent advice such that they can make an informed decision. Technical information not only needs to be provided in a suitable form, being accessible to

the community in question, but also with sufficient opportunity to test their understanding with independent experts.

QUESTION 8. Do you agree that the inventory for disposal should be specified in advance of discussions and that any changes should be subject to community agreement before any commitment to hosting a GDF??

- Please give your reasons.

Yes. Natural Resources Wales consider that the inventory for disposal, i.e. the waste being considered for disposal in an underground geological repository, is key to discussions with potential volunteer host communities. Communities should have as much information as is possible and confidence that the information provided detailing the projected inventory is realistic and accurate.. This includes both wastes from the existing nuclear programme and any wastes that may be generated from new nuclear facilities.

QUESTION 9. Do you agree that the inventory for disposal should include waste from new nuclear power stations?

- Please give your reasons.

Yes, Natural Resources Wales considers that the inventory for disposal should include waste from both existing and new nuclear facilities to maximise the potential capacity of what will be a nationally critical engineered facility.

QUESTION 10. If you do not agree that waste from new nuclear power stations should be included in the inventory for disposal what disposal option would you prefer for waste from new nuclear power stations?

- Please give your reasons.

N/A

QUESTION 11. Do you agree that Government should provide funding to communities to meet the cost of engaging in discussions about potentially hosting a GDF?

- Please give your reasons.

Natural Resources Wales support the proposal and supporting arguments in the consultation that Welsh Government adopt the arrangements and processes as set out in the UK Government White Paper. This includes the commitment by Government to provide additional investment to a host community, in order to prosper from what will be significant economic benefits that are associated with hosting an engineered facility of critical national importance.

QUESTION 12. Do you agree that Government should provide additional investment for communities engaging in discussions about potentially hosting a GDF and further community investment if a community commits to hosting a GDF?

- Please give your reasons.

Natural Resources Wales support the proposal and supporting arguments in the consultation that Welsh Government adopt the arrangements and processes as set out in the UK Government White Paper that includes the commitment by Government to provide investment to potential host communities involved in discussions regarding potentially hosting a GDF and additional investment for the community that commits to hosting this critical national infrastructure project.

Ends.

Annex 1 - NRW Response to Welsh Government Review of Policy for the disposal of higher activity radioactive waste (Submitted January 2015).

Response to Consultation Questions

QUESTION 1. The Welsh Government is reviewing its current policy on the disposal of higher activity radioactive waste and spent fuel declared as waste. In carrying out this review, the Welsh Government has three options:

- should it seek to adopt a policy for disposal for HAW and spent fuel should it be declared as waste?
- should it retain its existing neutral position of neither supporting nor rejecting a disposal option?
- should it adopt a policy opposing a disposal option for HAW and potentially spent fuel?

Natural Resources Wales statutory responsibilities include the regulation of the disposal of radioactive wastes from nuclear sites, as well as other 'non-nuclear' premises in Wales. The responsibility of issuing and regulating environmental permits and any associated enforcement activity related to sites generating or disposing of radioactive waste in Wales is the responsibility of NRW.

Over a number of decades, specific industrial activities within Wales have generated a legacy of Higher Activity Waste (HAW) (including high level waste (HLW), intermediate level waste (ILW) and a proportion of low level waste (LLW)) for which existing disposal options are not suitable. In Wales, a proportion of this has arisen from electricity generation from the nuclear power stations at Trawsfynydd and Wylfa, and also from other facilities in Wales where radioactive materials have been historically (and are currently) used in radiochemical manufacture, medicine, industry and research.

Furthermore, that a new nuclear power generating facility is proposed in Wales by Horizon Nuclear Power with a reactor design provided by Hitachi GE Nuclear Ltd has been recently confirmed. If built, subject to all the necessary assessments, regulatory approvals and permissions; the facility would generate HAW and Spent Fuel needing management and disposal thereof. Even without new nuclear power facilities being built in Wales, there is a legacy of HAW, as well as the ongoing generation of waste from non-nuclear sources which needs management and eventual disposal.

Natural Resources Wales considers that Welsh Government needs to ensure that suitable and effective arrangements exist for the management of HAW that have been, are being and will be generated at facilities within Wales.

Taking the above into account, and as the lead environmental regulator in Wales with responsibility for the regulation of radioactive waste disposal, Natural Resources Wales considers that:

- Welsh Government should now adopt a clear, definitive policy for the management and disposal of HAW and spent fuel that is declared as wastes from both existing and future sources, that is consistent with its policy of supporting current and future nuclear and non-nuclear facilities in Wales.

QUESTION 2. Should the Welsh Government adopt a policy for geological disposal for the long term management of higher activity radioactive waste and spent fuel declared as waste?

Natural Resources Wales recognises that the UK and Scottish Governments both have a clear policy on the management and disposal of HAW. In England, the preferred policy is for an engineered deep underground geological disposal of these wastes, whereas the Scottish Government policy is opposed to underground geological disposal, favouring instead the long-term management of HAW within near-surface facilities.

Natural Resources Wales recognise that the current Welsh Government Policy is neither to support, nor oppose the UK Government policy of geological disposal for HAW.

Natural Resources Wales are involved in an assortment of multi-regulatory work streams associated with radioactive substances regulation in the UK. We work closely with the Environment Agency, the Office for Nuclear Regulation, the Scottish Environmental Protection Agency, the Nuclear Decommissioning Authority and Radioactive Waste Management Ltd on the complex issues around radioactive waste management and disposal in the United Kingdom.

Through this Natural Resources Wales note that of those countries in the international community having HAW and spent fuel, the majority are applying (or considering to apply) deep geological disposal as their preferred option. Within the European Community there are a number of member states who have made substantial progress in this area. This includes significant progress in community and stakeholder engagement, geological screening programmes, site identification and selection programmes. In some cases this has progressed to starting the construction phase of a rock laboratory or geological repository.

With this in mind, and as stated in our previous response to the call for evidence on this policy review (refer to Annex 1); we maintain the following, that '*Natural Resources Wales has reviewed the Committee on Radioactive Waste Management (CoRWM) recommendations from 2006 and its statement of 2013, noting their recommendation that geological disposal is the best long term option for the disposal of higher activity radioactive waste and spent fuel declared as waste*'.

Natural Resources Wales acknowledge that based on current evidence worldwide, the most favoured option for the management and disposal of HAW is geological disposal, with the most commonly accepted approach being that of an engineered deep geological repository. As such, we support the proposed approach set out in the consultation, that Welsh Government adopt a policy to favour geological disposal.

Furthermore, we reiterate our comment previously made (Annex 1) that it is essential that '*Welsh Government is in a position to engage with the relevant UK Government departments, regulators and operators to play an effective role in UK radioactive substances policy and strategy development*'.

Should Welsh Government issue a policy favouring geological disposal, it would establish a consistent policy across Wales and England. It would bring an opportunity for a clear,

consistent and joined up approach on the long term management of HAW and spent fuel declared as waste within Wales and England.

This would clarify the common position to all parties involved in radioactive waste disposal in Wales and England; from nuclear operators and regulators to Government departments, enabling further progress to be made in identifying realistic and practicable solutions together for the long term management and disposal of HAW.

QUESTION 3. If the Welsh Government does not adopt a geological disposal policy should it adopt a policy for an alternative disposal route for higher activity radioactive waste and spent fuel declared as waste? If so what policy should it adopt?

As described in our answers to Questions 1 and 2 above, and in our response to the call for evidence (Annex 1), Natural Resources Wales maintain the view that Welsh Government should adopt a policy for geological disposal for the long term management of HAW and spent fuel declared as waste.

Furthermore, as set out in Annex 1, Natural Resources Wales maintain the following opinion; *'that Welsh Government consider including in its policy review the need for interim and long-term storage prior to geological disposal...'*

'This is particularly relevant given the time forecasted to create a geological disposal facility, and that possibly even the next generation of nuclear power facilities may have been decommissioned before the facility is available, including the proposed Wylfa Newydd.'

Natural Resources Wales consider that disposal of these unique waste streams should be distinct from their separate long-term storage, based on the concept of retrievability, i.e. whether the waste can be retrieved or not. In simpler terms, we believe that if the material can be retrieved it is storage and if not it is final disposal.

Since there will likely be a need for interim and long term storage, until a final engineered disposal solution is available, we encourage Welsh Government to consider how any future policy for disposal accommodates arrangements for long term storage. We also encourage Welsh Government to bear this in mind should an alternative option to geological disposal for this unique waste stream be considered as part of the policy review.

QUESTION 4. Do you have any other comments on the Welsh Government policy for the disposal of higher activity radioactive waste and spent fuel declared as waste?

We refer to our response to Question 4 in the call for evidence (Annex 1) in that *'If a geological disposal facility were to proceed, the design and management of such a facility and any related interim storage facilities, would need to inspire confidence amongst all affected communities from the earliest stages. Welsh Government would need to consider as part of its review the need for clear Government policy and effective regulation in providing community confidence.'*

Natural Resources Wales acknowledges that if Welsh Government decides that their policy for disposal of HAW and spent fuel (declared as waste) is geological disposal, this does not necessarily mean that such a disposal site would be in Wales.

Natural Resources Wales consider that further evidence would be needed to establish that there is a location with suitable geological conditions to site a geological repository in Wales or that a Welsh community exists that would volunteer to host such a facility. Although Welsh Government may choose to align with the UK Government's policy of geological disposal as the preferred option, the specific circumstances may not favour such a repository to be sited in Wales.

However, as stated in Annex 1, Natural Resources Wales considers that; *'Welsh Government needs to ensure that suitable and effective arrangements exist for the management of higher activity radioactive wastes generated in Wales by existing, and future nuclear facilities and also that from Welsh industry and the medical sector. Wales has benefited socially and economically from the use of these radioactive substances and we agree that Welsh Government has an obligation to participate in the development of a strategy for the management of these wastes.'*

In conclusion, Natural Resources Wales support Welsh Government's proposal for a definitive policy on the management and disposal of HAW and spent fuel declared as waste. We also support the Welsh Government's proposal, as stated in the policy review document, to favour geological disposal as the preferred solution.

Cyfoeth Naturiol Cymru / Natural Resources Wales

January 2015