UK Government and Devolved Administration Response to the Committee on Radioactive Waste Management (CoRWM) Report on 'Interim Storage of Higher Activity Wastes and the Management of Spent Fuels, Plutonium and Uranium'

10<sup>th</sup> July 2009











# 1. INTRODUCTION

- 1.1 The UK Government and the devolved administrations' (for Scotland, Wales and Northern Ireland, from here on referred to as 'The Government') statement<sup>1</sup> of October 2006 made clear there will be strong independent scrutiny of the proposals, plans and programmes to deliver geological disposal of higher activity radioactive waste. In June 2007 Scottish Ministers announced a policy of near-surface, near-site long-term storage rather than geological disposal although they continue to sponsor CoRWM on storage and related research and development matters.
- 1.2 The Committee on Radioactive Waste Management (CoRWM) was reconstituted with modified terms of reference<sup>2</sup> and expertise to provide this independent scrutiny and advise the UK Government and the devolved administration Ministers on the long-term radioactive waste management programme, including storage and disposal. CoRWM's primary task is to provide independent scrutiny of the Government's and the Nuclear Decommissioning Authority'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.
- 1.3 In June 2008, sponsor Ministers agreed CoRWM's 08-09 work programme which included scrutinising and reporting on the existing and planned storage programme. This covered plans for retrieval of untreated wastes, safety, security, capacity, longevity, an assessment of the impact of NDA's competition methodology on storage, the scrutiny of plans for waste handling and transport, and the scrutiny of management plans for materials that may be declared waste. CoRWM's report 'Interim Storage of Higher Activity Wastes and the Management of Spent Fuels, Plutonium and Uranium' was published on 31 March 2009 and the full report is available on the CoRWM website at <a href="https://www.corwm.org.uk">www.corwm.org.uk</a>.
- 1.4 This document is the Government's response to those recommendations and, as set out in CoRWM's terms of reference, will be made available along with CoRWM's report to respective Parliaments and Assemblies.

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<sup>&</sup>lt;sup>1</sup> The UK Government and the devolved administrations, "Response to the Report and Recommendations from the Committee on Radioactive Waste Management (CoRWM)", (PB 12303) October 2006. www.defra.gov.uk/environment/radioactivity/waste/pdf/corwm-govresponse.pdf
<sup>2</sup> Defra, BERR and the devolved administrations, "Committee on Radioactive Waste Management Terms of

<sup>&</sup>lt;sup>2</sup> Defra, BERR and the devolved administrations, "Committee on Radioactive Waste Management Terms of Reference", October 2007. Document no. 2235. Available at <a href="https://www.corwm.org.uk">www.corwm.org.uk</a>

# 2. THE GOVERNMENT RESPONSE

- 2.1 The Government thanks the Committee for its report and welcomes the recommendations. The report provides a valuable opportunity to consider the strategic coordination of the management of higher activity waste and nuclear materials as well as the co-ordination of public and stakeholder engagement and the publicly available information on the management of these materials. It also provides an opportunity to clarify in our response some of the structures already in place and to highlight some of the more recent work to review structures, which will now take account of CoRWM's recommendations.
- 2.2 The Government is encouraged by the open and consultative manner in which the committee has drafted its report and by its engagement of the key organisations, stakeholders and the public.
- 2.3 The Government largely agrees with CoRWM's recommendations. Our response sets out ongoing or proposed work that goes some way towards addressing the recommendations but the response also makes clear that further thought and discussion with appropriate bodies such as the Regulators, the Nuclear Decommissioning Authority (NDA), other waste owners, CoRWM and other stakeholders is needed before agreeing a way forward in some areas. This is particularly true when it comes to addressing the recommendation for greater UK-wide strategic co-ordination of the management of higher activity wastes and other nuclear materials, where the Government wishes to be confident that proposed mechanisms will meet the needs of those involved before implementing any changes.
- 2.4 In making this response it is worth noting that Spent Fuel, Plutonium and Uranium are not currently classified as waste. On the basis that the Government, in conjunction with the material owners, may eventually declare some or all of these materials as waste, a prudent approach is being taken with their possible inclusion being factored into the design and development of a geological disposal facility. It is on this basis that CoRWM provided advice on their management.
- 2.5 The following section provides the Government's response to the Committee's four specific recommendations in more detail:

## 3. RECOMMENDATION 1

CoRWM recommends to Government that there should be greater UK-wide strategic co-ordination of:

- the conditioning, packaging and storage of higher activity wastes
- the management of all spent fuels
- the management of plutonium
- the management of uranic materials
- future transport arrangements for radioactive wastes and nuclear materials.

The co-ordination should include agreement on priorities.

- 3.1 The Government accepts this recommendation. We are pleased that CoRWM confirm that the current plans for storage of higher activity waste at all nuclear sites meet the Government's commitment that there should be arrangements for safe and secure storage for a period of at least 100 years. This complements the position set out in the NDA's Higher Activity Waste Storage review which was published alongside CoRWM's report on 31 March.
- 3.2 The Government agrees that further UK-wide strategic co-ordination of the management of higher activity wastes, spent fuels and nuclear materials could benefit the programmes of UK waste producers and potentially lead to efficiencies and cost savings through, for example, better knowledge sharing, visibility of best practice developed across the industry and possible joint-working on shared problems. As CoRWM acknowledge, co-ordination work is already going on at a working level. The NDA has a Strategy Management System<sup>3</sup> under which a Higher Activity Wastes Topic Strategy and a Transport Topic Strategy are being developed. The Strategy Management System ensures that key strategic issues are addressed systematically within the NDA and considered at a senior level. These Topic Strategies focus on the NDA's mission but other waste owners (MoD, British Energy etc) can be involved where there are common waste treatment, storage and transport issues.
- 3.3 There are also groups such as the Nuclear Waste Research Forum and the Waste Packagers' Liaison Group whose memberships include both NDA and other waste owners and whose objectives are to share, collaborate and communicate work.
- 3.4 To address the specific issues raised by both their own Storage review and the CoRWM report, the NDA are also proposing to initiate an Integrated Project Team (IPT) on Interim Storage. This will be made up of the NDA, Site Licence Companies and other waste owners and will address key issues such as waste package performance, store longevity, monitoring & inspection regimes and store maintenance & refurbishment.
- 3.5 Whilst recognising that there would be benefit in seeking further co-ordination to bring this ongoing, and proposed, operational work together at a strategic level, the Government does not wish to create another body or group without it having a clear purpose. A mechanism for bringing together representatives from all the relevant

<sup>&</sup>lt;sup>3</sup> www.nda.gov.uk/strategy/developing-strategy.cfm

organisations, at the right level for strategic co-ordination, through the adaptation of existing structures could be a more effective way of achieving this outcome in practice.

- 3.6 Greater UK-wide strategic co-ordination will offer improved visibility of the strategies that already exist across waste owning organisations, and the sharing of ongoing best practice as well as providing a way of discussing and instigating joint working on shared priorities. The objective might not be uniformity of practices across all waste producers as these will include private companies who must be able to manage their waste and nuclear materials in a way that fits with their business needs <u>provided</u> the processes meet the high safety, security and environmental standards required by the independent regulators. Waste producers must also demonstrate to the Regulators, through Radioactive Waste Management Cases supported by the Letter of Compliance process, that disposal has been taken into account as an integral part of the development and manufacture of waste packages.
- 3.7 The Government is now exploring the best means of implementing this recommendation. This will involve discussion with the NDA, the waste owners and the regulators and will also consider how the profile of existing ongoing work may be raised. CoRWM will be invited to input to, and scrutinise, proposals as they develop.

# 4. RECOMMENDATION 2

CoRWM recommends to Government that appropriate information be made publicly available on the management of higher activity wastes, spent fuels, plutonium and uranium. There is a need to summarise, for a variety of readerships, the progress to date, the management options under consideration for the future, and the issues involved in choosing between alternative options. The information should complement that on waste quantities and characteristics given in the various documents about the UK Radioactive Waste Inventory.

- 4.1 The Government acknowledges the importance of making information as accessible as possible and presented in a way that allows relevant information to be extracted and understood by a variety of readerships. It must be noted that a diverse range of stakeholders will have different needs for information so it would be very difficult to provide a one-size-fits-all summary of information that suits everyone. The Government agrees that this information, subject to commercial, security and policy considerations, needs to be available in ways that address the needs of as many stakeholders as possible to give confidence and understanding of the issues, in particular that systems and controls are in place to ensure safety and security.
- 4.2 A great deal of information is already in the public domain, spread across the websites of the UK Government, the devolved administrations, the Regulators, the NDA and other waste owners. Indeed, the publication of CoRWM's report on interim storage itself has helped in this way. At the same time as CoRWM's report, the publication of the NDA's 'UK Radioactive Higher Activity Waste Storage Review<sup>4</sup>' has also improved the amount and quality of information available. The Review was published on the NDA's

<sup>&</sup>lt;sup>4</sup> http://www.nda.gov.uk/news/haw-storage-review-09.cfm

website and promoted via a NDA 'web alert' to a wide range of stakeholder organisations as well as members of the public. As well as a series of stakeholder workshops to support the Review's production, interim storage of higher activity waste continues to be discussed at forums such as the NDA's National Stakeholder Group.

- 4.3 The purpose of the NDA's review was to understand the robustness of long-term storage arrangements. It included storage regimes for solid intermediate level waste (raw and immobilised) and for high level waste (HLW) across the UK on both NDA and non-NDA sites. It considered waste conditioning plans, existing store information (where a waste is due to be relocated to a new store), store design lives and lifetime extension capability, store environmental controls, monitoring and inspection regimes and storage optimisation of conditioned wastes. Spent fuels and nuclear materials were not covered in this review (they have not been declared as waste) but their management will be considered as an integral part of Spent Fuel and Nuclear Materials Topic Strategy (see paragraphs 4.10 4.12 for information on Topic Strategies).
- 4.4 As well as setting out the main findings by individual NDA sites, the report also summarises the findings with regards other waste owners such as British Energy, Ministry of Defence and GE Healthcare. The review focussed on ensuring the longevity of stores themselves but also considered other points specifically raised by CoRWM in their 2006 recommendations to the Government. These were:
  - o reviewing and ensuring security, particularly against terrorist attacks;
  - o prompt immobilisation of waste leading to passively safe waste forms;
  - minimising the need for repackaging of the wastes;
  - the implications for transport of wastes.
- 4.5 A significant finding of the NDA's storage review is the need for robust and sustainable waste information systems. It is essential that there is reliable information to support geological disposal facility planning but it is also needed for international reporting obligations as well as by a diverse range of stakeholders seeking to understand the nature and quantity of both unconditioned and packaged waste.
- 4.6 The NDA is also investigating an **integrated UK waste information system**, to offer a more coherent strategic focus. The system could upgrade the current UK Radioactive Waste Inventory and could hold detailed information on waste and its containment, including:
  - unconditioned waste in stock and predicted future arisings;
  - o packaged waste in storage; and
  - waste storage facility characteristics.
- 4.7 This is emerging thinking and further discussion is required. NDA will explore the scope of such a system with the Government, regulators and other waste owners as well as gauging expectation through its National Stakeholder Group and engaging other stakeholders including CoRWM. This will include how it might make information publicly available in a user-friendly way.

- 4.8 A detailed statement of policy in Scotland is being developed for "near surface, near site, long-term storage which is monitorable and retrievable and with minimal transportation". The statement is being developed with the NDA, other waste producers, regulators and local authorities and it is intended to publish a consultation document in late Summer 2009.
- 4.9 The consultation document will seek to explain what Higher Activity Waste is arising at sites in Scotland, providing stakeholders with descriptions of the wastes, for example contaminated metals, rather than using categories such as Intermediate Level Waste (ILW).
- 4.10 Finally, the Government considers that there is also a route for considering further information provision through the NDA's **Strategy Management System**<sup>5</sup>. The Strategy Management System6 (SMS) is a management tool used by the NDA to develop, control and communicate its Strategy.
- 4.11 NDA's overall Strategy is now broken down into individual Topics that cover all areas of NDA's remit. Each Topic will have its own strategy which will be developed in consultation with a broad range of stakeholders including groups and individuals with a declared interest in the topic. The extent and nature of this engagement will depend on the topic concerned and range from the provision of information to requesting comments on proposals, through to full engagement at key stages during strategy development.
- 4.12 The Higher Activity Waste Topic Strategy is the most relevant to interim storage (supported by enabling strategies such as the Transport Topic Strategy and the Information Topic strategy) and the Government will look to the NDA to consider how appropriate information can be made available in a publicly digestible form as the programme moves forward. CoRWM will also be kept involved with this process as it develops in its role of scrutinising the NDA's plans.

# 5. RECOMMENDATION 3

CoRWM recommends to Government that more information be made available to the public about how the security of the storage and transport of radioactive wastes, spent fuels, plutonium and uranium is assured. The objective should be to give the public more insights into security issues, without compromising security in any way. In deciding what information should be made available, account should be taken of existing and proposed practices in countries with similar security needs to the UK and a strong freedom of information culture (for example, the USA).

5.1 As the Government made clear in its response to CoRWM's Recommendations in 2006 and in its Managing Radioactive Waste Safely White Paper, the security of all stores is of paramount importance. The Government recognises the importance of being as open and transparent as is possible and the need to provide public reassurance and confidence

6 http://www.nda.gov.uk/documents/upload/SMS\_Short\_Description-March-2009.pdf

<sup>&</sup>lt;sup>5</sup> www.nda.gov.uk/strategy/developing-strategy.cfm

in security arrangements. Indeed, the Government believes that there should be a presumption of openness unless there are sound reasons against it.

- 5.2 Civil nuclear operators must have site security plans dealing with the security arrangements for the protection of nuclear sites and nuclear material, including all radioactive wastes, on such sites. The arrangements cover, for example, physical protection features such as fencing, CCTV and turnstile access, the roles of security guards and the Civil Nuclear Constabulary, the protection of proliferation-sensitive data and technologies and the trustworthiness of the individuals with access to them. Security at nuclear sites is kept under regular review in the light of the prevailing threat and has been significantly enhanced since the terrorist attacks in the USA on 11 September 2001. It is not, and cannot be, the Government's policy to disclose details of these measures which could potentially be of use to terrorists.
- 5.3 A considerable amount of information is already available. However, work is underway to make some of this more accessible and raise its profile. The Office of Civil Nuclear Security already publishes several important documents for public use. One is the Director's annual report titled "The State of Security in the Civil Nuclear Industry and the Effectiveness of Security Regulation". This provides a good deal of information on how the industry is regulated on security issues and on changes that have occurred over that year. The primary reason behind publishing the Director's annual report is to provide further assurance that security arrangements within the civil nuclear industry are stringent and comprehensive, and regulated by a competent security authority independent of industry interests. The Report also details any reported security breaches to demonstrate that breaches are rare and always fully investigated. The Director also considers that publication will have some salutary impact on the companies and individuals involved.
- 5.4 The OCNS has also published a detailed document "Finding a Balance Guidance on the Sensitivity of Nuclear and Related Information and its disclosure" which explains the need to protect some information. This sets out guidelines on how information can be made available to those who need it whilst keeping it from those who could take advantage of it for the wrong reasons.
- 5.5 Internationally, the OCNS are a key participant in the European Nuclear Security Regulators' Association (ENSRA). ENSRA provides the opportunity for international collaboration of regulatory authorities responsible for security in the civil nuclear industry in Europe. It facilitates the adoption of best practice and the promotion of greater understanding of the security challenges facing the industry. Discussions are confidential (ENSRA needs to enable frank debate) but the OCNS will request that there is discussion about existing and proposed practices of information provision in countries with similar security needs at a future meeting. OCNS also engages in regular bilateral meetings with overseas nuclear security regulators such as the Dutch, German, US and French security authorities and will also raise existing and proposed practices of information provision at upcoming meetings.
- 5.6 Finally, the OCNS is in the process of updating its webpages<sup>9</sup> within its parent site of the HSE's Nuclear Directorate. The aim is to provide a more accessible and user

www.hse.gov.uk/nuclear/ocns/publications.htm

<sup>8</sup> www.hse.gov.uk/nuclear/ocns/publications.htm

<sup>9</sup> www.hse.gov.uk/nuclear/ocns/index.htm

friendly overview of the OCNS, detailing its role, who it regulates and how it regulates, as well as providing links to more detailed reports such as the Director's Annual Report. HSE communications specialists are involved to ensure information is accessible and helpful to the public and CoRWM will also be invited to comment on draft text.

# 6. RECOMMENDATION 4

CoRWM recommends to Government that there be more co-ordination of Public and Stakeholder Engagement (PSE) between the NDA and other UK nuclear industry organisations, at national, regional and local levels. The objective should be to ensure that there is sufficient stakeholder participation in decision-making processes for the conditioning, packaging, storage and transport of higher activity wastes, and the management of spent fuels, plutonium and uranium, without incurring "stakeholder fatigue".

- 6.1 The Government accepts that there needs to be co-ordination of PSE between the NDA and other UK nuclear industry organisations, at national, regional and local levels and will be looking to improve this wherever possible.
- 6.2 The NDA has a duty to engage and consult stakeholders on all aspects of its work under the Energy Act 2004 and has two key co-ordination mechanisms, the National Stakeholder Group (NSG) and Site Stakeholder Groups (SSG). These groups enable the NDA the opportunity to target either a wide range of national stakeholders (the NSG) or stakeholders local to a particular site (SSGs) ensuring that there is the opportunity for participation at all levels.
- 6.3 Until recently, the NDA also regularly brought together representatives from national organisations such as the UK Government, Devolved Administrations, Regulators and CoRWM with the aim of sharing engagement strategies and looking for practical opportunities to ease the load on stakeholders. Although useful, it proved difficult to capture all engagement activities across the board at an early enough stage and mesh all of these activities together.
- 6.4 The Department of Energy and Climate Change has since established a Nuclear Engagement Group including representatives from UK Government, the Regulators and the NDA, to better coordinate and consider consultation and engagement activities in the nuclear sector more strategically. This will look to provide clarity for stakeholders on activities underway, mapping any consultations and looking for opportunities for organisations to work together where appropriate.
- 6.5 Furthermore, as set out earlier in our response, the Government accepts that further UK-wide strategic co-ordination of the management of higher activity radioactive wastes and other nuclear materials was needed and committed to give further consideration to an appropriate mechanism to do so. In considering this mechanism the Government will ensure further consideration is given to co-ordination of PSE between the Government, NDA, Regulators, CoRWM and other UK nuclear industry organisations.