

## CoRWM REPORT TO GOVERNMENT

### INTERIM STORAGE OF HIGHER ACTIVITY WASTES AND THE MANAGEMENT OF SPENT FUELS, PLUTONIUM AND URANIUM March 2009

#### EXECUTIVE SUMMARY

1. CoRWM's remit is to provide independent scrutiny and advice to Government on the long-term management, including storage and disposal, of radioactive wastes and materials that may be declared to be wastes. This is the first of three reports to be produced in 2009 that describes the results of the Committee's scrutiny work in 2008 and the first part of 2009 and provides advice to Government.

#### ***Scope of Report***

2. This report is about CoRWM's work during 2008/09 on:
  - the conditioning, packaging, interim storage and transport of higher activity radioactive wastes
  - the management of nuclear materials that may be declared to be wastes in the future, that is spent nuclear fuels, plutonium and uranium
  - public and stakeholder engagement (PSE) on the above topics.
3. For each topic we summarise the current position and provide advice for use in making plans for the work to be carried out over the next few years. We intend to monitor whether and how this advice has been acted on by Government and others.

#### ***How We Worked***

4. We worked by gathering information from the waste producers and holders of spent fuels, plutonium and uranium; from all the regulators and from other organisations. We held meetings with all the major organisations, the notes of which are available on our website, and we attended stakeholder workshops held by the Nuclear Decommissioning Authority (NDA). We also sought the views of stakeholders and the public *via* our website and at CoRWM stakeholder events in October 2008 and February 2009. An outline and then a full draft of this report were sent to key stakeholders for comment and placed on the CoRWM website for public comment. Responses to all the requests for comments were taken into account in preparing the final version of the report.

#### ***Overall Conclusions and Recommendations***

5. This report sets out the information we gathered on each topic, referencing other CoRWM documents for more details, and gives our conclusions on each topic. Our overall conclusions and recommendations are as follows.

#### ***Strategic Co-ordination***

6. In all the areas considered in this report (waste conditioning and packaging, waste storage, waste transport, the management of spent fuels, plutonium and uranium) there is a need for better strategic co-ordination across all the UK nuclear industry organisations, civil and defence. Recent NDA work on its "strategy management system" goes some way towards achieving this but the NDA can only develop strategies that cover the sites for which it has responsibility.
7. At all nuclear sites the current plans for storage of higher activity wastes are adequate to meet the CoRWM 2006 recommendation, and Government commitment, that there should be arrangements for safe and secure storage for at least 100 years. However, the

present UK approach to storage lacks robustness: it is fragmented and too few sites have contingency plans. A more strategic approach is required.

8. Through various discussion fora, the NDA involves other waste producers and holders of nuclear materials in the development of its strategies for the management of higher activity wastes, spent fuels and uranium. However, none of these fora has a remit to provide the required degree of strategic co-ordination between the NDA and other organisations. An additional co-ordination mechanism is needed, initially for strategy development and in due course for strategy implementation.
9. The NDA strategy for plutonium management is UK-wide in the sense that it is for all separated civil plutonium and all this is held on NDA sites. However, some of this plutonium is owned by British Energy, which may choose its own strategy. There is also other plutonium owned by the Ministry of Defence. Thus co-ordination is also required on strategies for managing UK plutonium.
10. The type of overall co-ordination mechanism needed for all the wastes and materials that may be declared to be wastes is one that has strong regulatory involvement. It is the regulators who enforce most of the legislation that implements Government policy and who require nuclear site licensees to have strategies in place for the management of radioactive wastes and nuclear materials. Ideally, the degree of co-ordination would be such that it would be possible to describe overall UK strategies for the management of higher activity wastes, spent fuels, plutonium and uranium, made up of the strategies of the various waste producers and holders of nuclear materials.
11. The co-ordination should include priorities for managing the various types of higher activity wastes and nuclear materials. Priorities should be agreed between the various nuclear industry organisations, the regulators and, where policy matters are involved, the Government. The priorities need not necessarily be the same for all waste producers and holders of nuclear materials but the reasons for differences should be made clear.

***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.*

***Public and Stakeholder Engagement***

12. CoRWM has found that the issues covered in this report are not well-understood outside the technical community that deals with them on a day-to-day basis. Both lay people and technical people who are not expert in these areas have difficulties in finding information in forms that are useful to them. As a result, they are not well-equipped to become involved in consultations and decision-making processes, and they lack confidence in the organisations that are managing radioactive wastes and nuclear materials.

13. Through the compilation of the UK Radioactive Waste Inventory, a great deal of information is available about the quantities and characteristics of radioactive wastes, and this is published in formats suitable for experts and non-experts. There is a need for complementary information about how wastes, and materials that may be declared to be wastes in future, are managed now and the management options under consideration for the future. There is also a need for more information to be made available to the public about how the security of storage facilities and transport arrangements is assured.
14. CoRWM will be reporting at a later date on the outcome of its overall scrutiny of PSE approaches for the management of higher activity wastes but it would like to emphasise two points here. One is the continuing importance of public and stakeholder engagement. The other is the need for more co-ordination between the NDA and the other waste producers on PSE, so as to address our recommendations on strategic co-ordination (see above) and to avoid “stakeholder fatigue”. Increased co-ordination on PSE is required at national, regional and local levels. Some of this might be achieved by changes to existing mechanisms (for example, Site Stakeholder Groups and their equivalents at non-NDA sites). In other cases, particularly waste transport, new mechanisms will almost certainly be needed.

**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.*

**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).*

**Recommendation 4**

*CoRWM recommends to Government that there be more co-ordination of 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”.*