

## **Committee on Radioactive Waste Management (CoRWM) response to Scotland's Policy on Higher Activity Radioactive Waste: Consultation on an Implementation Strategy**

### **INTRODUCTION**

1. Scotland's Higher Activity Radioactive Waste Policy was issued in January 2011. It was not prescriptive, recognising that it applied to wastes, some of which would not be produced for years or for which long-term management options might not be feasible currently and/or have yet to be developed. The Policy allowed waste producers and owners to consider long-term management options for:

- waste treatment, including sending it to another location for treatment, either in Scotland or elsewhere including overseas, subject to any requirements by the relevant regulators in the UK and overseas for the return of the waste;  
or
- storage in near-surface facilities which are near to the site where the waste is produced;  
or
- disposal in near-surface facilities which are near to the site where waste is produced

2. Disposal is defined on the basis that there was no intention to retrieve but that the waste could be retrieved if that proved to be necessary. Near surface is defined as being at the surface or at depths down to several tens of metres. There is no prescriptive definition of near site other than as near to the site where waste was produced as practicable.

3. Figure 3 in the Policy indicated that the first stage of decision making and environmental assessment had been completed in 2011 by the production of the Policy and by setting parameters for development of the Implementation Strategy (IS). The next stage was the production of the IS comprising strategic locational choices, site selection and assessment of types of facility required.

4. Notwithstanding that this consultation is about implementing the 2011 policy and that a policy review is some years away, CoRWM remains concerned that the vast majority of ILW at Dounreay, 70% by volume and 99% of the radioactivity, is not suitable for near surface disposal. Accordingly it can only go into interim storage with no end date for finally being put beyond the need for human intervention.

5. Although the policy for the handling of radioactive waste is devolved to the Scottish Government, ultimate responsibility for establishing and maintaining policies on spent fuel and radioactive waste lies with EU member states and thus the UK Government. Accordingly, the concerns expressed about Dounreay waste and its safe disposal should be considered before the scheduled review of the SG policy in 2021.

## **CONTENT of Implementation Strategy**

6. An overview of the waste arising in Scotland is set out in Appendix 2 where it states that approximately one third of the total volume of HAW in Scotland has already been produced. Some has been processed and held in stores but most remains within existing nuclear facilities. Figure 1 identifies that operational and decommissioning waste will continue to be produced until around 2030. This conflicts slightly with the statement that Hunterston B and Torness are expected to remain operational until 2023 and then produce decommissioning waste for 10 years. Between 2030 and 2070 it is expected that no significant volume of HAW will be produced from any site in Scotland. Volumes will then triple in the period to 2120 after which no arisings are expected.

7. Phase 1 of the Implementation Strategy (IS) covers the period from the present day to 2030. Risk prevention and hazard reduction is the main focus of the present generation of stores at Chapelcross, Hunterston A and Dounreay. During this phase therefore the Scottish Government proposes to:

- support NDA initiatives to reduce HAW volumes;
- work with NDA to bring forward credible options for waste management post 2030;
- work with NDA and site operators regarding waste that may be suitable for near surface disposal;
- work with a number of parties to develop a near surface disposal concept ; and
- work with NDA and site operators on options for wastes not suitable for near surface disposal.

8. Clearly most of the effort will be required to come from NDA but R&D on treatment, storage and retrieval of wastes will be UK-wide notwithstanding that the Scottish Government Policy is different. New areas of R&D will be needed to help decide what to do with waste that is unsuitable for near surface disposal as the current Policy determines that no HAW in Scotland will be placed in a GDF.

9. Phase 2 of the IS covering 2030-2070 suggests that there is significant flexibility because all HAW will either be in modern stores or still within the reactors on power station sites. It is stated that spatial matters will be addressed at this time with near site disposal being the major factor to minimise transport and, of course, oversight through a robust regulatory regime.

10. Phase 3 – 2070 onwards covers the reactor dismantling period when over 60% of the HAW is expected to arise. The availability of suitable disposal facilities is recognised as necessary to avoid the need to build more stores for retrieved waste.

## **ASSESSMENT**

11. The Consultation Document poses twelve questions. The CoRWM response to these questions is given below.

***Question 1: Do you have any comments on the aims, scope and objectives of the proposed Implementation Strategy? (Section 2.2)***

12. Fifteen years for phase 1 is considered excessive when the Policy itself is due for updating in 2021 and potentially again in 2031. Perhaps this phase could be subdivided to identify where early action will be taken. What issues were considered relevant when the Policy document was written and are no longer relevant and why? The aim/scope is targeted at producers and owners of waste but says nothing about other stakeholders such as local people.

13. The Policy is for waste to be disposed of as near as possible to the site where the waste is produced. Could this restrict solutions to at/adjacent to each facility or is a single Central Scotland location considered acceptable?

14. In para 2.2.11, could international experience of the suitability of deep geological disposal, affect management options going forward? If so it should be recognised as a possible option in the revision of the Policy in 2021.

***Question 2: Do you have any comments on establishing the new baseline? (Section 3.3)***

15. An updated and new baseline is to be welcomed. There is a need to be more explicit in para 2.5.4 with regard to SEA requirements.

***Question 3: Do you agree that the plans to 2030 are compatible with the 2011 Policy? (Section 3.4)***

16. CoRWM generally agrees that the plans to 2030 are compatible with the 2011 Policy. However, CoRWM believes that there should be flexibility and that in contrast to the statement in para 3.4.2, new developments may make a change from the current Policy economically and socially conceivable, especially as the Policy will be reviewed in 2021.

***Question 4: Do you have any comments on the plans to take forward the work from 2015? (Section 3.4)***

17. In addition to CoRWM's concern about the length of phase 1, there needs to be a greater recognition that some waste, particularly from Dounreay, is never likely to be suitable for near surface disposal and therefore greater efforts need to be made in the interest of safety, security and intergenerational equity to find a permanent solution for this waste.

***Question 5: Do you have any comments on the proposed key phases and decision points in sections 3.4, 3.5 and 3.6? (Section 3.6)***

18. CoRWM has expressed its views on the timescale for Phase 1 above. In relation to Phase 2 this seems consistent with the NDA's current approach. CoRWM recognises and welcomes the need for flexibility as the dismantling of reactors in Scotland will need to be coordinated with dismantling of reactors in England to both learn from experience and recognise the challenges on the decommissioning industry. CoRWM also welcomes (para 3.5.6) the recognition that decisions will be made on a case by case basis and that they will be subject to robust regulatory oversight.

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***Question 6: Do you have any comments on siting issues? (Section 3.6)***

19. CoRWM notes that the disposal of HAW in England will be subject to licensing under the Nuclear Installations Act. The IS makes no reference to licensing the design, construction, commissioning and operation of a near surface disposal facility. CoRWM believes that this should be covered in the IS.

20. CoRWM supports the statement made in paragraph 5.5.14. However, as stated above, in developing this framework consideration should be given to nuclear site licensing, nuclear security and non-proliferation safeguards as well as environmental regulation.

***Question 7: Do you have any comments on the packaging strategy and the Letter of Compliance (LoC) process? (Section 3.7)***

21. CoRWM notes that the current LoC process is designed to ensure waste is conditioned in a manner that will make it suitable for disposal in a deep geological disposal facility (GDF) and not for a near surface disposal facility. However, CoRWM recognises that given the uncertainty about the final resting place for HAW in Scotland, and hence the design and location of the disposal facility, the waste producers have little option but to adopt the UK-wide LoC approach.

22. CoRWM believes that, as a matter of urgency a review should be undertaken of the applicability of the current UK-wide LoC process to near surface disposal. The IS should address the possibility that the current LoC process may not be applicable to near surface disposal and hence to avoid unnecessary retreatment of waste and unnecessary expenditure plans should be made for a near surface specific LoC process to be developed and implemented.

***Question 8: Do you have any comments on monitoring and retrievability? (Paras 4.1.5 - 4.1.13)***

23. CoRWM notes that Scotland's HAW is currently stored on nuclear licensed sites and as such the licensee's arrangements require retrievability.

24. CoRWM agrees with the points made concerning retrievability and disposal.

***Question 9: Do you consider that current plans for information and knowledge exchange are sufficient and if not what would you propose? (Paras 4.1.14 – 4.1.18)***

25. CoRWM agrees that that information and record management is an essential feature of radioactive waste management and welcomes the recognition in paragraph 4.1.18 concerning physical as well as electronic record keeping.

**Question 10: Do you have any views on issues of public and stakeholder engagement? (Paras 4.1.19 – 4.1.28)**

26. CoRWM welcome the recognition of this issue in the proposed IS. The definition of “local community” is an important issue and Scottish Government might consider whether it justifies observer status, as the Welsh Government has taken up, or at least liaison with the DECC Community Representation Working Group. As there appears to be some confusion in the text concerning roles and responsibilities of various organisations and group, the final IS should have this clarified.

**Question 11: Do you have any views on the issues of skills and the supply chain? (Paras 4.1.29 – 4.1.41)**

27. CoRWM recognises that importance of skills in the delivery of effective radioactive waste management including disposal. As recognised in the Consultation the NDA has a major role to play in the maintenance of skills. CoRWM believes that the IS should make provision for the regular review of skills requirements to deliver the Policy.

28. CoRWM welcomes the recognition that the skills of the Regulator need to be maintained as well as those of the nuclear licensees. However, it is not only SEPA that is affected, the ONR has a major role to play and hence the IS should ensure that ONR maintains sufficient expertise to address Scottish radioactive waste management issues.

**Question 12: Do you have any further comments on the proposed Implementation Strategy?**

29. CoRWM looks forward to continuing to work with the Scottish Government on finalising the Strategy, in its implementation and looking further ahead in advising and scrutinising the work to prepare a new Policy around 2021

