

CoRWM's SCRUTINY OF SCOTTISH GOVERNMENT DEVELOPMENT OF POLICY FOR MANAGING HIGHER ACTIVITY RADIOACTIVE WASTE

David Broughton

Introduction

1. During 2009 the Scottish Government (SG) developed a proposed Detailed Statement of Policy for Scotland's Higher Activity Radioactive Waste (HAW). In 2010 it consulted the public about the proposed policy (SG 2010a-d) and then finalised it. The policy was published in January 2011 (SG 2011a-c). Throughout the policy development process CoRWM scrutinised the work of SG and provided advice (CoRWM docs. 2515.2, 2800). It also responded to the main SG consultation (CoRWM doc. 2795) and to the supplementary consultation (CoRWM doc. 2865).
2. Summaries of CoRWM's work on SG policy are contained in its annual reports (CoRWM docs. 2807, 2922). This paper provides further details including a brief history of SG and CoRWM work prior to 2010-11 and a description of CoRWM's work in 2010-11. The Committee's work in 2010-11 included information gathering and testing conclusions about SG's policy development process and a review of the process by which SG developed its consultation programme and finalised its policy from 2009 to 2011.

History of Work Prior to 2010-11, SG Policy Development and CoRWM Involvement

3. In June 2007 Richard Lochhead, Cabinet Secretary for Rural Affairs and the Environment announced that SG's policy for the long-term management of HAW was to support long term, near surface, near site storage so that waste is monitorable and retrievable and the need for transporting the waste is minimal (SG 2010a).
4. Thereafter SG embarked on a process to develop a more detailed statement of this policy which included engaging with stakeholders. Ways used to gather stakeholder's views on the scope and content of a consultation document on SG's proposed policy included two workshops in June and December, 2009 which were attended by CoRWM members.
5. On 15 January 2010 SG published a consultation document on a draft Detailed Statement of Policy for Scotland's HAW (SG 2010a). It invited comments by 9 April 2010 on the draft policy and supporting documents which comprised a Supplementary Information report (SG 2010b) and an Environmental report (ER) (SG 2010c). On 29 January 2010 a stakeholder workshop was held to discuss these reports with other stakeholders and with those involved in the preparation of the documents. CoRWM members attended this workshop.
6. The consultation period was then extended to allow more time for local authorities to respond. Final responses were received by SG on 26 May 2010.

Principal Comments made by CoRWM in its Response to the January – April 2010 SG Consultation

7. CoRWM's formal response to the SG consultation (CoRWM doc. 2795) was informed by bilateral meetings held with key nuclear industry, local government and community stakeholders, attendance at various SG meetings, and discussion at two plenary meetings. The Committee's principal comments were as follows.

8. CoRWM considered that the final policy documents would benefit from including more information on the physical and chemical nature of the waste being produced in Scotland. The final Detailed Statement of Policy (PS) needed to stress that, within the definition of HAW, there is a sizeable portion of waste (the ER suggested approximately 25% by volume) that will not be suitable for near-surface disposal. The final PS should be clear about the process for arriving at an end point for HAW that is not suitable for near-surface disposal.
9. SG proposed to give waste owners and producers the responsibility for developing a strategy for implementing the policy but CoRWM considered that it did not provide sufficient guidance on what was expected, for example on optimisation of HAW management, coordination between organisations and the criteria for selecting sites for new storage and disposal facilities.
10. The final PS needed to make it clear that the Nuclear Decommissioning Authority (NDA) would lead the development of an Implementation Strategy but that SG should direct and enable the NDA to take this lead role.
11. The final PS should explain how considerations of cost, affordability and best value should be taken into account in developing an implementation strategy.
12. The final PS needed to be stand-alone. Consequently, information and definitions that were currently within the ER needed to be brought into the PS. For example, it was stated in the ER that the preference was for disposal but this was not reflected in the PS.

CoRWM Response to Further Consultation on the ER, October 2010

13. On the basis of the responses to its main consultation SG decided to undertake further environmental assessment work. It produced an Annex to the Environmental Report entitled "Environmental Report: Supplementary Assessment of Policy Alternatives" (SG 2010d). This was issued for consultation on 10 September 2010 with responses requested by 21 October 2010. The Annex dealt with the environmental impacts of geological disposal of HAW. It stated that SG did not consider geological disposal to be a "reasonable alternative" to its policy of near-surface, near-site storage or disposal but it was recognised that several of those consulted about the policy did hold this view. It had therefore carried out further assessment for the SEA purposes.
14. Owing to the short timescale for the consultation on the Supplementary Annex CoRWM was unable to provide a full Committee response but some members submitted comments (CoRWM doc. 2865). The principal comments were as follows.
15. It would have been preferable for SG to have carried out a comparison of the environmental impacts of managing Scotland's entire HAW inventory by a combination of long-term storage and near-surface disposal with the environmental impacts of managing all these wastes by deep geological disposal.
16. Much of the evidence presented appeared to suggest that the positive impacts of deep geological disposal would be better, or no worse than, the impacts from near-surface disposal and long-term storage.
17. As a final conclusion the Supplementary Annex stated that "*The Scottish Government position remains that it does not support deep geological disposal of radioactive waste and does not consider it to be a reasonable alternative at this point in time*". CoRWM's

understanding was that the purpose of the Supplementary Annex to the ER was not to confirm what constituted a “reasonable alternative” to the HAW management methods favoured by SG, but to assess the environmental impacts of deep geological disposal so that they could be compared with the management methods in the proposed policy. The Committee therefore expressed the view that this SG’s conclusion was outside the scope of the Supplementary Annex. CoRWM holds the view that geological disposal is a “reasonable alternative” to the proposed SG policy, particularly for those types of HAW that are unsuitable for near-surface disposal.

SG Post-Consultation Feedback Meetings in September and October 2010

18. Following the consultation period SG undertook three feedback meetings in September and October 2010 in Ayr, Edinburgh and Inverness. CoRWM members were present as observers at each meeting (CoRWM doc. 2928). SG presented the conclusions of the consultation process to invited stakeholders and discussed the next steps in publishing the final SG HAW Policy.
19. SG acknowledged the input from stakeholders and said points raised would be taken into account in finalising the policy.
20. SG recognised that there was a clear need to explain the key differences between storage and disposal. New diagrams, definitions and descriptions had been produced for this purpose.
21. SG accepted that the range of wastes covered by the policy needed to be explained more fully but remained of the opinion that a description in terms of volume, rather than radioactive content, was the most appropriate for the public. SG had produced additional waste inventory information in easily understood “pie chart” form that showed the types of HAW that exist, or will be generated, and on what timescales.
22. SG stated that it would lead development of the implementation strategy following the publication of the policy and not NDA as originally intended.
23. SG said that as the policy would be reviewed every 10 years and, as the timescales for establishing new radioactive disposal facilities were measured in decades, there was ample opportunity for further development of the policy.

Publication of Scotland’s Higher Active Waste Policy 2011

24. SG published its Policy, Summary of Comments and Post Adoption Strategic Environmental Assessment Statement on 20 January 2011 (SG. 2011a-c) together with six supporting reports. A seventh report on Retrievability and Reversibility was published in June 2011.
25. The Post Adoption Strategic Environmental Assessment Statement includes an analysis of the consultation exercise on the SA for deep geological disposal.

Influence of CoRWM’s Input to Policy Development

26. SG has acknowledged that CoRWM’s advice in developing both the consultation documents and the policy statement was very valuable and appreciated (CoRWM docs. 2884, 2928). However, there were a number of comments in CoRWM’s responses to the policy consultations that are not reflected in the final policy documents.

27. CoRWM's advice that the amounts of HAW covered by the policy should be explained by using a number of criteria has not been accepted. Additional details of the HAW to be managed under the policy were shown in the additional information provided at SG's post consultation meetings even though they were still restricted to volume as the criterion. No details of the categories or amounts of HAW are given in the policy statement in either text or diagrams but are shown in the supporting documents.
28. CoRWM understands that its points about optimisation and coordination and its comments about transport and the proximity principle will be taken into account during the development of the strategy to implement the policy. However the Committee is unclear whether or how its suggestion that considerations of cost, affordability and best value should be taken into account in developing an implementation strategy has been taken up. The policy refers only to social and economic benefits to communities. CoRWM will be scrutinising the development of the implementation strategy and will raise this issue again if necessary.
29. On the policy itself, CoRWM takes the view that near-surface disposal is a feasible and potentially attractive option for some types of HAW. The Committee notes, however, that there is much work to be done to determine whether, where, how and for which wastes the option should be implemented.
30. CoRWM also notes that the policy is silent on a final end point for HAW that cannot be disposed of in near surface near site facilities. This is a significant omission and at present leaves owners of such HAW with no guidance on how they should plan for a final solution. Their only current option is to plan for continuous storage. The Committee considers that it will be essential for SG to re-examine the option of geological disposal of Scottish HAW during the ten yearly reviews of the policy. The objective of the re-examination would be to ascertain whether, in the light of further knowledge, SG considered that geological disposal would be an appropriate option for HAW that cannot, for whatever reason, be disposed of in near-surface facilities.

CoRWM's Discussions with Specific Stakeholders about the Process

Stakeholders Contacted

31. After SG published its policy in January 2011 CoRWM wrote to the same stakeholders that it had met in early 2010 to learn their views on the process that they had participated in with SG. A questionnaire (CoRWM doc. 2905) accompanied the request which included asking whether and how the process had taken into account their responses in formulating the policy. The offer of telephone or face to face discussions was extended.
32. The stakeholders contacted were:
 - British Energy
 - Dounreay Site Restoration Ltd (DSRL)
 - Highland Council
 - NDA
 - Scottish Environment Protection Agency (SEPA)
 - Nuclear Installations Inspectorate (NII, now part of the Office for Nuclear Regulation)
 - Dounreay Site Stakeholder Group
 - Greenpeace
 - Scottish Councils Committee on Radioactive Substances (SCCORS)
 - Hunterston Site Stakeholder Group

Stakeholders' Views on the Process

33. All the stakeholders listed above except NDA, which said it had a policy of not commenting on other non-departmental public bodies, and Greenpeace sent CoRWM written responses by completing the questionnaire pro-forma. None asked for verbal discussions.
34. Stakeholders were generally complementary about SG's consultation process. Points made by several stakeholders were:
- SG took great care to keep them up to date on the formulation of the policy. They appreciated SG affording them individual discussions and presentations when requested in addition to the main stakeholder workshops.
 - The workshops were inclusive and this allowed a large number of stakeholders to attend and contribute, particularly in developing the consultation documents.
 - They felt their views had been taken into account. They felt SG had explained how it had dealt with their views and why it had, or had not, taken them forward in the policy.
 - The policy is a reasonable basis for developing an implementation strategy but the end point for some HAW is not covered.
35. Some stakeholders raised a number of specific points of concern:
- The consultation was limited in scope by not considering deep geological disposal and financial and liability issues; the SEA should have addressed all feasible options.
 - It is unclear what the end point will be for the substantial volume of HAW not suitable for near-surface, near-site disposal. In particular, under the policy the majority of Dounreay HAW can only be stored.
 - Significant R&D is required for all HAW options and there is a limited skills and resource pool for implementing the policy.
 - Some current operators of nuclear sites are not considering their use for disposal of HAW.

SG's Involvement of Stakeholders

36. CoRWM considers that SG carried out a committed and comprehensive programme of stakeholder engagement in the process of developing its policy. It commends SG for acknowledging the contribution made by stakeholders (SG 2011a) and for publishing a detailed analysis of consultees' comments and a response to these comments (SG 2011b).
37. The formal engagements SG undertook were:
- A number of technical advice meetings with co-opted stakeholders during 2009
 - 2 pre-consultation workshops held in June and December 2009
 - A stakeholder workshop held in January 2010 to discuss the consultation reports.
 - 3 post – consultation workshops held (Ayr 7th Sept 10, Inverness 28th Sept 10, Edinburgh 1st Oct 10)
 - A number of Post- consultation presentations to Hunterston and Dounreay SSGs held in the first half of 2010
38. SG received 62 responses to the consultation which it grouped as:
- Health sector (8) (13%)

- Local government (22) (35%)
 - Local stakeholder groups (8) (13%)
 - Nuclear industry waste producers (8) (13%)
 - Others [including CoRWM] (7) (11%)
 - Private individuals (4) (6%)
 - Regulators (5) (8%)
39. There were 21 questions asked in the Consultation Document and 3 in the Environmental Report. SG segregated the responses to each question numerically using the groups shown in para.38 and noted whether they “broadly agreed”, “broadly disagreed” or “commented”.
40. CoRWM agrees with SG that from the analysis of the 62 responses it received to its consultation there appeared to be broad support for the proposed policy. There were questions though where more respondents disagreed than agreed with SG’s propositions. These were:
- The definitions for “near surface” and “near site” (Consultation Document questions CD4 and CD5). This is a particular concern as near surface – near site is the central plank of the policy.
 - Whether all issues had been taken into account and whether anything else needed to be added (CD20 and CD21). Respondents suggested that further consideration should be given to stakeholder engagement, research and development and costs.

CoRWM’s Views on the Process leading to the Production of the Consultation Documents

SG’s Pre-consultation Workshops

41. SG organised two workshops in June and December, 2009. These involved a wide range of stakeholders and a few informed and interested members of the public. The discussions brought out a wide range of views.
42. The presentations by SG on why it was developing a HAW policy and the SEA being undertaken were comprehensive and well received. The commitment of the presenters led by Elizabeth Gray was high and evident. CoRWM members attending the workshops considered that the supplementary presentations on HAW treatments by NDA were too detailed for the purpose of the workshops.
43. There was a general view from participants that the range of HAW to be considered in the policy was not adequately explained in terms of its physical constitution, radioactivity levels and whether or not it was suitable for near surface disposal. SG did not respond to this comment and only explained the inventory in volume terms in the consultation documents (SG. 2010a-c).
44. A majority of participants had difficulty in understanding how the “proximity principle” related to sites widely distributed throughout Scotland when the draft policy consultation documents also mentioned common and shared facilities. They also felt that the terms “near site” and “near surface” were inadequately explained. CoRWM was satisfied that these concerns were taken into account in the consultation documents and fuller descriptions were included but these terms are inherently imprecise.

45. Some participants were unsure how and when the option of disposal came into the draft consultation documents as it was not in the Ministerial statement that initiated the policy development programme. SG's response was that it had found through discussions with stakeholders that the near site, near surface disposal concept may be considered as an alternative option that fitted well with the SG's near site near surface storage concept and was an internationally accepted solution.
46. Some participants were concerned about the references in the draft policy consultation documents to the length of time for institutional control. They considered the reference to 300 years was associated with disposal rather than storage and further explanation was necessary. SG did amplify the concepts of "long term" in the consultation documents but CoRWM considered the issue of continual storage of HAW that had no final end point had still not been adequately addressed.

CoRWM's Views on the Process from Consultation to Policy Publication

47. With the input from the pre-consultation meetings and responses to the consultation SG was able to present at the post-consultation meetings more comprehensive information about the types and amounts of HAW that is to be managed under the policy. CoRWM welcomed this clear response to stakeholders' concerns and is pleased that this improved level of information has been given in a stand alone supporting document to the policy. However CoRWM remains concerned that volume is the single differentiating criterion.
48. CoRWM appreciated SG's presentation to its February 2011 plenary meeting (CoRWM doc. 2884) in which the same subjects were covered as at the post-consultation meetings.

CoRWM's Principal Comments on the Whole Policy Development Process

CoRWM's Influence on Policy Development

49. CoRWM influenced the process in the early stages of preparing the consultation documents by its detailed scrutiny of drafts and subsequent advice to SG. SG in turn reflected on CoRWM's advice and adjusted its timetable for publishing documents to ensure that the most relevant and accurate information was included.
50. In its bilateral discussions with some stakeholders CoRWM added value to the process by being able to inform these stakeholders of historical and technical details that they did not have a full view of. The Committee believes that this helped these stakeholders in formulating their responses to the consultation.

Stakeholders' Influence on Policy Development

51. CoRWM has the following comments on stakeholders' influence on the process of policy development:
 - Stakeholders believe they did influence the process and subsequent policy.
 - Stakeholders had a significant influence in the pre-consultation stage, both in programming the consultation and in determining the content of the consultation documents. SG appreciated this input from stakeholders.
 - Stakeholders had no influence on the issue of the exclusion of geological disposal from the options allowed under the policy. A few stakeholders commented that there was a policy vacuum for the HAW that could not be disposed of near surface. SG gave no technical justification for the exclusion

of geological disposal; it simply stated that it was its policy prerogative to exclude it.

- The publication of supporting documents to the policy demonstrates that SG took into account stakeholders' views that more comprehensive detailed information was required.

52. SG considers that stakeholders had an influence on the process leading to modifications of the draft statement of policy to produce the final policy. SG states this in paras.1.05 and 1.06 of the 2011 policy document (SG. 2011a). Stakeholder requests for more detailed information have led to SG publishing seven supporting documents which are listed in para.1.11 of the 2011 policy document (SG. 2011a).

REFERENCES

CoRWM Documents

CoRWM doc. 2515.2 Committee on Radioactive Waste Management Programme of Work, 2009-2012. March 2009.

CoRWM doc. 2795 Committee on Radioactive Waste Management Response to the Scottish Government Consultation on Scotland's Higher Activity Radioactive Waste Policy. March 2010.

CoRWM doc. 2800. Committee on Radioactive Waste Management Programme of Work, 2010-2013. March 2010.

CoRWM doc. 2807 Committee on Radioactive Waste Management Sixth Annual Report 2009-10. June 2010.

CoRWM doc. 2865 Committee on Radioactive Waste Management Response to Scottish Government Consultation on Annex to SEA Environmental Report. October 2010.

CoRWM doc. 2884 Committee on Radioactive Waste Management Note of November 2010 Closed Plenary meeting. February 2011.

CoRWM doc. 2905. Committee on Radioactive Waste Management Questionnaire on Scottish Government's Process for Developing, Determining and Publishing its HAW Policy. February 2011.

CoRWM doc. 2922 Committee on Radioactive Waste Management Seventh Annual Report 2010-11. June 2011.

CoRWM doc. 2928. Committee on Radioactive Waste Management Scotland's Higher Activity Waste Policy Post Consultation Information Meetings. May 2011

Other Documents

Scottish Government, 2010a. *Scotland's Higher Activity Radioactive Waste Policy Consultation 2010* January 2010.

Scottish Government, 2010b. *Scotland's Higher Activity Radioactive Waste Policy Supplementary Information 2010* January 2010.

Scottish Government, 2010c. *Scotland's Higher Activity Radioactive Waste Policy Environmental Report* January 2010.

Scottish Government, 2010d. *Scotland's Higher Activity Radioactive Waste Policy, Strategic Environmental Assessment, Annex to the Environmental Report: Supplementary Assessment of Policy Alternatives* September 2010.

Scottish Government, 2011a. *Scotland's Higher Activity Radioactive Waste Policy 2011* January 2011.

Scottish Government, 2011b. *Scotland's Higher Activity Radioactive Waste Policy, Summary of Comments and Scottish Government Response 2011* January 2011.

Scottish Government, 2011c. *Scotland's Higher Activity Radioactive Waste Policy, Post Adoption Strategic Environmental Assessment Statement 2011* January 2011