

## **Dounreay Stakeholder Group briefing note**

### **Scottish Government Higher Activity Waste Implementation Strategy Project Board PB07 Meeting 30<sup>th</sup> January 2014**

**Note by David Broughton, DSG representative**

#### **Introduction**

1. 17 members attended, including 4 by telephone (the author, Alex Anderson, Dounreay Site Restoration Ltd. (DSRL), Charles McVay, DSRL and Roddy Anderson, Electricite de France, (EDF).
2. The main purpose of the meeting was to discuss the draft paper produced by Scottish Government executive (SG) “An Implementation Strategy for Scotland’s Policy on Higher Activity Radioactive Wastes: Development Draft of Consultation Paper” ref. SGHAWIS/Outline/2014/v2 24 January 2014.
3. SG intends to go out to consultation on a final version of this paper in March 2014. The author considers this is challenging as it is unclear whether SG has the resource to meet this timescale and whether the other missing sections from the paper to be prepared by other operators and regulators will be completed in time.
4. When the final version is ready to be put out to public consultation whether it will actually be published will depend on its timing relative to the Scottish Independence Referendum “purdah” period when no policy documents etc. can be made. It may be published before the referendum but have a long response time allowed until after the referendum.
5. The author’s opinion remains that the lack of a Higher Activity Radioactive Waste Implementation Strategy (HAWIS) is not affecting the current work of DSRL or the other Site Licence Companies (SLCs).

#### **Progress on Actions**

6. PB06/1 – Comments on Governance paper SGHAWIS/WP4/Govpap/v1.0 – This is a paper on how the nuclear waste management structures operate in Scotland and the governance arrangements in place. Written comments were requested by SG by 10/1/14. The only comments submitted were from the author and submitted officially through the DSG.
7. PB06/02- SG to follow up on monitoring and retrievability with the Office for Nuclear Regulation (ONR) & Scottish Environment Protection Agency (SEPA) – SG had discussed the subjects with ONR but not SEPA yet. ONR said it had produced a draft document on monitoring. ONR intends to produce regulatory guidance on storage next year. Nothing was mentioned about retrievability.
8. PB06/03 – SG to prepare draft strategy by end January 2014 – completed, document noted above at para 2.
9. PB06/04 – SG to invite a Nuclear Free Local Authorities (NFLA) observer to the PB – completed, Peter Roach was in attendance at this meeting.

## Progress of the Work Packages (WP)

10. WP1 – Overview of Scottish HAW Inventory
  - The Nuclear Decommissioning Authority (NDA) said that all information was based on the 2010 inventory at present but the 2013 inventory would be available in February 2014.
  - NDA will explain the changes at the next Project Board (PB) meeting in March 2014.
  - NDA will provide an internet link for PB members to access the inventory.
  - The revised packaged volumes will be slightly lower but there is still uncertainty over how to package graphite, the dominant volume of Scottish higher activity radioactive waste (HAW). This arises at site clearance from 2070 onwards. There is little opportunity of reducing the actual volume of graphite.
  - Clarity is required in identifying the HAW that has to be dealt with in Scotland and that HAW that is destined to be managed in England under agreed governmental and contractual arrangements.
  
11. WP2 – Overview of HAW in Scotland
  - No discussion took place on this work package as it had been thoroughly covered at the previous PB.
  
12. WP3 – Near Surface Waste Compatibility
  - A workshop was held on 22<sup>nd</sup> November 2013. ONR and DSRL attended with Magnox and EDF.
  - NDA presented a series of slides summarising the workshop and current ongoing work.
  - The work resulted in feasibility assessments for Magnox sites. The “feasibility” being how feasible it might be to dispose of some HAW in near surface facilities.
  - Much detail was talked about Magnox HAW streams and whether they could be disposed of near surface “at the surface” or near surface “tens of metres down”. There were some HAW streams that could never be disposed of in either of those ways. However there were some important generic topics aired and these are noted below.
  - The assumptions are based on current views and when much of the waste arises in 70 years’ time stakeholders and regulators might have different views.
  
  - The nuclear operators and particularly Magnox and Dounreay are in the actual process of conditioning and packaging HAW under the current regulations and the Letter of Compliance (LoC) process operated by NDA’s Radioactive Waste Management Directorate (RWMD). They do not want late guidance coming from SG and regulators after they have committed substantial funds towards agreed programmes that have been running successfully for many years.
  
  - SEPA stated that it considered that the LoC process was essential as it gave confidence that the packaged HAW could eventually be disposed of in a Geological Disposal Facility (GDF) even if that was not current SG policy.
  
  - The package life required in the LoC process is 500 years.
  
  - Magnox however thought that the LoC process was too severe when applied to HAW that was *only* going to be stored and monitored. SEPA disagreed and said it would press strongly for all HAW packaging to go through the LoC process.
  
  - A new action was placed for NDA to lead a discussion on the LoC process w.r.t. disposal, storage and the Scottish storage scenario.
  
  - The major criterion for whether HAW can be disposed of in near surface facilities is the alpha content of the waste. This leads to the conclusion that the majority of HAW at

Dounreay cannot be disposed of near surface; and that there is opportunity for some HAW from Magnox sites to be disposed of near surface if an Environmental Safety Case (ESC) can be made for a site that can be found to be acceptable to stakeholders.

13. WP4 – Responsibility to Deliver

- See para 6 above.

14. WP5 – Regulatory Issues

- See para 7 above.

15. **Discussion of “An Implementation Strategy for Scotland’s Policy on Higher Activity Radioactive Wastes: Development Draft of Consultation Paper” ref. SGHAWIS/Outline/2014/v2 24 January 2014.**

- Written comments were requested by SG within 2 weeks. The author will draft comments and send to June Love to send as DSG response (See Appendix 1).
- The author gave his overall views which were: a) SG should let its legal team look at the document as there were many loose ends and unachievable statement in it which could undermine the paper {Dounreay did this on its Low Level Radioactive Waste Best Practicable Environmental Option study (LLW BPEO)} b) the paper confuses being a high level document and then going into too much detail c) could be shorter and more succinct along the Committee on Radioactive Waste Management’s (CoRWM) recommendations in its paper 3063.
- ONR asked what legal status this document would ultimately have and SG seemed unsure. ONR said it would not regulate “strategy” only “safety” and not “policy”.
- SEPA specifically stated that human intrusion is the critical issue in near surface disposal safety cases whereas for deep geological disposal it is a much lower risk consideration.
- It was considered that the terms in the paper need much more careful definition e.g. final site clearance, interim end state, deferred reactor decommissioning.
- SG said it had now decided that a Strategic Environmental Assessment (SEA) was not needed for the HAWIS. CoRWM had suggested this was not required previously. However SG has submitted a Scoping Document for a SEA in case in the future options arise that would require a SEA.
- The PB members appeared to feel that the paper was maturing and progress was being made, but needed some serious extra input and refining. The author is not so confident as the issue of storage of HAW that cannot be disposed of near surface is not addressed in a robust manner and the references are merely putting decisions off to future generations under the guise of “possible technical advances” coming along. When the paper goes out to public consultation the author suspects some correspondents will highlight this.

16. The next meeting of the PB will be week commencing 10<sup>th</sup> March 2014

## APPENDIX 1

**Scottish Government  
Higher Activity Waste Implementation Strategy Project Board  
PB07 Meeting 30<sup>th</sup> January 2014**

*Action by 13<sup>th</sup> February 2014:-*

**To comment on:- “An Implementation Strategy for Scotland’s Policy on Higher Activity Radioactive Wastes: Development Draft of Consultation Paper” ref. SGHAWIS/Outline/2014/v2 24 January 2014.**

**Comments by David Broughton, DSG representative  
3<sup>rd</sup> February 2014**

*General Comments:*

- It would be worthwhile getting an opinion from the legal side in SG as that department could highlight where the many loose ends and non-addressed issues are that respondents will comment on. That department could also provide a reality check on some of the statements. An important first step in the Dounreay LLW BPEO study was to discuss with a Scottish Counsel the ways to write and communicate with stakeholders.
- As discussed at the PB more clarity is needed in defining the states of the sites at various periods. There is no point talking about final site clearance if there is no place to dispose of HAW that cannot be disposed of near surface and has to remain in stores on the site.
- A little more openness and honesty needs to be admitted in the paper concerning the HAW that cannot ever be disposed of near surface and will eventually have to be disposed of in the UK GDF or stored permanently on site. Stating that new technical opportunities might appear in the future is passing on burdens to future generations, is wishful thinking and abdicating responsibility.
- The SG’s aim was to have a high level frame work document but this paper appears to be a mixture of that and specific detail which is out of context in that aim. SG should aggressively edit out unnecessary detail.
- Following such an edit and review above it should be possible to produce a more succinct shorter paper along the lines suggested in CoRWM paper 3063.

*Using the paper’s paragraph numbers:*

Executive Summary – 4<sup>th</sup> para...non-nuclear **radioactive** waste.... or put a rider in at the beginning of the paper saying “waste”= “radioactive waste”

1.2 last para – Is SG “developing” a policy? Developing a HAWIS perhaps.

1.4 3<sup>rd</sup> para – different **from**

1.4 4<sup>th</sup> para – “It will prioritise future courses of action” This is a bold statement as finance and NDA programmes have a substantial influence here.

1.4 5<sup>th</sup> para – This gives an unfair and negative view of present arrangements which actually are robust and satisfy the regulators.

1.4 6<sup>th</sup> para – “we” is grammatically peculiar, everything should be impersonal.

1.4 8<sup>th</sup> para – this para is too open ended, what happens after 300+ years? Also a store might last more than 100 years.

1.4 para 9 – If a managements option is not feasible it is not an “option”

1.4 last section – Most probably would be seen as waffle by the general public.

1.5 4<sup>th</sup> bullet – After much discussion at the PB and other fora the general view is that the “proximity principle” is vague and care should be used in quoting it e.g. it ranges from sites to Scotland depending on the context.

1.5 last section 2<sup>nd</sup> bullet – “no excessive burden on future generations” – This is exactly what the SG Policy does!

1.7 1<sup>st</sup> para- “...deliver the environmental benefits...” It is difficult to see the environmental benefits of constantly rebuilding stores with the attendant energy inputs (materials, fuel for machinery, warmth and lighting for workers etc.) and radiological doses to workers involved in waste transfers.

2.1 2<sup>nd</sup> para- Better to say “waste covered by the Policy”

2.1 last para – Sentence starting “Raffinate” should end with...”and cannot be disposed of near surface.”

2.2 1<sup>st</sup> and 2<sup>nd</sup> paras – See general comments 2<sup>nd</sup> bullet above. These paras hide the fact that SG Policy is going to change plans so that they will NOT now lead to final site clearance. More clarity and honesty is required here.

2.2 Dounreay – Check with DSRL but there may be 3 ILW stores now. “....renewed every 100 years” Is this forever?

2.2 NDA Strategy 3<sup>rd</sup> para – “....will lead ultimately to Final Site Clearance(FSC)” This is unachievable for Dounreay and other sites with HAW that can only be disposed of in a geological disposal facility (i.e. the UK GDF)

3 Phases of Strategy 2<sup>nd</sup> para. – These 2 bullet points need explaining if they remain. See comment 1.4 last section above.

3 Packaging Strategy – Would be worthwhile adding in why the LoC process is important along the lines elucidated by SEPA at the PB meeting.

3 Siting – It is a hostage to fortune overemphasising the Proximity Principle as it could lead to nothing but storage if no current nuclear sites can support an ESC for near surface disposal for some HAW. Paras 3-5 then just confuse the issue in stakeholders’ minds. Para 8 – Disposal facilities are only required for their building and operational periods, after closure the geology looks after the waste. That is the fundamental principle, so saying “needed” for 1000s of years is the wrong way of expressing it.

4 Storage –All the detail on SAPs etc. is not needed in this document.

5.4 More explicit details should be given on what consultations are purely informative and what consultation e.g. by the regulators and planners, are mandatory. Also how stakeholders views are taken into account and what overrides them in a national needs context.

5.5 last para. – Retrievalability was covered in the Policy so either refer to it or say nothing, What is stated here could look like an abdication of responsibility to stakeholders.

6 Recommendations – Seems peculiar to have them in a strategy paper which saying what is to be done, even if draft at this stage.