

# Nuclear Free Local Authorities **RADIOACTIVE WASTE POLICY**

## **Briefing No. 27 – Scottish Government Policy**

Prepared for NFLA Scotland member authorities, 26<sup>th</sup> January 2011

### Scotland's Higher Activity Waste Policy – a brief assessment

#### **1. Introduction**

This brief assessment of the recently published Scottish higher activity radioactive waste policy has been developed by the NFLA Scotland Policy Advisor Pete Roche, with additional comments by the NFLA Secretary Sean Morris.

On January 21, 2011, the Scottish Government published its Higher Activity Waste Policy: <http://www.scotland.gov.uk/Publications/2011/01/20114928/0>

A “Post-Adoption Strategic Environment Assessment” was published with it: <http://www.scotland.gov.uk/Publications/2011/01/20115159/0>

The Government also published its response to submissions made to the Consultation: <http://www.scotland.gov.uk/Publications/2011/01/20115440/0>

Various additional documents such as a guide to Higher Activity Waste in Scotland were also published:

<http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1/16293/higheractivitywastepolicy/additionaldocs>

#### **2. NFLA's preliminary assessment**

From a quick perusal of the revised policy, it is clear that the Scottish Government has listened to local authorities and taken on board many of the points raised by NFLA and others during the Consultation. Although the concept of “disposal” of Higher Activity Waste (HAW) is still included as an option in the policy, this practice is quite tightly defined and will require waste to be monitored and to be retrievable. In addition, any ‘disposal’ should be as close to the surface and as near to the site where it is produced as practicable.

What will be important is to monitor how the policy is implemented in practice. Now that near-surface ‘disposal’ has been accepted as a possible option, Magnox North may continue with proposals to “dispose” of irradiated graphite sleeves at Hunterston A – an issue which remains of concern to the NFLA. Even if monitoring and retrievability were built into such proposals, local residents and communities may remain concerned because the site already has an above-ground Intermediate Level Waste storage facility large enough to accept all graphite waste. Placing graphite waste in a new near-surface disposal facility means there would be spare capacity implying there may be plans to import waste to Hunterston from outside of the area – in effect making it a potential central location for such waste. The Scottish Government has indicated that decisions on the location and materials to be ‘disposed’ of will be explored in the Implementation Strategy.

### 3. The Scottish Government's new Published Policy

#### 3.1 Storage is the priority

The revised document clears up the confusion created by the Consultation Documents which seemed to suggest that 'disposal' was the priority - "...*Scottish Government Policy at the present time is that long-term **storage is still the primary** long-term management option*" (para 2.04.03) (all emphases added by NFLA). The NFLA welcomes this clarification to the policy, which tallies with its own policy.

#### 3.2 Proximity Principle

The new Policy clarifies the Government's definition of the Proximity Principle, requiring that "...*waste should be dealt with **as close as possible to the site where it is produced**. This means that long-term radioactive waste management facilities should be as near to those sites as practicable so that the need to transport the waste over long distances is minimal*". (para 2.04.04) The NFLA again welcomes this clarification of the definition.

However, treatment abroad is still allowed under the new Policy (provided waste for disposal is returned to Scotland) (para 2.04.14). The Policy says treatment specifically excludes reprocessing (para 2.04.0-9), although this would not apply anyway as spent fuel is not defined as a waste. A separate joint consultation with the UK Government is considering waste substitution contracts with foreign customers from the Dounreay site.

#### 3.3 Definition of Storage

There is a presumption that "...*storage facilities will be as near to the site where waste is produced as practicable*". (para 2.04.21). Stores will be expected to last for at least 100 years. (para 2.04.25). Near surface storage could mean down to several tens of metres below the surface. (para 2.04.19) This is again a useful clarification of the policy, as there were concerns it could be 100 metres or more.

#### 3.4 Definition of 'Disposal'

'Disposal' is defined as "...*placing the waste in a suitable specialised land-based facility without the intent to retrieve it at a later time*". (para 2.04.26). This does not mean the waste cannot be retrieved if that proves necessary – it just means there is no present intention to retrieve it. (para 2.04.26)

Crucially, "*The Policy requires that disposal facilities should be **monitored** and that there should be a **capability to retrieve** waste packages and waste if necessary.*" (para 2.04.29) The NFLA is more content with this clarified definition than it was previously. It will consider the definition in more detail at the NFLA Scotland meeting in Dundee.

It is important to note that the Policy does not specify what monitoring is required or how retrievability will be demonstrated. The site operators will have to demonstrate these to the satisfaction of the regulators. The policy document refers on several occasions to consistency with the "Near Surface Disposal Facilities – Guidance on Requirements for Authorisation" (GRA) produced by the Environment Agency and the Scottish Environmental Protection Agency. This guidance says it "...*does not require the waste to be retrievable*". (GRA para 3.6.2) However the GRA does provide guidance on what should happen if the operator does decide to make provision for retrievability.

The Policy does not prescribe a particular depth for a disposal facility but *“The presumption in the Policy is that a disposal facility will be **as near to the surface as practicable** taking account of all factors.”* (para 2.04.30). And it should be *“as near to the site where waste is produced as practicable. Decisions will be made on a case by case basis and will be subject to robust regulatory requirements and the principles underlying the Policy”*. (para 2.04.32) The NFLA is reasonably pleased with this clarification.

### **3.5 Timing**

An area of the policy document that is most interesting in what it notes about the timing required for maintenance of such facilities. The Policy says disposal facilities need to be capable of existing for much longer time periods than storage facilities. (para 2.04.35) Whilst no specific period is prescribed it says that 300 years would be an *“acceptable period for institutional control”*, which presumably means that monitoring would be carried out for at least that period. (para 3.04.36)

### **3.6 Further engagement and consultation**

The Scottish Government expects waste producers to engage with local communities at an early stage. The Scottish Government now has to develop an “Implementation Strategy” in order to carry out its policy. It says ongoing engagement with stakeholders will be needed as the Implementation Strategy is developed. (para 3.02.02)

A Project Board will be set up to assist, chaired by the Scottish Government with representatives from regulators, local authorities in Scotland and the Nuclear Decommissioning Authority (NDA). The Project Board will establish associated supporting working groups to inform and assist the Board which might include representatives of site operating companies, local stakeholders, including members of Site Stakeholder Groups (SSGs), the Committee on Radioactive Waste Management (CoRWM) and non-governmental organisations. (paras 3.02.03 – 04) The NFLA should look to be represented on the Project Board.

## **4. Scottish Government’s Response to the Consultation Submissions**

Over a third (22 in total) of the responses to the 2010 Consultation were from local government – either individual councils or organisations such as NFLA, SCCORS and NuLEAF. A summary of question responses from local government is attached as Appendix 1. Most Scottish local authorities supported the NFLA response. The NFLA had argued that radioactive waste management policy should follow a clear set of environmental principles. It also opposed the concept of ‘disposal’ in deep geological facilities or near the surface and questioned why the Government’s Environment Report had suggested disposal was the preferred option. It also noted that there is no ‘safe’ dose of radiation, and there are huge uncertainties involved in deciding what dose members of the public actually receive and what the health impact of those doses might be. As stated above, the revised Policy now requires that disposal facilities should be monitored and that there should be a capability to retrieve waste packages and waste if necessary. (para 2.04.29) This is a significant improvement to policy and the NFLA played an important role in lobbying for an amendment to this policy.

The Scottish Government has announced that it will take the lead in developing an Implementation Strategy to carry out the Policy. It has also announced it will undertake this strategy in close co-operation with the waste owners and producers, including the NDA.

## 5. The Scottish Government's Post-Adoption (i.e. of the Policy) Strategic Environmental Assessment (SEA)

The post-policy SEA will examine plans and policies as they develop, in order to identify any significant effects on the environment. It will ensure that environmental considerations are taken into account during policy making, and that decisions affecting the environment are made in a transparent way. The SEA also aims to build in mitigation measures, to avoid or minimise any potentially significant adverse effects of the plan on the environment, and to establish a framework for monitoring effects as implementation progresses.

## 6. Views on deep geological disposal

The Government's Post-Adoption Strategic Environmental Assessment reaffirms the "*Scottish Government position that it **does not support deep geological disposal of radioactive waste as it does not consider it to be a "reasonable alternative" at this point in time.***" (para 1.16 of the SEA) The NFLA supports this policy as it foresees major scientific and technical uncertainties in developing a deep waste repository.

in September 2010, the Scottish Government published, and invited views on, a Supplementary Assessment of the environmental effects of deep geological disposal. NFLA responded to this consultation. Along with other responders, such as SCCORS, it highlighted the weight of scientific evidence on the many challenges still posed by deep geological disposal.

It is interesting to note the response of Energy Solutions (owner of Magnox North) to the 2010 consultation. It has argued that many of Scotland's wastes could be "managed" (i.e. disposed of) in near-surface facilities. It stated it regarded the new Scottish Policy as pragmatic, compared with deep geological disposal, as it generated cost and time savings for the industry and stimulated innovation and investment. (para 3.52 of the SEA) The NFLA has concerns with this view and will seek to take a pro-active role in further discussions in the implementation of the policy.

## 7. Next Steps

The Scottish Government has identified a number of additional documents that they will shortly be publishing on its website, across a number of topic areas:

- Radiation and Radioactivity
- Higher Activity Radioactive Waste in Scotland
- Legislative and Regulatory Framework for the Management of Radioactive Waste
- Treatment Options for Radioactive Waste
- International Examples of Near-surface Facilities
- Retrievability and Reversibility
- Glossary of Terms

The NFLA will continue to monitor developments in Scottish radioactive waste policy. It has had a constructive dialogue with the Scottish Government on the implementation of its revised Highly Active Waste Policy and will seek to maintain that up to, and following, the Scottish Parliamentary elections.

## Summary of responses from local authorities to the draft Policy

There were 22 responses to the draft Policy from Local Authorities, either individual councils or wider organisations like the NFLA. This was 35% of the total respondents to the consultation. The responses and text are directly taken from the Scottish Government website.

### Responses to specific questions -

#### Q1. Waste

*CD1 - Have we explained what waste we have in Scotland and how it is managed?*

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	6	3	11	20

#### Q2.-Q.11: Definitions

*CD2 - Have we explained why we need to define the terms used in the Policy?*

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	18	0	0	18

*CD3 - Do you agree with the definition of long-term?*

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	7	3	9	19

*CD4 - Do you agree with the definition of near-surface ?*

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	3	16	1	20

*CD5 - Do you agree with the definition of near site?*

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	4	6	3	13

*CD6 - Do you agree with the definition of storage?*

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	8	1	9	18

*CD7 - Do you agree with the definition of disposal?*

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	9	0	10	19

**CD8 - Do you agree with the definition of monitorable?**

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	6	2	10	18

**CD9 - Do you agree with the definition of retrievable?**

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	8	9	1	18

**CD10 - Do you agree with the definition of the need for transport over long distances is minimal?**

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	6	4	1	11

**Q11 - Do you wish to propose any other definitions?**

Sector	Yes	No	Total
Local authorities	2	7	9

“There was general agreement to the definitions but it was suggested that further clarification of some terms, notably treatment and short-lived waste and long-lived waste, would be helpful.”

**Q12.-Q19. Implications**

**CD12 - Have we explained the implications of the Policy?**

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	6	10	1	17

**CD13 - Do you agree with the application of the Waste Hierarchy?**

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	9	2	0	11

**CD14 - Do you agree with transport of the Waste for treatment?**

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	8	3	1	12

**CD15 - Do you agree with the export of waste for treatment?**

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	6	5	6	17

**“Scottish Government Response:** The Scottish Government recognises the concerns expressed. The Policy Statement explains that the export of waste to other OECD (Organisation for Economic Co-operation and Development) and EU (European Union) countries may only be authorised or consented to by the competent authority in light of an assessment of all practicable options, and should not be permitted except:

- for the recovery of reusable materials;

or

- for treatment that will make the subsequent storage or disposal of the waste more manageable.

In all cases where such processes would add materially to the waste needing to be disposed of in a country of destination, including in other parts of the UK, the presumption should be that it will be returned to Scotland, to a timescale agreed by regulators and competent authorities in Scotland and in the country of destination.

The Policy does not allow disposal of waste overseas other than as described above. It will be for the competent authorities in those countries to assess if the waste adds materially to that in their country.”

***CD16 - Do you agree with the need to develop a Strategy to implement the Policy?***

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	9	2	0	11

***CD17 - Do you agree that the Nuclear Decommissioning Authority should be responsible for developing the Strategy to implement the Policy?***

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	10	1	7	18

***CD18 - Do you agree with the proposal to review the application of the Detailed Statement of Policy 10 years after it is published?***

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	9	0	0	9

***CD19 - Have we explained the Regulatory Framework for managing the Waste in Scotland?***

Sector	Broadly agreed	Broadly disagree	Comments	Total
Local authorities	9	0	1	10

**Q20.-Q21. Other Issues/ Detailed Statement of Policy**

***CD20 - Does the proposed Detailed Statement of Policy include all relevant issues?***

Sector	Yes	No	Comments	Total
Local authorities	2	14	1	17

***CD21 - Should the proposed Detailed Statement of Policy include anything else?***

Sector	Yes	No	Comments	Total
Local authorities	8	0	0	8