



# **Regulatory Arrangements for the Management of Higher Activity Radioactive Waste on Nuclear Licensed Sites**

*Regulatory Position Statement – 2021 Update*

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### **Executive Summary**

This position statement provides a commitment by the Office for Nuclear Regulation (ONR), the Scottish Environment Protection Agency (SEPA), the Environment Agency and Natural Resources Wales (NRW) to work together to improve the regulatory arrangements for the management of Higher Activity radioactive Waste (HAW) on nuclear licensed sites. This position statement updates earlier versions issued in 2003 [1] and 2017 [2] and will be periodically reviewed to ensure it remains fit for purpose. The statement should be read in conjunction with the Memoranda of Understanding (MoUs) between ONR and the environment agencies [3] [4] [5].

The management and storage of HAW on all GB nuclear licensed sites is regulated by the ONR via the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) [6] and on Scottish nuclear sites it is also regulated by SEPA via permits granted under the Environmental Authorisations (Scotland) Regulations 2018 (EASR18) [7]. The environment agencies regulate the disposal of HAW [7] [8]. The ONR and the environment agencies will continue to work together on HAW matters in accordance with terms set out in the MoUs between the organisations. The ONR and the environment agencies are working together because decisions about the permissioning of operations and processes for HAW management must take into account the long-term disposability of conditioned waste, and the appropriate environment agency's regulatory requirements, alongside the nuclear safety considerations. This is essential to minimise the risk that reworking of waste packages may be necessary to ensure disposal. By ensuring that the arrangements for the packaging and storage of the HAW over its entire life-cycle are optimised, the need for reworking will be minimised, detriments to safety, security and the environment will be reduced, and this will contribute to ensuring that the waste is managed in a sustainable way.

### **1. Background**

The aims of the arrangements described in the 2003 position statement [1] and its update in 2017 [2] were to ensure that HAW is managed by dutyholders in a sustainable way, taking into account environmental and safety considerations.

The regulators considered that the arrangements would provide the public, nuclear licensees, the Nuclear Decommissioning Authority (NDA) and Radioactive Waste Management Limited (RWM), with:

- Increased confidence in waste management arrangements arising from the independent examination and assessment of HAW conditioning proposals;
- Greater regulatory certainty with respect to the eventual disposability of conditioned HAW;
- Confidence that any necessary foreclosure of options had been decided in a transparent and systematic way;

- Reduced risk of conflicting regulatory requirements, through joint regulation on HAW management that takes account of the ONR's requirements regarding safety and security, and the environment agencies' requirements regarding environmental protection.

Additional benefits of the joint regulatory arrangements also include:

- Early interaction between the regulators and the stakeholders, at a time when they are committing significant resources to HAW conditioning, which will avoid wasted effort, and potential delays and costs, resulting from developing inappropriate waste management approaches;
- Continued early dialogue between dutyholders, regulators and other key stakeholders, which will reduce the regulatory risk under NIA65 [6], for example, for building HAW conditioning plants, and to authorisations under the EASR18 / Environmental Permitting Regulations (EPR2016) for disposal of waste packages;
- Clear documentation of the basis for current regulatory decisions that could inform future implementation of a waste disposal strategy.

The purpose of this updated position statement is to:

- i. Summarise improvements made since the most recent revision to the position statement in 2017 [2] (see Section 2);
- ii. Highlight other relevant changes affecting management of HAW on nuclear licensed sites (see Section 3);
- iii. Describe the review of working arrangements (see Section 4) and our updated position (see Section 5).

## **2. Improvements since the 2017 Position Statement**

In the 2003 Position Statement [1], the regulators set out a joint commitment to produce guidance explaining the arrangements for the management of HAW. Joint regulatory guidance on the management of HAW was first published in 2005 and has subsequently been progressively updated in response to developments in implementing long-term management and disposal of HAW with the latest version being published in January 2021 [9]. The primary aim of these updates has been to improve the clarity and ease of use of our guidance, and to take proper account of learning from experience by the regulators and the nuclear industry.

In developing the joint guidance, other key improvements were made, for example, introducing the concept of the Radioactive Waste Management Case (RWMC). An RWMC is seen as good practice and is considered by the regulators to be the most efficient and effective way for demonstrating the long-term safety and environmental performance of the planned management of a specific waste stream over the entirety of its lifecycle.

In relation to HAW on Scottish sites, the joint guidance indicates that HAW packages conditioned in anticipation of geological disposal are also suitable for long-term management in near-surface facilities in line with Scottish HAW policy [10]. ONR and SEPA carried out an intervention in 2017 to confirm the validity of this position [11] and keep this under review.

### 3. Changes since 2017

Relevant changes since the 2017 position statement include:

#### **(a) Legislation and Policy**

The UK and Welsh Governments support managing HAW in the long-term through geological disposal, coupled with safe and secure interim storage and on-going research and development to support its optimised implementation. Earlier policy frameworks for England and Wales [12] [13] have been updated to reflect on-going work to engage with communities on the siting of a potential geological disposal facility. The current policy frameworks are set out in the 2018 paper '*Implementing Geological Disposal - Working with Communities. An updated framework for the long-term management of higher activity radioactive waste*' [14] for England and in the 2019 paper '*Geological Disposal of Higher Activity Radioactive Waste: Working with Communities*' for Wales [15] and the supporting national planning policy statement [16]. The Scottish Government's policy is that long-term management of HAW should be in near-surface facilities which should be located as near to the site where the waste is produced as possible [10].

#### **(b) Regulatory Changes**

In 2018, the Environmental Authorisations (Scotland) Regulations 2018 [7] came into force. These regulations aim to deliver an integrated framework for authorisation and enforcement arrangements relating to radioactive substances, waste management, water and pollution prevention and control. The regulations give SEPA responsibility for regulating the management of HAW on nuclear licensed sites in addition to ONR's responsibilities.

### 4. Review of working arrangements between ONR and the environment agencies

This position statement provides a commitment from the ONR, EA, SEPA and NRW to work together to continually improve the arrangements for the management of HAW on nuclear licensed sites. The more detailed working arrangements to ensure effective cooperation and collaboration between regulatory authorities are covered by the MoUs between ONR and each of the environment agencies [3] [5] [4]. These are kept under review and updated as necessary.

The regulators will meet periodically to:

- ensure effective oversight of HAW management
- understand individual regulatory positions, form joint positions or clarify differences where necessary
- identify, review and prioritise issues where regulators need to take action

### 5. Updated Regulatory Position

The regulators will maintain their joint regulation of HAW as set out in this position statement. The ONR and the environment agencies will continue to work together on HAW matters in accordance with terms set out in the MoUs between the organisations. The ONR and the environment agencies are working together because decisions about the permissioning of operations and processes for HAW management must take into account the long-term disposability of conditioned waste, and the appropriate environment agency's

regulatory requirements, alongside the nuclear safety considerations. This is essential to minimise the risk that reworking of waste packages may be necessary to ensure disposal. By ensuring that the arrangements for the packaging and storage of the HAW over its entire life-cycle are optimised, the need for reworking will be minimised, detriments to safety and the environment will be reduced, and this will contribute to ensuring that the waste is managed in a sustainable way.

This will be achieved by the ONR ensuring that HAW is managed safely and securely by the dutyholder in such a way that is appropriate for storage and eventual disposal; and the environment agencies ensuring that the resulting waste packages are suitable for disposal, with environmental protection considered. In the case of proposals to condition HAW, the appropriate environment agency will regulate both the eventual disposability of the proposed waste package, and the nearer term environmental impacts of packaging the HAW. The regulators' working arrangements will have the flexibility to accommodate changes to legislation and policy, development and availability of any HAW disposal facilities and RWM's process of disposability assessment and associated provision of packaging advice.

ONR and the environment agencies will continue to cooperate and work jointly in other related areas as appropriate (as indicated in the MoUs). For example, there is joint working in relation to geological disposal regarding the provision of advice to RWM and providing support to community Working Groups involved in the GDF siting process. This work is undertaken separately, but in parallel, to the regulation of licensees' HAW management.

## **6. Financial Implications**

The environment agencies will charge licensees directly for their work through the provisions in the environmental permits and authorisations.

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