

Higher Activity Radioactive Waste Management and Geological Disposal

Regulators' Position – February 2019

Environment Agency, Natural Resources Wales, Northern Ireland Environment Agency, Office for Nuclear Regulation

This note aims to clarify the role of the regulators with respect to the management of Higher Activity Radioactive Waste (HAW) and the delivery of geological disposal.

Our aims: As independent safety, security and environment regulators we regulate the nuclear industry and other users of radioactive material to ensure the protection of people and the environment. Through our interactions with industry, we encourage them to create an excellent health, safety, environmental and security culture and influence them to achieve long-term sustainable solutions for radioactive waste management.

Background: Radioactive wastes result from various responsible uses of radioactivity across the UK. These include not only the generation of electricity in nuclear power stations and defence-related programmes (and the subsequent decommissioning of such sites), but also industrial, medical and scientific uses, and as a by-product of the extraction and processing of various natural minerals. The majority (by volume) of radioactive waste is disposed of to existing waste facilities such as the Low Level Waste Repository or permitted landfills. However, there is no disposal facility for HAW.

The need for geological disposal: The UK Government, in its White Paper “Implementing Geological Disposal – Working with Communities” [1], and respectively the Welsh Government in their policy on the “Management and Disposal of Higher Activity Radioactive Waste” [2] remain committed to a policy of deep geological disposal as a permanent solution for the UK’s higher activity radioactive waste. HAW from all sources is currently safely and securely stored at nuclear sites and will continue to accumulate, both from existing and new sources (e.g. new nuclear power stations), where it will present an on-going risk requiring active management for hundreds of thousands of years if a final disposal solution is not pursued.

The regulators agree that a safe permanent disposal route is needed to resolve this situation. The regulators believe this requires:

- strong independent regulation.
- development and maintenance of a broader understanding across the UK of the need for progress in securing a long-term solution for HAW.
- active participation from a wide range of parties from across the UK in helping ensure that a long-term solution for HAW is secured as soon as possible.

Our role in siting: The regulators will support the geological disposal facility siting process by explaining how we will regulate a future geological disposal facility. We will only licence or permit a geological disposal facility if it can be shown to meet our stringent requirements for protection of people and the environment. In addition, EA, NRW and ONR will actively support work to develop a broader understanding of the need for progress in this area, including the current status of HAW management at sites, making use of our existing networks and opportunities for engagement to encourage participation – seeking to ensure the ‘best chance of success’ through the Government programmes.

The regulators will support the siting process in ways that continue to ensure we do not compromise our independent regulation of any specified sites proposed for geological disposal. We will only licence or permit a geological disposal facility if it can be shown to meet our stringent requirements for protection of people and the environment.

¹ Department of Business, Energy & Industrial Strategy. Implementing Geological Disposal – Working with Communities. An updated framework for the long-term management of higher activity radioactive waste. December 2018.

² Welsh Government Policy on the Management and Disposal of Higher Activity Radioactive Waste. May 2015. WG23160.