

The regulation of radioactive waste management on licensed nuclear sites

This document summarises how we regulate the management of radioactive waste on nuclear licensed sites. If you would like to obtain further details, these are available from the contacts and references listed.

The regulators

Health and Safety Executive

The Health and Safety Executive (HSE) regulates all activities associated with radioactive waste management while the waste remains on the nuclear site. These include the creation, treatment, conditioning and storage of radioactive waste until it is removed from the site.

Environment Agency and Scottish Environment Protection Agency

The Environment Agency in England and Wales and the Scottish Environment Protection Agency (SEPA) in Scotland regulate radioactive liquid or gaseous discharges from nuclear sites and the disposal of solid radioactive waste.

Co-operation between regulators

The regulators co-operate to make sure they work in a consistent and comprehensive way throughout England, Wales and Scotland.^{1,2} Working together is essential for building and maintaining public confidence in the regulatory system.

Safety case

A 'safety case' is the written documentation demonstrating that risks associated with a site, a plant, part of a plant or a plant modification are as low as reasonably practicable and that the relevant standards have been met.³

Key aspects of a safety case specific to radioactive waste management⁴ are to demonstrate:

- consistency with radioactive waste management strategies;
- that risks are reduced to as low as reasonably practicable through adherence to modern standards and best practice;
- that radioactive material and radioactive waste are adequately controlled and contained;
- that the waste is packaged in a way that ensures it can be disposed of both now and in the future (disposability).

Disposability and the role of the Nuclear Decommissioning Authority

Waste must be packaged in such a way that ensures it retains disposability, ie that it can be disposed of now and in the future.

A demonstration of disposability should show how the waste package would meet the conditions for acceptance at an authorised disposal site.

Following the Government announcement of 25 October 2006 on the way forward for developing a deep geological repository, HSE, the Environment Agency and SEPA regard the Nuclear Decommissioning Authority (NDA) as the authoritative source in providing advice to licensees with regards to the safety case for Intermediate Level Waste (ILW) and any other waste that may be disposed of via a deep geological repository.⁵

Regulation

HSE regulates in a way that is proportionate to the importance of the process being regulated.

For the more significant processes, HSE will assess the safety case and decide that waste conditioning cannot proceed without HSE's agreement or consent. Throughout this process, HSE will seek advice from the Environment Agency or SEPA, particularly about disposability.

To support their ability to advise HSE, the Environment Agency and SEPA carry out independent reviews of NDA's development work and periodically publish the results.

Once a radioactive waste management facility is in operation, HSE will carry out regular inspections (at times jointly with the Environment Agency or SEPA) to verify that it complies with the requirements of the safety case and all other relevant standards and regulations.

HSE will take appropriate enforcement action in accordance with HSE's Enforcement Management model⁶ in the event of failure to meet the requirements of the safety case or any other legal provisions relating to management of waste on site.

- 6 *HSE enforcement management model*
www.hse.gov.uk/enforce/emm.pdf

Contacts

Health and Safety Executive
HSE Infoline: 0845 345 0055
www.hse.gov.uk

Environment Agency
General enquiries: 08708 506 506
www.environment-agency.gov.uk

Scottish Environment Protection Agency
General enquiries: 01786 457700
www.sepa.org.uk

Nuclear Decommissioning Authority
General enquiries: 01925 80 2001
www.nda.gov.uk

References

- 1 *Memorandum of Understanding between the Health and Safety Executive and the Environment Agency on matters of mutual concern at nuclear sites licensed by HSE in England and Wales*
www.hse.gov.uk/nuclear/nucmou.pdf
- 2 *Memorandum of Understanding between the Health and Safety Executive and the Scottish Environment Protection Agency on matters of mutual concern at licensed nuclear sites in Scotland*
www.hse.gov.uk/aboutus/framework/mou/sepa-nuclear.pdf
- 3 *Guidance on the purpose, scope and content of nuclear safety cases*
www.hse.gov.uk/foi/internalops/nsd/tech_asst_guides/TAST051.pdf
- 4 *Management of radioactive materials and radioactive waste on nuclear licensed sites*
www.hse.gov.uk/nuclear/waste1.pdf
- 5 Government announcement on the way forward for developing a deep geological depository (25 October 2006)
www.publications.parliament.uk/pa/ld199697/ldhansrd/pdvn/lds06/text/61025-0002.htm