

A BRIEFING FOR LOCAL AUTHORITY PLANNERS ON RADIOACTIVE WASTE MANAGEMENT



Briefing Paper 4

January 2020

1. Introduction

Developments in radioactive waste management – covering nuclear and non-nuclear industries – are likely to impact on all counties of England and Wales, suggesting that all waste planning authorities should address relevant developments in their Local Plans and Waste Plans.

To assist Local Planning Authorities, this Briefing Paper provides a high-level overview of radioactive waste management in the UK and references to where more detailed material can be found. It covers:

- Section 2 National responsibilities
- Section 3 Categories of radioactive wastes and materials
- Section 4 Main steps in the management of radioactive wastes
- Section 5 Government policies for radioactive waste management
- Section 7 Advisory Bodies, International Guidelines and Regulations
- Section 7 Regulators
- Section 8 Strategies for implementing policy

This paper should be read in conjunction with NuLeAF **Briefing Paper 11 – NuLeAF Advice on Approaches to Radioactive Waste Management in Local Plans** – which provides detailed guidance on the current planning and waste framework and NDA strategy. It also includes specific advice on policies on radioactive waste that local authorities may wish to adopt, and examples of actual policies from relevant authorities across England and Wales.

2. National Responsibilities

National responsibilities are allocated in the following way:

- Government maintains and develops policy and the regulatory framework;
- Regulators have the duty to ensure that the policy and regulatory framework is properly implemented; and
- The producers and owners of radioactive waste are responsible for developing their own waste management strategies to implement policy and regulatory requirements.

Within Government, the **Department of Business, Energy and Industrial Strategy (BEIS)** and the **Devolved Administrations** have overall responsibility for policy and legislation. However, **DEFRA** and the **Ministry for Housing, Communities and Local Government (MHCLG)** also have some responsibilities around radioactive waste management. The **Ministry of Defence** is accountable for radioactive wastes kept or stored at military related nuclear licensed sites.

The **owners and producers** of radioactive waste are:

- Civil public sector nuclear sites are owned by the **Nuclear Decommissioning Authority (NDA)**, a non-departmental public body established under the Energy Act 2004. Wholly owned subsidiary companies of the NDA oversee radioactive waste management at **Sellafield** and in relation to the **Magnox** stations. Another wholly owned subsidiary, **Radioactive Waste Management (RWM) Ltd**, is responsible for identifying and developing a suitable site for a **Geological Disposal Facility (GDF)**.
- Also, part of **NDA Group** are organisations managed at arms-length by private sector consortia. These include the **Dounreay Site Restoration Limited (DSRL)**, tasked with decommissioning and remediating the Dounreay site, and **Low-Level Waste Repository (LLWR) Ltd**, which manages LLW treatment and disposal and operates the LLW repository in West Cumbria.
- Private sector nuclear sites are owned and operated by **EDF Energy**;
- Defence-related sites are usually owned by the **Ministry of Defence**, and operated by private sector companies;
- **URENCO UK** (from production of enriched uranium for nuclear fuel); and
- **GE Healthcare** and other non-nuclear users of radioactive material (i.e. universities and hospitals).

3. Categories of Radioactive Wastes and Materials

Radioactive waste is any material that is either radioactive itself, or is contaminated by radioactivity, for which no further use is envisaged. Most radioactive waste is produced by nuclear power station operators and associated fuel-cycle facilities. A substantial amount arises from nuclear research and development sites. Some also arises from Ministry of Defence sites, and small amounts are produced by medical, industrial and educational establishments.

In the UK, radioactive waste is classified under the following broad categories:

High Level Wastes (HLW)

These are highly radioactive and generate substantial amounts of heat. HLW is a product from reprocessing spent nuclear fuel at Sellafield in Cumbria. It

arises as highly radioactive nitric acid, which is converted into glass within stainless steel containers ('vitrification') at the Sellafield site. If declared a waste, spent fuel would also be categorised as HLW.

Intermediate Level Wastes (ILW)

These are wastes where the radioactivity levels are higher than for Low Level Waste, but which do not require heat to be taken into account in the design of management facilities. ILW is sufficiently radioactive to require shielding and containment. It arises mainly from the reprocessing of spent fuel and from operations and maintenance at nuclear sites, including fuel casing and reactor components, moderator graphite from reactor cores, and sludges from the treatment of radioactive effluents.

Low Level Waste (LLW)

These are radioactive wastes other than that suitable for disposal with ordinary refuse, but not exceeding 4 gigabecquerels per tonne of alpha activity, or 12 gigabecquerels per tonne of beta or gamma activity¹. Unlike HLW and ILW, LLW does not normally require shielding during handling or transport. Currently, LLW consists largely of paper, plastics and scrap metal items that have been used in hospitals, research establishments and the nuclear industry. In future there will be large volumes in the form of soil, concrete and steel, as nuclear plants are decommissioned. LLW represents about 90% by volume of UK radioactive wastes but contains less than 0.0003% of the radioactivity.

Government and the NDA are currently moving towards a change in legislation that will enable some LLW (particularly VLLW and LALLW – see below) to be disposed of on site where this is seen as the best option. If this legislative change is approved, it could lead to significant changes in the management and disposal of the lowest level radioactive material generated by decommissioning.

Very Low-Level Waste (VLLW)

This is a sub-category of LLW, consisting of the same sorts of materials, and divided into Low Volume ('dustbin loads') and High Volume ('bulk disposal'). Low volume VLLW can be disposed of to unspecified destinations along with municipal, commercial or industrial waste. High volume VLLW can be disposed of to specified landfill sites and controls are necessary as specified by the environmental regulators².

¹ A Becquerel is the unit of radioactivity, representing one disintegration per second. A gigabecquerel is 1000 million becquerels.

² For low volume VLLW, each 0.1 m cubed of waste must contain less than 400 kilobecquerels of total activity or single items must contain less than 40 kBq. For high volume VLLW, the maximum concentration should be 4 MBq/tonne. Different activities are specified for wastes containing Carbon 14 and Tritium.

Low Activity Low Level Waste (LALLW)

A sub-set of LLW which is below a certain threshold of radioactivity.

Out of scope wastes

Material that is so low in radioactivity that the risks to humans and the environment can be classed as negligible.

Non-nuclear LLW

A range of processes and industries outside the nuclear industry produce LLW. These include hospitals, research facilities, military uses and certain industries. There is a separate Government strategy to manage non-nuclear LLW.

Naturally Occurring Radioactive Material (NORM)

NORM consists of materials, usually industrial wastes or by-products, which contain naturally occurring radioactive materials which have been concentrated by the nature of certain industrial processes. Within the UK a range of industries including oil and gas, produce such NORM wastes. There is a separate Government strategy for the management of NORM.

Historically, spent fuel and the other products of its reprocessing (plutonium and uranium) have not been considered to be radioactive wastes. However, it is now recognised that some of these materials may in the future be categorised as waste. In principle, it is anticipated that these materials could be disposed of with higher activity wastes in a Geological Disposal Facility.

A national inventory of radioactive wastes is updated about every three years. It describes all stocks of radioactive wastes held in the UK, together with predictions of future arisings. The most recent version of the inventory was published in 2016³.

Finally, it should be noted that the NDA is moving towards a risk based approach to the management of radioactive wastes, so that decisions on treatment and disposal are made based on the best management option rather than simply on their classification.

4. Main Steps in the Management of Radioactive Wastes

Radioactive waste will undergo some or all of the following steps depending on the type of waste and strategy for its management:

- Pre-treatment – the aim is to segregate waste into streams that will be managed in similar ways.

³ <https://ukinventory.nda.gov.uk/the-2016-inventory/2016-inventory-reports/>

- Treatment – involves changing the characteristics of the waste by volume reduction, radionuclide removal or change of composition.
- Conditioning – involves transforming wastes into a form suitable for handling, transport, storage and disposal, usually by immobilisation and packaging.
- Storage – involves emplacement of waste in a facility with an intention to retrieve for another step in the management process.
- Retrieval – involves removing wastes from storage for inspection, further storage or disposal.
- Disposal – occurs when packages of radioactive waste are emplaced in a facility with no intention of retrieval. Disposal can also include discharging liquid and gaseous effluent into the environment.

Strategies and plans for managing radioactive wastes need to address all the steps that are relevant to a particular waste.

5. Government Policies for Radioactive Waste Management

These can be summarised as follows:

Higher Activity Wastes (mainly High-Level Waste and Intermediate Level Waste)

Policy in England and Wales is for Higher Activity Wastes (HAW) to be stored on NDA sites before being disposed of in a Geological Disposal Facility (GDF). This is a highly engineered repository located deep underground in suitable geology.

In December 2018 (England) and January 2019 (Wales), Government launched a new siting process for a GDF. Radioactive Waste Management Ltd (RWM) is a subsidiary of the NDA that has been tasked by Government with finding a suitable location for a GDF. Policy requires that such a development can only take place within a consenting local community, and both local authorities and communities have been given a significant role in the siting process.

The GDF has been designated a **Nationally Significant Infrastructure Project (NSIP)** and a **National Policy Statement (NPS)** governing the planning aspects of the process, was laid before Parliament in July 2019⁴. More information on the current process can be found in NuLeAF **Briefing Paper 14**, while background information on geological disposal can be found in **Briefing Paper 16** and **Briefing Paper 5**.

⁴ <https://www.gov.uk/government/consultations/national-policy-statement-for-geological-disposal-infrastructure>

Radioactive waste management is a devolved policy issue. Therefore, the Welsh Government, Northern Ireland Executive and Scottish Government each have responsibility for this issue in respect of their areas.

The Welsh Government and the Northern Ireland Executive supports the implementation of geological disposal. Scottish Government policy⁵ is that long term management of Higher Activity Waste should be in near-surface facilities located as near to the site waste originates as possible. It does not sponsor the programme for implementing geological disposal.

Finally, the NDA is currently considering the scope for disposing of some of the UK's HAW inventory in a **Near Surface Disposal** site or sites. Near Surface Disposal would be limited in scope and would not negate the need for a GDF. Further announcements on this issue are anticipated.

Low Level Wastes

The UK Government published a policy statement⁶ on Low Level Waste management in March 2007. The most recent strategy for the management of solid Low-Level Waste (LLW) from the nuclear industry was published in February 2016⁷. At its heart are commitments to:

- Apply the waste hierarchy and move away from the past focus on disposal;
- Make best use of existing LLW management assets, particularly the LLW Repository (LLWR) in Cumbria; and
- Identify new fit-for-purpose management routes.

NuLeAF's **Briefing Paper 8** provides more detail on LLW policy. Strategies for the management of NORM (Naturally Occurring Radioactive Material) and for non-nuclear industry radioactive waste have also been published (see Section 6).

Spent Fuel (SF) and Plutonium

Government policy is that the question of whether to reprocess spent fuel (a chemical process for separating uranium and plutonium), or hold it in storage, is a matter for the commercial judgement of the owner of the spent fuel, subject to meeting the necessary regulatory requirements.

Government has confirmed its view that in the absence of any proposals from industry, new nuclear power stations built in the UK should proceed on the basis that spent fuel will not be reprocessed. The **THORP (Thermal Oxide Reprocessing Plant)** at Sellafield closed in 2018, with the **Magnox**

⁵ [Scotland's Higher Activity Radioactive Waste Policy 2011](#)

⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/254393/Low_level_waste_policy.pdf

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/497114/NI_LLW_Strategy_Final.pdf

Reprocessing Plant is expected to follow in 2020, ending all reprocessing operations.

UK Government's preferred policy for the long-term management of plutonium is that it should be reused in the form of mixed oxide fuel (MOX), with any remaining plutonium unsuitable for conversion into MOX immobilised and treated as waste for disposal. UK Government has also stated that it would be open to consider alternative options if they offered better value to the UK taxpayer. It should be noted that at present, there are no plans to build a facility to produce MOX, nor, at present, are any of the new build reactor designs capable of burning it.

A Government progress report on Plutonium consolidation, storage and disposition was published in March 2019⁸.

Liquid and Gaseous Waste Discharges

Under the terms of the Radioactive Substances Act 1993 (RSA 93), disposal includes the discharge of liquid and gaseous wastes to the environment. Such disposals are made as part of normal operations from hospitals, research establishments and the nuclear industry, and are controlled by means of authorisations issued under RSA 93. The Government is committed to progressive and substantial reductions in radioactive discharges. In June 2009 the UK Government published its revised strategy for radioactive discharges to inform decision making by industry and regulators. This strategy is currently under review.

Decommissioning

This is the process whereby a nuclear facility is taken permanently out of service, dismantled and its site made available for other purposes. Current Government policy dates from 2004. This states that decommissioning should be carried out as soon as reasonably practicable, taking all relevant factors into account, including the availability of waste disposal routes. Government states that the relevant factors, and their respective importance, can only be determined on a case-by-case approach.

A process of reviewing and updating decommissioning policy is underway and is expected that a new policy will be finalised in 2020 or 2021. The NDA is also currently reviewing its approach to the decommissioning of the Magnox sites, which may result in the accelerated decommissioning of some sites.

EDF Energy is working with the Government and NDA to determine the best options for the decommissioning of their reactor fleet, with the first of their nuclear power stations set to close in the early 2020s.

Contaminated Land

⁸https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791046/Progress_on_Plutonium.pdf

Part 2A of the Environmental Protection Act 1990 addresses radioactively contaminated land. Annexes 4 and 5 of DEFRA Circular 01/2006 explain how⁹.

Import and Export

Government policy is that radioactive waste should not be imported or exported from the UK, except for the recovery of reusable materials and, in specific cases, for treatment that will make its subsequent storage and disposal more manageable. Where such processes would add materially to the wastes needing to be disposed in the UK, the presumption should be that they will be returned to the country of origin. However, waste may be imported for treatment and disposal in the UK if it is in the form of spent sources that were manufactured in the UK or, in certain cases, if the waste is from small users such as hospitals.

6. Advisory Bodies, International Guidelines and Regulations

Government and others are advised by a number of different bodies:

- **Committee on Radioactive Waste Management (CoRWM)** – provides scrutiny and advice on the long-term management of radioactive wastes¹⁰
- **Nuclear Safety Advisory Committee (NuSAC)** – advises the Health and Safety Commission on nuclear safety policy and its implementation¹¹
- **Committee on Medical Aspects of Radiation in the Environment (COMARE)** – provides assessments and advice on the health effects of radiation in the environment¹².
- **Public Health England** – provides advice, research, laboratory services and training courses¹³.

Government policies are framed within the context of international guidelines and regulations, involving the following:

- European Union legislation and the Euratom Treaty
- International Commission on Radiological Protection
- International Atomic Energy Agency
- Nuclear Energy Agency of the OECD

It is unclear how guidelines and regulations will be affected by the departure of the UK from the European Union. NuLeAF will provide updates as the situation is clarified.

⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69309/pb12112-circular01-2006-060817.pdf

¹⁰ <https://www.gov.uk/government/organisations/committee-on-radioactive-waste-management>

¹¹ <http://www.hse.gov.uk/aboutus/meetings/iacs/nusac/>

¹² <https://www.gov.uk/government/groups/committee-on-medical-aspects-of-radiation-in-the-environment-comare>

¹³ <https://www.gov.uk/topic/health-protection/radiation>

7. Regulators

Regulators have the duty to ensure that the policy and regulatory framework is properly implemented. The primary regulators are:

Office for Nuclear Regulation (ONR) – ONR independently regulates nuclear safety and security at 37 nuclear licensed sites in the UK¹⁴. They also regulate transport and the safeguarding of nuclear and radioactive materials. Their duty is to ensure that the nuclear industry controls its hazards effectively, has a culture of continuous improvement and maintains high standards. More information on how ONR regulates is available here¹⁵.

The Environment Agency – regulates any disposal, discharge or off-site transfer of radioactive waste through authorisations issued under the Radioactive Substances Act 1993 (RSA93). It advises ONR on the long-term disposability of conditioned waste and scrutinises plans for disposal. The role of the EA in managing radioactive waste is set out here¹⁶.

Natural Resource Wales - is responsible for regulating the nuclear industry in Wales on disposals and discharges of radioactive waste, discharges of cooling water and operation of standby generators¹⁷.

Other regulators include: the Office for Civil Nuclear Security (OCNS) – responsible for regulating security arrangements; and the Radioactive Materials Transport Division (RMTD) of the Department of Transport – responsible for regulating the transport of radioactive materials.

8. Strategies for Implementing Policy

NDA Strategy

The NDA is responsible for producing a strategy for managing civil public sector nuclear liabilities which must be updated every 5 years. The latest Strategy was published in April 2016¹⁸. The Strategy is broken down into a series of themes: site decommissioning and remediation, spent fuels, nuclear materials, integrated waste management and critical enablers.

¹⁴ <http://www.onr.org.uk/>

¹⁵ <http://www.onr.org.uk/regulation-and-licensing.htm>

¹⁶ <https://www.gov.uk/government/publications/environment-agencys-role-in-managing-radioactive-waste>

¹⁷ <https://naturalresources.wales/apply-for-a-permit/radioactive-substance-sites/information-about-radioactive-substance-sites/?lang=en>

¹⁸ <https://www.gov.uk/government/consultations/nuclear-decommissioning-authority-draft-strategy>

Site Decommissioning and Remediation– NDA’s objective is to release designated sites for other uses, in consultation with local authorities and communities. The aim is to complete this as soon as reasonably practical and to progressively reduce risk and hazard. Each site will be treated individually and the benefits and detriments of clean up, in terms of safety, desired next use, environmental impact and cost assessed.

Spent Fuel – NDA’s strategy is to “secure and subsequently implement the most appropriate management approach for spent Magnox and oxide fuels and, where possible, take advantage of these approaches to manage exotic fuels.¹⁹ There is a commitment to engage with government, regulators and stakeholders in reaching strategic decisions.

Nuclear Materials – Strategy is to safely and securely store nuclear materials while cost-effective lifetime solutions for their management are developed. Nuclear materials are being consolidated at sites which are considered to be best suited to their safe long term management.

Integrated Waste Management – Strategic decisions about waste management are informed by the following principles:

1. Supporting risk and hazard reduction by enabling and delivering a flexible approach to long term waste management.
2. Apply the waste hierarchy.
3. promote timely characterisation and segregation of waste.
4. Where appropriate, provide leadership aimed at integrating waste management delivery across the estate and supply chain.
5. Support and promote the use of robust decision-making processes.
6. Enable the availability of sustainable, robust infrastructure for continued operations, hazard reduction and decommissioning.

Through the development of a single **Radioactive Waste Strategy** covering all the classifications of waste, the NDA is considering the opportunities for a more flexible approach to the management of radioactive wastes.

Critical Enablers – NDA has identified a range of critical enablers which it must address in order for it to deliver its strategy effectively. They are:

1. Health, safety, security, safeguards, environment and quality (HSSSEQ);
2. Research and development;
3. People;
4. Asset management;
5. Contracting;

¹⁹ NDA Strategy p19

6. Supply Chain Development;
7. Information Governance;
8. Socio-economics;
9. Public and stakeholder engagement;
10. Transport and logistics;
11. Revenue optimisation;
12. International relations; and
13. Land and property management.

The Strategy notes that NDA is currently considering how best to engage in future with national and local stakeholders, and consultation on this will take place in 2017.

The overarching strategy is supported by the **NDA Business Plan**²⁰, which sets out operations plans over a rolling three-year period.

In 2019 the NDA published its **Radioactive Waste Strategy**²¹, providing a high-level framework for waste management decisions across all categories of waste managed by the NDA. This Strategy is supported by the **UK Strategy for the management of solid Low-Level Radioactive Waste from the nuclear industry**²².

Published in 2016, a refreshed **UK Strategy for the Management of Low-Level Waste (LLW) for the Nuclear Industry** was prepared by the Nuclear Decommissioning Authority (NDA) on behalf of the UK Government and is published jointly by the UK Government and the devolved administrations. This builds on the policy for the long-term management of solid LLW in the UK, published in 2007. It maintains the same three strategic themes of the earlier documents, namely:

- The application of the waste hierarchy and a move away from the past focus on disposal;
- Making best use of existing LLW management assets, particularly the LLW Repository (LLWR) near Drigg in Cumbria; and
- The need for new fit-for-purpose waste management routes.

It also recognises the significant changes that have occurred in the way LLW is managed. These include:

- The diversion of significant volumes of LLW from the Low-Level Waste Repository (LLWR) site;

²⁰ <https://www.gov.uk/government/consultations/nuclear-decommissioning-authority-business-plan-2019-to-2022>

²¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/831727/Radioactive_Waste_Management_Strategy_September_2019.pdf

²² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/497114/NI_LLW_Strategy_Final.pdf

- The development and use of alternative treatment and disposal routes;
- The application of the waste hierarchy by waste producers when making waste management decisions;
- The identification of opportunities for improvement and the sharing of good practices for LLW management; and
- The engagement of a broad group of stakeholders within the process.

The strategy is primarily aimed at nuclear industry waste producers, the waste management industry, environmental regulators and waste planning bodies, and will also apply to new nuclear sites as they are developed.

UK Strategy for the management of solid Low-Level Radioactive Waste from the non-nuclear industry in the United Kingdom

UK Government published the first part of its strategy for the management of solid Low-Level Waste from the non-nuclear industry in March 2012²³. This deals with radioactive waste which is generated on non-nuclear licensed sites such as hospitals, pharmaceutical industries, and research and educational establishments.

The Strategy lists a number of key points which include:

- Government will work with industry, the environmental regulators and planning authorities to strengthen the robustness of disposal arrangement for Low Level Waste.
- Producers of Low-Level Waste should work with planning authorities, to ensure that such wastes are handled effectively through the preparation of local plans and in determining planning applications.
- Low Level Waste can be disposed of safely without harm to human health and the environment, and without compromising the rigorous standards of radiological protection set out in legislation.
- Radiological risks associated with disposal of Low-Level Waste are low when disposal is made to an appropriate facility. Provided that the risks have been calculated and shown to be within the relevant limits, then radiological risk does not prevent the use of any disposal facility referred to in this strategy.
- The proximity principle needs to be a consideration, alongside other considerations, in any waste management plan prepared by Low Level Waste producers. The principle is a component of work and decisions by waste producers, the environment agencies, and planning authorities.
- Communities which benefit from the beneficial uses of radioactive materials (including the direct benefit such as the use of radiopharmaceuticals, and indirect benefits such as contributions to a local economy from commercial bodies using radioactive materials) should take a share in the responsibility for managing the radioactive waste which inevitably arise from their use, where possible, while recognising that each and every local authority can not necessarily be self-sufficient in the matter of waste management.

²³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48291/4616-strategy-low-level-radioactive-waste.pdf

- Waste planning authorities should consider how to manage Low Level Waste and Very Low-Level Waste arising in their areas as part of the preparation of their local waste plans. They should seek advice from waste producers and the environment agencies to ensure that the waste is being sent to a suitable waste management facility. If necessary and feasible, they should work with other waste planning authorities to share facilities. The environment agencies will supply information on disposal facility locations, on request, to waste producers and planning authorities to assist their decisions.
- The principles of the waste hierarchy, and the waste reduction step in particular, apply equally to radioactive wastes as they do to Directive wastes. However, the practical application of these principles may be different; the protection of human health over-rides any consideration of the hierarchy.²⁴

UK Strategy for the management of Naturally Occurring Radioactive Materials (NORM)²⁵

The earth's crust contains Naturally Occurring Radioactive Materials (NORM). NORM wastes are generated in industries such as production of titanium oxide and Oil and Gas exploration and production, including the process known as fracking. In the instance of fracking NORM waste is produced when these Naturally Occurring Radioactive Material mixes with the liquid (usually a water mixture) used under high pressure to fracture rock, and the released gas and is brought to the surface. It accumulates in scale, sludge and scrapings and can also form a thin film on the interior surfaces of gas processing equipment and vessels.

EDF Energy Strategy

EDF Energy is the operator of the current fleet of energy generating nuclear power stations in the UK. It is responsible for discharging all aspects of decommissioning and radioactive waste management associated with its sites.

Low Level Waste produced in operating the power stations is sent for treatment and/or disposal. Intermediate Level Waste is stored on site in tanks or vaults pending disposal to the Geological Disposal Facility when it becomes available, or in Scotland stored long term in near surface facilities. Spent fuel from the Advance Gas Cooled Reactors (AGR) is sent to Sellafield for storage or reprocessing, whilst spent fuel from Sizewell B which is a Pressurised Water Reactor (PWR) is stored on site until a final decision is made on how it will be disposed of.

EDF Energy is constructing a new nuclear power station at Hinkley Point in Somerset, with another planned for Sizewell in Suffolk. Decommissioning is a factor included in the design of the new reactors, the intention being to minimise the amount of radioactive waste produced. Current plans are that spent fuel from new

²⁴ Chapter 2, pages 8-22

²⁵https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335821/Final_strategy_NORM.pdf

nuclear power stations will be sent directly to the Geological Disposal Facility for disposal and will not be reprocessed.

Ministry of Defence Strategy

The MoD is committed to complying with legislation and 'so far as is reasonably practicable' with national policy relating to the management of radioactive wastes and decommissioning. MoD's approach includes sending Low Level Waste to the Low-Level Waste Repository near Drigg and interim storage of Intermediate Level Waste at the sites where it arises. The intention is that ILW will be disposed of in the Geological Disposal Facility.

The MoD's Submarine Dismantling Project (formerly known as ISOLUS) concluded in 2016. This identified Capenhurst in Cheshire as the site for the storage of ILW from decommissioned submarines which are currently being stored at Rosyth and Devonport (Plymouth) dockyards. Following storage, these wastes will be sent to the Geological Disposal Facility when it is operational.