

Update to NAWG 2026 from Nuclear Waste Services



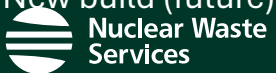
David Schofield¹

Nuclear Waste Services (NWS), UK

¹Chief Geologist

NWS: Waste, permanently safe, sooner

- Nuclear activities have been undertaken in the UK since the 1940s, with waste arising from various sites.
- Waste is produced through various activities, including:
 - Spent fuel reprocessing (historical)
 - Civil power generation
 - R&D
 - Defence
 - Fuel fabrication and enrichment
 - Medical & industrial uses
 - Waste conditioning
 - New build (future)



Repository
Managing the legacy



GDF
Shaping the future programme



Waste Solutions
Support mission delivery

The Inventory for Geological Disposal

- 10% of the volume of waste in the UK Inventory destined for a GDF
- This includes legacy ILW, HLW glass, spent fuel and additional uranic and special nuclear materials.
- Includes provision for waste/spent fuel arising from nuclear new build.
- ILW: ~ 671,000 m3
- SF/HLW: ~ 98,800 m3

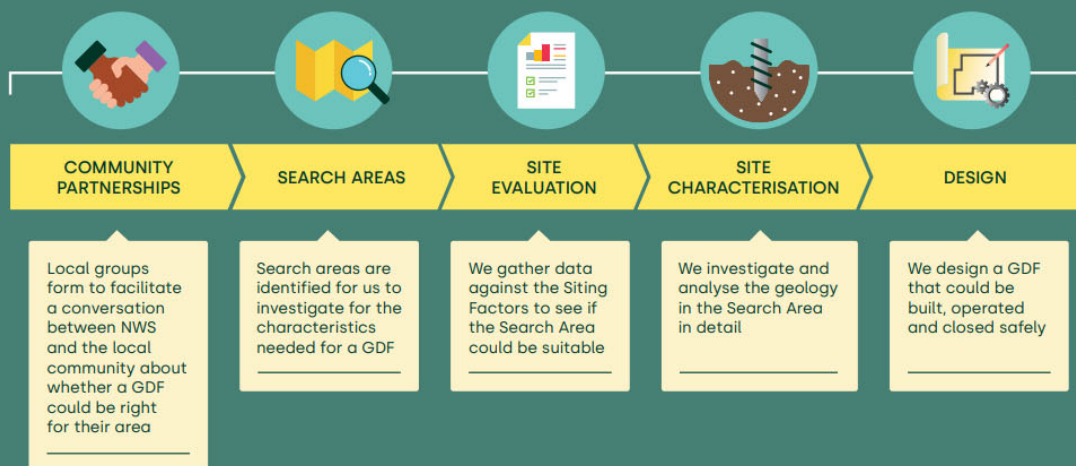


Waste Category	Stored volume [m³]	Conditioned volume [m³]	Packaged volume [m³]
HLW	1,470	1,470	9,370
Legacy ILW/LLW	71,900	342,620	440,290
New Build ILW	9,930	24,120	38,300
Legacy Spent fuels	3,830	3,830	16,600
NB Spent fuels	8,740	8,740	60,400
MOX Spent fuel*	566	566	11,700
Pu/HEU	0.671	204.3	697
DNLEU	102,000	139,000	192,000
Total	337,000	521,000	769,000

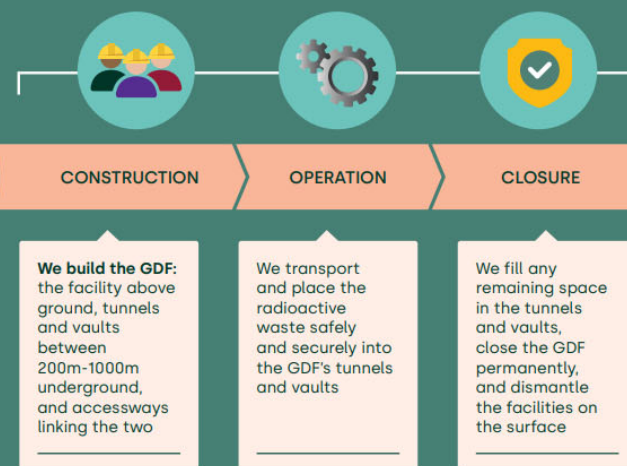
A Geological Disposal Facility (GDF) is the safest permanent way to dispose of the UK's most hazardous radioactive waste.

To make it a reality, we need a **suitable site** and a **willing community**. Finding the right place is a careful, gradual process.

Selecting a Geological Disposal Facility site
up to **20** years



Making radioactive waste permanently safe
150 years



Natural analogue studies in RD&D



Develops knowledge base needed to provide waste packaging advice



Provides waste characterisation and disposability assessment for the disposal inventory



Delivers site specific understanding



Delivers the science and information that will underpin design and safety case



Supports repository operations, closure activities and future technologies

OFFICIAL

LLWR Environmental Safety Case 2026

Updated ESC for the LLWR submitted to the Environment Agency on 1st May 2026.

Demonstrates protection of people and the environment, both now and in the future.



NWS is supporting Nuclear New Build

NWS support to licensing: assesses disposal viability, informs GDF demand, underpins liability pricing, and regulatory justification.

NWS proven track record: supported Generic Design Assessments across major LWR designs and Rolls-Royce SMR programme.

NWS future focus: early engagement with SMR and AMR developers to provide formal disposal advice.



Image: Roll-Royce SMR



Nuclear Waste
Services

Questions

