

# Corporate report: Generic Disposal System Safety Case for a Geological Disposal Facility: disposal system specification

The Disposal System Specification is described in four documents:

- Disposal System Specification Part A: High Level Requirements
- Disposal System Specification Part B: Technical Specification
- Derived Inventory Report
- Derived Inventory: Scenarios Report

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## Collection: Demonstrating the safety of a geological disposal facility (GDF)

*Updated:* Re-ordering of content on page

This suite of documents is designated as a 'generic' safety case: it is not site-specific as no site has yet been chosen for a geological disposal facility (GDF). It sets out how a GDF can be designed, constructed and operated safely, in compliance with regulatory guidance, in a range of geological environments. This safety case underpins a process for packaging waste ready for disposal in such a facility.

This latest update brings together:

- a revised inventory for disposal
- findings from a comprehensive, ongoing research programme
- learning from facilities around the world.

This collection of documents is structured in the following way:

- The overview provides a guide to the suite of safety case documents
- There are three main safety case reports on transport, operational and environmental safety
- There are a series of individual assessments for the different safety case reports. These are split into:
  - transport safety assessment

- operational safety assessment
  - environmental safety assessment
  - environmental and sustainability assessments
  - There is a detailed specification for the disposal system
  - The design of the transport system and the disposal facility are described
  - Further information is provided in the associated knowledge base including specific research status reports
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## **Research and analysis: Future of the sea: plastic pollution**

This report summarises evidence on marine plastic pollution in the UK, its overseas territories and the global oceans. It explores:

- what causes plastic pollution
- how plastic pollution impacts the UK's marine life, marine industries and human health
- how plastic pollution will change in the future

It was commissioned as part of the [Foresight Future of the sea project](#).

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## **Research and analysis: Future of the sea: trends in aquaculture**

This report summarises the evidence for current and future trends in the UK aquaculture sector. It explores:

- the current state of the industry
- the challenges and opportunities for growth
- drivers of change including climate change, costs of production, and technological advancements
- scenarios for the future development of the sector

It was commissioned as part of the [Foresight Future of the sea project](#).

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# Research and analysis: Future of the sea: implications from opening Arctic Sea routes

*Updated:* Added a link to Dr Nathanael Melia's blogpost.

This report summarises the evidence for the projected loss of Arctic sea ice and opening of shipping routes due to climate change. It explores how these changes will make trans-Arctic shipping routes more navigable and profitable, and explores the resulting challenges and opportunities for the UK.

It was commissioned as part of the [Foresight Future of the sea project](#).

[Read Dr Nathanael Melia's blogpost about this evidence review on the Foresight Projects blog.](#)