

First marine geophysical surveys set to start this summer

News story

Investigations off the coast to provide data about potential of deep rocks to host a Geological Disposal Facility (GDF).



The survey vessel will be carrying specialist acoustic equipment

The marine geophysical surveys off the coast of Copeland, Cumbria, which are set to begin in the summer of 2022, are non-intrusive and will provide a better understanding of the rock structure to help inform the search for a suitable site for a Geological Disposal Facility (GDF).

The data-gathering programme will use a vessel carrying specialist acoustic equipment deployed between 5 and 20km from the coastline. The work will take place over a period of three to four weeks and will be undertaken by specialists Shearwater GeoServices, who were awarded a £6 million contract by Nuclear Waste Services (NWS) following a procurement process.

The survey is an important early step in beginning to understand the deep geology beyond the coast. This first survey is focused off the coast of South and Mid Copeland.

The technology deployed from the 92-metre vessel is based on sound waves – similar to ultrasound scans used for medical purposes – which are reflected as an echo from different geological layers. This enables a 3D picture of the underlying rocks to be gradually built up. The seabed itself remains undisturbed. Surveys of this type are commonplace in the offshore wind, oil and gas sectors.

The GDF team will work with marine representative bodies and other stakeholders to keep marine users and local communities informed of developments.

Chris Eldred, Head of GDF Geosphere Characterisation, said:

We are looking forward to the commencement of the first surveys this summer off the south west coast of Copeland, working with the specialists at Shearwater GeoServices.

The information we gather will help us to further consider the suitability of areas to host a GDF and support informed dialogue with the communities that are at the heart of the siting process.

Data from the surveys will need to be processed and analysed in detail which will take about nine months during which time we will consider how or if further survey work is needed. The information will give our geologists and engineers some of the tools they need to begin designing and planning the next steps in the search for a suitable site for a GDF.

[Learn more about geological disposal.](#)

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