

Introduction

The Submarine Dismantling Project (SDP) is the MOD's programme to deliver a safe, secure and environmentally responsible solution for dismantling 27 defuelled submarines. This involves recycling the bulk of the submarine and safely disposing of the remainder. The submarine's Reactor Pressure Vessel (RPV) contains Intermediate Level radioactive Waste (ILW) and must be stored for an interim period until it can be processed and sent to a proposed Geological Disposal Facility (GDF) sometime after 2040.

This Topic Summary provides information on the Strategic Environmental Assessment (SEA) that has been carried out by SDP which has built upon the 2010/2011 SEA by considering five specific candidate sites for the interim storage of ILW arising from the submarine dismantling being considered by the SDP.

Strategic Environmental Assessment

SEA supports decision making by helping to ensure that environmental issues are considered effectively in the preparation of 'plans' and 'programmes'. The 'draft plan' considered by the SEA at this stage of the SDP has been considered to be the Consultation Document on the Site for Interim Storage of Intermediate Level Radioactive Waste (November 2014) prepared as part of the SDP's consideration of the candidate sites.

The SEA process must

- Identify and assess whether there could be any likely significant environmental effects.
- Enable the public to comment on any potential environmental effects identified and assessed
- Ensure that any potential effects are properly considered throughout project planning and before major decisions are made, to suggest measures to avoid, reduce or manage damaging environmental impacts, and to enhance beneficial effects.

Stages in the SEA

The main stages of the SEA process as applied to the SDP are listed below:

- The proposed scope of the SEA (essentially, the environmental issues to be considered) was set out in a Scoping Report, which was agreed in early 2014 with statutory and other government consultees. It can be found on the project web pages.
- The likely significant environmental effects of the SDP's 'reasonable alternatives' have been assessed. These include any short- and long-term, direct and indirect effects, as well as cumulative effects (where multiple small effects add together to have a large combined impact) and synergistic effects (where effects add together to create an impact greater than the sum of their parts).
- An Environmental Report (ER) with a Non Technical Summary (NTS) has been prepared detailing the results of the SEA, and suggesting ways to improve the environmental performance of the SDP. Both the ER and the NTS are available on the project web pages.
- Public Consultation will take place on the Environmental Report and the SDP proposals, after which the responses will be considered and integrated by MOD into the final decisions on how to proceed.
- Once the 'plan has been adopted' i.e. once MOD has selected a final site, a Post-Adoption Statement will be published to show how MOD has taken the public's views on the ER into account.
- The operators of the final chosen site must continue to monitor any environmental effects and monitoring will also continue by external regulators.



What Does the SEA Cover

SEA Category	SEA Category Scope
Radiological Discharges / Exposure	Potential effects on radiological discharges and emissions, including from construction (e.g. any contaminated land), transport and operational discharges / emissions.
Biodiversity and Nature Conservation	The potential effects of interim ILW storage and transport on wildlife and habitats, including sites protected for nature conservation.
Population	Potential effects on local communities, particularly in relation to employment opportunities
Health and Well-Being	The potential effects on people's health, including recreation. This includes issues related to any radiological and non-radiological discharges or emissions.
Noise and Vibration	The potential effects on noise and vibration levels relative to established standards and people likely to be affected.
Geology and Soils	Potential effects on soil extent and quality (including the potential to disturb historic contamination). The potential for effects on protected/ important geological features have also been considered.
Water	Potential effects on surface waters, groundwater systems and the marine environment, including the effects of licensed and unplanned discharges to water.
Air	Potential effects on air quality, including construction, transport and the effects of licensed and unplanned discharges to the atmosphere.
Climate Change and Energy Use	The potential effects on energy use and greenhouse gas emissions.
Coastal Change and Flood Risk	Existing and future flood risks, as well as the effects on coastlines of projected sea level rise and a possible increase in storm intensity. The effects of land instability and erosion have also been considered.
Transportation	Interim ILW storage will involve RPVs being transported to the interim ILW storage site, as well as construction and operational transport.
Waste Management	The generation of new waste volumes and the effects this may have on current waste management infrastructure and landfill.
Land Use and Materials	The potential effects of interim ILW storage and transport on how people use or manage the land.

Cultural Heritage	The potential effects of interim ILW storage and transport on the historic environment, including cultural heritage resources, historic buildings and archaeological features.
Landscape & Townscape	The potential effects of interim ILW storage and transport on the quality and attractiveness of landscapes and townscapes, including visual amenity.

SDP's SEA Programme

The SDP SEA studies were carried out by independent specialist consultants, with some input from site owners and operators, supervised by experts from the MOD's Defence Infrastructure Organisation.

The main project SEA was carried out in 2011. The results of that assessment were incorporated into the Operational Effectiveness Investment Appraisal and Other Contributory Factors analyses and presented during the 2011/12 public consultation.

However, although the SEA considered the end-to-end process of submarine dismantling, it was not possible at that stage to identify specific potential interim ILW storage sites. As a result, the SEA could only consider the generic storage options of 'point of generation' and 'remote' sites.

The SEA Regulations require that the SEA both develops in parallel to and influences the plan or programme it is assessing. Since the option studies now address the choice of a specific ILW storage site, the SEA has been updated to assess the effects of developing, operating and decommissioning the interim ILW storage facility at each shortlisted site.

Consideration has also been given to the effects of ILW storage on other elements of the end-to-end process where they are apparent; for example, transport to the site from the initial dismantling sites at Rosyth and Devonport with an SDP assumption that this will be by road. It has not been possible within the SEA to assess any likely environmental effects which could arise from onward transportation of the ILW from the interim store to the GDF when available as its location is not yet known.

More Information

Further information and all the SDP consultation documents are available at:

<https://www.gov.uk/government/publications/submarine-dismantling-project-interim-storage-of-intermediate-level-radioactive-waste>

In particular, see the *Environmental Report* and associated *Non-Technical Summary*.

