DOGGER BANK D WIND FARM

Outline Project Environmental Management Plan

Document Reference No: 8.6
Date: June 2025
Revision: V1

sse Renewables equinor

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Document Title:	**Outline Project Environmental Management Plan**
Document BIM No.	**PC6250-RHD-XX-OF-RP-EV-0129**
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Prepared For:	**Dogger Bank D Offshore Wind Farm**

Revision No.	Date	Status / Reason for Issue	Author	Checked By	Approved By
V1	01/05/2025	Final	LA	GA	RR

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Glossary

Term	Definition
Additional Mitigation	Measures identified through the EIA process that are required as further action to avoid, reduce or offset likely significant adverse effects to acceptable levels. All additional mitigation measures adopted by the Project are provided in the Commitments Register.
The Applicant	SSE Renewables and Equinor acting through 'Doggerbank Offshore Wind Farm Project 4 Projco Limited.
DBD Array Area	The area within which the wind turbines, inter-array cables and Offshore Platform(s) will be located.
Deemed Marine Licence (dML)	A consent required under the Marine and Coastal Access Act 2009 for certain activities undertaken within the UK marine area, which may be granted as part of the Development Consent Order.
Development Consent Order (DCO)	A consent required under Section 37 of the Planning Act 2008 to authorise the development of a Nationally Significant Infrastructure Project, which is granted by the relevant Secretary of State following an application to the Planning Inspectorate.
Embedded Mitigation	Embedded mitigation includes: • Measures that form an inherent part of the project design evolution such as modifications to the location or design of the development made during the pre-application phase; and • Measures that will occur regardless of the EIA process as they are imposed by other existing legislative requirements or are considered as standard or best practice to manage commonly occurring environmental effects. All embedded mitigation measures adopted by the Project are provided in the Commitments Register.
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, and includes the publication of an Environmental Statement.
Environmental Statement (ES)	A document reporting the findings of the EIA which describes the measures proposed to mitigate any likely significant effects.
Inter-Array Cables	Cables which link the wind turbines to the Offshore Platform(s).
Mean High Water Spring	MHWS is the average of the heights of two successive high waters during a 24-hour period.

Term	Definition
Monitoring	Measures to ensure the systematic and ongoing collection, analysis and evaluation of data related to the implementation and performance of a development. Monitoring can be undertaken to monitor conditions in the future to verify any environmental effects identified by the EIA, the effectiveness of mitigation or enhancement measures or ensure remedial action are taken should adverse effects above a set threshold occur. All monitoring measures adopted by the Project are provided in the Commitments Register.
Offshore Development Area	The area in which all offshore infrastructure associated with the Project will be located, including any temporary works area during construction, which extends seaward of Mean High Water Springs.
Offshore Export Cable Corridor (ECC)	The area within which the offshore export cables will be located, extending from the DBD Array Area to Mean High Water Springs at the landfall.
Offshore Export Cables	Cables which bring electricity from the offshore platform(s) to the transition joint bay at landfall.
Offshore Platform(s)	Fixed structures located within the DBD Array Area that contain electrical equipment to aggregate and, where required, convert the power from the wind turbines, into a more suitable voltage for transmission through the export cables to the Onshore Converter Station. Such structures could include (but are not limited to): Offshore Converter Station(s) and an Offshore Switching Station.
Project Design Envelope	A range of design parameters defined where appropriate to enable the identification and assessment of likely significant effects arising from a project's worst-case scenario. The project design envelope incorporates flexibility and addresses uncertainty in the DCO application and will be further refined during the EIA process.
Safety Zones	A statutory, temporary marine zone demarcated for safety purposes around a possibly hazardous offshore installation or works / construction area.
Scour Protection	Protective materials used to avoid sediment erosion from the base of the wind turbine foundations and offshore platform foundations due to water flow.
The Project	Dogger Bank D Offshore Wind Farm Project, also referred to as DBD in this PEIR.
Trenchless Techniques	Trenchless cable or duct installation methods used to bring offshore export cables ashore at landfall, facilitate crossing major onshore obstacles such as roads, railways and watercourses and where trenching may not be suitable. Trenchless techniques included in the Project Design Envelope include Horizontal Directional Drilling (HDD), auger boring, micro-tunnelling, pipe jacking / ramming and Direct Pipe.
Wind Turbines	Power generating devices located within the DBD Array Area that convert kinetic energy from wind into electricity.

Term	Definition
The Undertaker	'Doggerbank Offshore Wind Farm Project 4 Projco Limited'.

1 Introduction

1. SSE Renewables and Equinor acting through 'Doggerbank Offshore wind Farm Project 4 Projco Limited' (hereafter 'the Applicant') will be submitting a Development Consent Order (DCO) Application for the Dogger Bank D Offshore Wind Farm (hereafter 'the Project' or 'DBD').

2. The Project is still at an early stage of development, and therefore the description of the key components is indicative and intended to provide sufficient flexibility to accommodate further refinement leading up to submission of the DCO application. A range of design parameters and construction, operation and maintenance (O&M), and decommissioning methodologies are being considered in the project design envelope (further information in **Volume 1, Chapter 4 Project Description**).

1.1 Purpose of the Outline Project Environmental Management Plan

3. The purpose of this Outline Project Environmental Management Plan (PEMP) is to set out the indicative proposed measures for managing environmental risks associated with the construction of the offshore components of the Project, and to provide a framework for the PEMP(s) (which will be agreed post consent) to be based on. This will:

   - Enable relevant phases of construction activities to take place as required by the Project in an environmentally responsible manner; and
   - Provide staff and contractors with clear, concise, and practical environmental management measures.

4. The Outline PEMP is based on relevant sections from the Project's Preliminary Environmental Information Report (PEIR) (**Volume 1, Chapters 1** to **31**), industry good practice, and relevant legislation (at the time of preparation).

5. The PEIR presents the preliminary findings of the Environmental Impact Assessment (EIA) process. The EIA process identifies embedded mitigation adopted through the project design and where necessary, any additional mitigation to be adhered to during the construction, O&M and decommissioning phases. These measures are fully detailed in **Volume 2, Appendix 6.3 Commitments Register**. The Commitments Register identifies how each environmental measure will be legally secured such as through supporting management plans and DCO requirements. Where applicable, this Outline PEMP identifies measures from the Commitments Register by their Commitment ID, a unique identification number.

6. The provision of a PEMP in accordance with this Outline PEMP post-consent and prior to the commencement of the relevant stage of offshore construction works is included as Commitment ID CO25 in the Commitments Register.

7. This document provide a key mechanism of securing relevant commitments made as a result of the preliminary impact assessment for the offshore components of the Project seaward of Mean High Water Springs (MHWS)

8. The onshore equivalent of this document is the **Outline Code of Construction Practice (CoCP)** (document reference 8.9) which sets out the relevant commitments landward of Mean Low Water Springs (MLWS). Landfall works will span both offshore and onshore, therefore the relevant aspects of both the Outline CoCP and Outline PEMP will apply to these works.

1.2 Future Updates to the Project Environmental Management Plan

9. The DCO and dMLs will allow for the PEMP to be discharged in phases to align with the different phases of construction as required. Therefore, separate PEMPs may be developed to facilitate this approach.

10. The PEMP(s) will be based on the structure and principles set out in this Outline PEMP, and will require input from the contractors responsible for the individual construction packages, such as the wind turbine foundations, wind turbines, export cables, etc.

11. The PEMP(s) will be iterative document(s) that will be developed and refined as the Project progresses through construction, O&M and decommissioning phases. The PEMP(s) may require further amendment and re-approval prior to the O&M and decommissioning phases of the Project, to ensure that it remains relevant for those phases.

1.3 The PEMP would be submitted to the MMO for approval at least four months prior to construction of the relevant phase commencing. Project Summary

12. A high-level description of the Project is provided in this section to aid in setting the context for this Outline PEMP. A full description of the Project is provided in **Volume 1, Chapter 4 Project Description** of the PEIR.

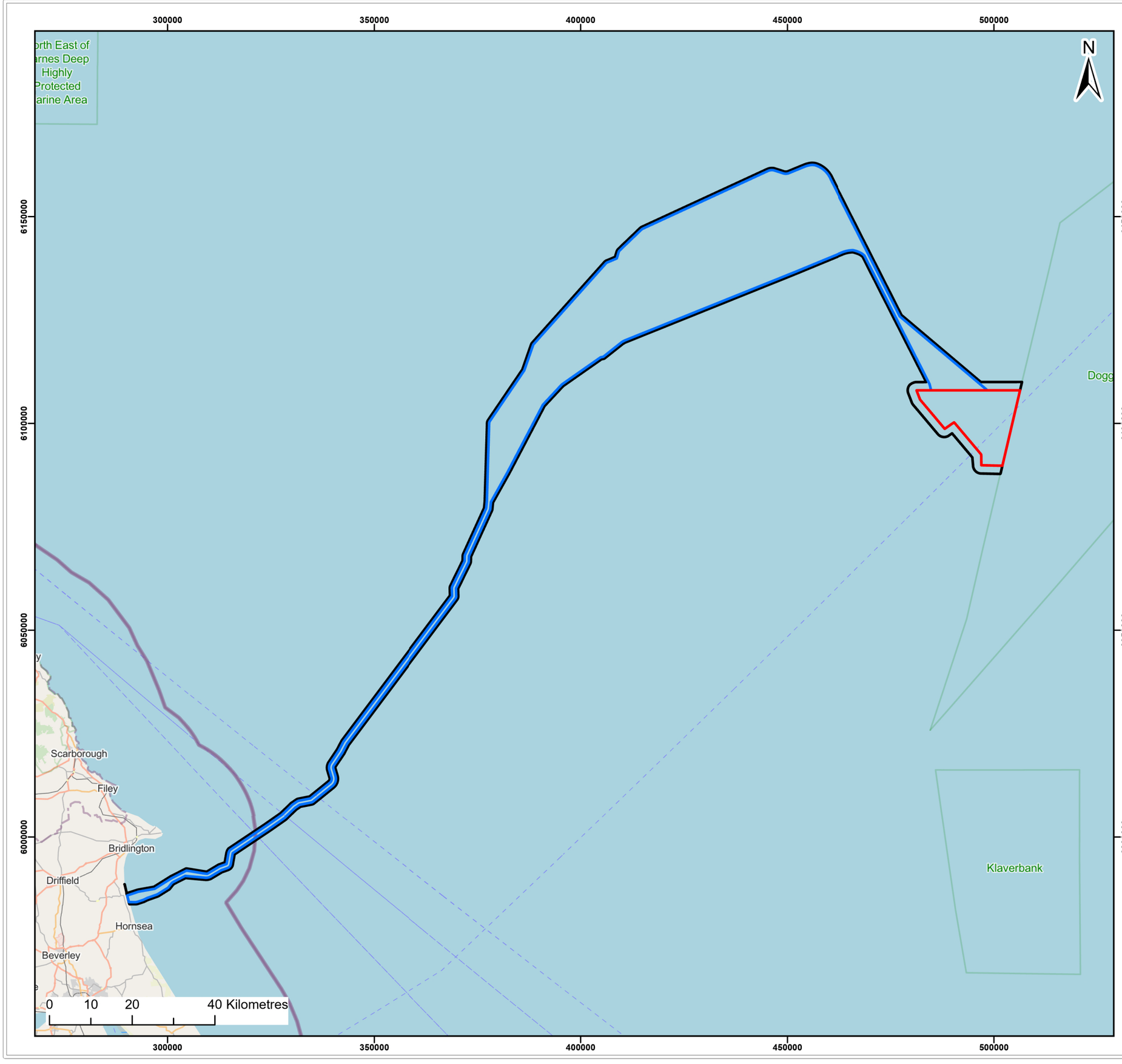
13. The Project is located off the east coast of the United Kingdom (UK) in the Dogger Bank region of the Southern North Sea. Up to 113 wind turbines (dependent on turbine capacity) would be installed at the DBD Array Area, where its location and the location of the offshore Export Cable Corridor (ECC) are shown on **Figure 1-1**.

14. The DBD Array Area covers 262km^2 and is located approximately 211km from the coast. The Project would make landfall on the East Riding of Yorkshire coastline near Skipsea to a newly constructed Onshore Converter Station before onward onshore cable routeing to the proposed Birkhill Wood National Grid Substation, to the south of Beverley.

15. The key offshore components comprise:

- Wind turbines;
- Offshore platform(s);
- Foundation structures for wind turbines and offshore platforms;
- Inter-array cables;
- Offshore Export Cables from the DBD Array Area to the landfall; and
- Scour / cable protection (where required).

16. Construction of the Project is anticipated to commence at the earliest in 2029.



Legend:

- Dogger Bank D Array Area
- Offshore Development Area
- Offshore Export Cable Corridor

Project:

Dogger Bank D
Offshore Wind Farm

DOGGER BANK WIND FARM

Title:

Offshore Development Area

Figure: 1-1

Drawing No: PC6250-RHD-OF-ZZ-DR-Z-0601

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
01	09/05/2025	AB	LA	A3	1:900,000

Co-ordinate system: WGS 1984 UTM Zone 31N

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1.4 Structure of this Document

17. **Table 1-1** sets out the information contained within each section of this document.

Table 1-1 How to navigate this document

Section of the PEMP	Contains information on:
Section 1 Introduction	• Purpose of the Outline PEMP and any future iterations of the PEMP; • High-level description of the Project; • Link to the Project's commitments register; and • Hierarchy of the Project's management plans.
Section 2 Roles and Responsibilities	• High-level roles that are key to the offshore aspects of the Project; • Key stakeholder organisations; and • This will be the location where contractor details and fisheries liaison contacts will be provided prior to construction.
Section 3 Environmental Policy and Implementation	• High-level overview of the Project's environmental policies, compliance monitoring, and health and safety principles in place; and • This section will also be the location where contractor environmental principles will be provided.
Section 4 Environmental Sensitivities	• Identification of environmental sensitivities relevant to the PEMP; • Commitments that stipulate management and/or monitoring requirements for each environmental sensitivity; • Waste management procedure; • Marine pollution management procedure; • Chemical risk assessment; • Dropped object procedure; and • Climate change resilience procedure.
Section 5 Induction Requirements	• High-level description of the inductions that will be carried out prior to construction; and • Requirements for toolbox talks.
Section 6 Environmental Audit	• Environmental Audits; • Vessel Inspections and Audits; and • Environmental Monitoring.

1.5 Commitments Register

18. As mentioned in **Section 1.1**, this Outline PEMP is a method of securing a number of relevant commitments made in the PEIR and measures identified throughout the EIA process and stakeholder engagement, that will be implemented during the Project's relevant phase to avoid, prevent, reduce or, if possible, offset potentially significant adverse environmental effects. **Table 1-1** also sets out different sections and documents that will form part of the PEMP(s), which is also another method of securing commitments made. These measures are fully detailed in **Volume 2, Appendix 6.3 Commitments Register**.

19. The Commitments Register identifies how each environmental measure will be legally secured and delivered post-consent, such as through supporting management plans, DCO requirements, and dML. **Plate 1-1** provides an indicative illustration of the framework of management plans for the Project's offshore elements.

20. Where applicable, this Outline PEMP identifies measures from the Commitments Register by their Commitment ID, which is a unique identification number.

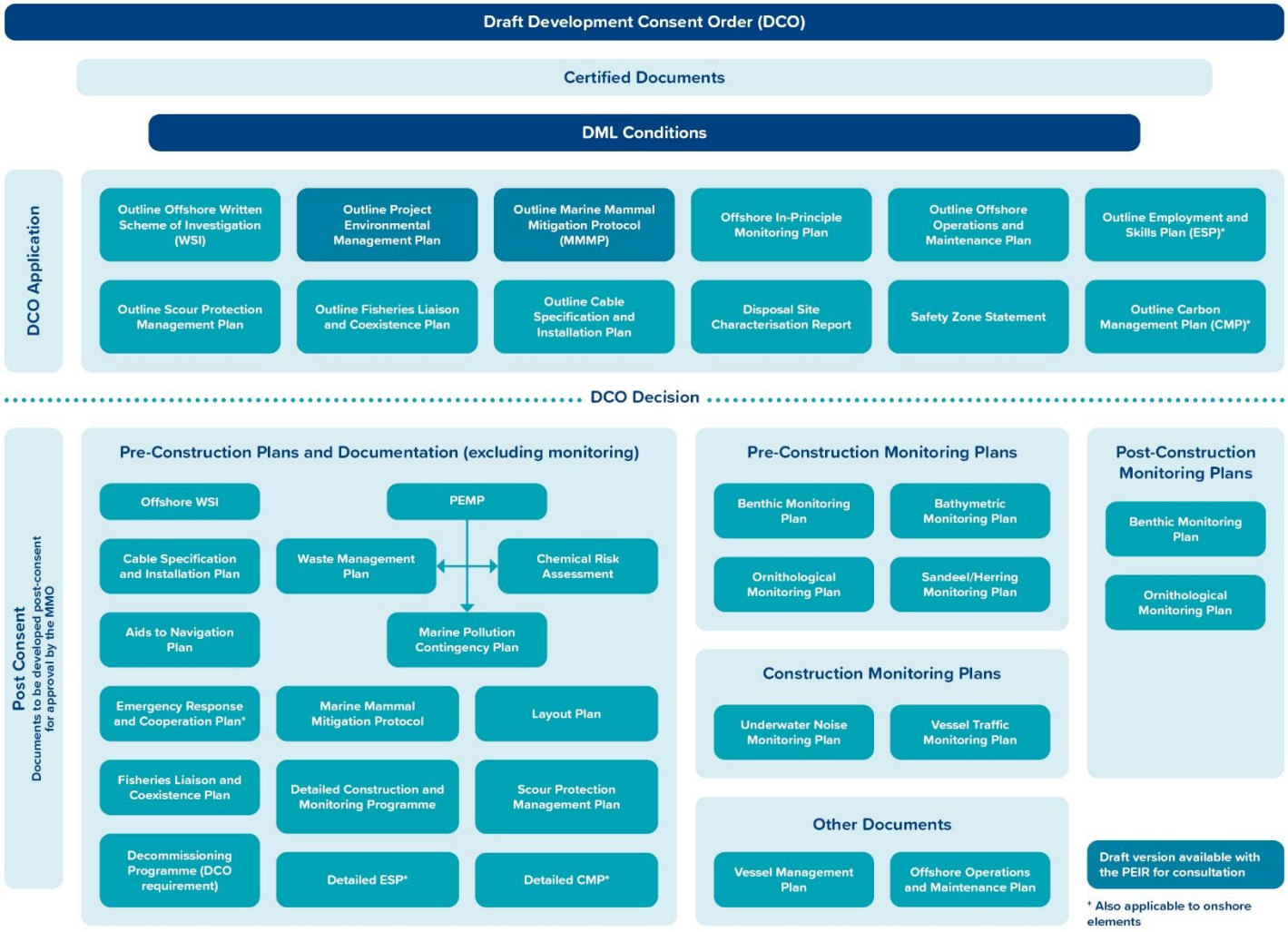

Plate 1-1 Indicative Hierarchy of Management Plans for the Project's Offshore Elements

2 Roles and Responsibilities

2.1 Key contacts

21. This section will provide details of key personnel involved in the Project, with contact details (email address and phone number) provided for the roles specified below.

- Fisheries Liaison Officer;
- Marine Coordination Centre;
- Marine Operations Manager(s);
- Consents Package Manager;
- Offshore Environment Manager;
- Project Safety, Health and Wellbeing (SHW) Manager; and
- Client Representative(s) for the package relevant to the PEMP.

22. This section will also provide a bullet-list format of responsibilities for each role.

2.2 Key stakeholders

23. Contact details (email address and phone number) for key stakeholders will also be provided; expected to comprise the following organisations:

- MMO Case Team;
- MMO Emergency number in case of a pollution incident;
- Natural England Case Team; and
- Eastern Inshore Fisheries and Conservation Authority.

3 Environmental Policy and Implementation

3.1 Environmental Management System

24. The Undertaker will operate an Environmental Management System (EMS) based on the requirements of International Organization for Standardization (ISO) 14001:2015, which describes the processes and procedures by which the Undertaker would identify and manage significant risks associated with its operations. The EMS is a primary mechanism by which environmental policy commitments, such as compliance with relevant legislation and standards, pollution prevention and continual improvement in environmental performance are delivered. The Undertaker would be compliant with the requirements of the EMS.

25. The PEMP(s) are the primary documents within the Project's environmental documentation and are linked to the wider Management System used by the Undertaker. Key documents of the Management System include:

- SSE's Environmental and Climate Change Policy;
- SSE's Sustainable and Corporate Responsibility Policy; and
- Equinor's Environmental Policy.

26. This Outline PEMP, together with the EMS documents address environmental aspects, impacts and other factors that could influence the Project's environmental performance.

27. The PEMP(s) will also provide a summary of the relevant contractor's EMS and ISO accreditations.

3.2 Compliance Monitoring

28. This section will provide a list of the relevant Project documentation with which the relevant contractors will be required to ensure compliance, as well as the method of doing so. These documents are anticipated to include, but are not limited to, the following:

- The PEMP;
- The Construction and Monitoring Programme;
- The phase-specific Construction Method Statement;
- The Marine Mammal Mitigation Protocol (MMMP); and
- The Written Statement of Archaeological Investigation (WSI) and relevant archaeological method statements.

29. Contractors will be required to provide the following, but not limited to:

- Waste Transfer Notes;
- Record of any pollution incidents;
- Record of any drills undertaken for consent compliance;
- Record of any detection of archaeological features; and
- Log of events of non-compliance and near-misses throughout the relevant Project phase.

30. Copies of this PEMP (including Marine Pollution Contingency Plan (MPCP), Chemical Risk Assessment (CRA) and Waste Management Plan (WMP)) will be provided to the contractors and it is expected that regular meetings will also be held with the contractors where environmental compliance will be one of the agenda items. Vessel crews are anticipated be briefed by the Offshore Environment Manager (or equivalent role) on the PEMP procedures required to be followed prior to mobilisation of the relevant work packages. It is intended that the PEMP will outline all necessary environmental management measures that the contractor will need to comply with.

3.3 Health and Safety

31. **Table 3-1** identifies health and safety commitments applicable to offshore construction works, which will be adhered to by the Principal Contractor(s).

Table 3-1 Commitments Relevant to Health and Safety

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO50	Health, safety and environmental risks will be identified and managed in accordance with the latest relevant regulatory requirements and best practice methods and construction activities will be informed by appropriate risk assessments and undertaken with appropriate personal protective equipment.	DCO Requirement - Code of Construction Practice dML Condition - Project Environmental Management Plan
CO68	A protocol on workforce access to occupational health, hygiene and emergency services to minimise the use of local National Health Service (NHS) primary healthcare providers and inappropriate use of Accident and Emergency (A&E) services, appropriate communicable disease prevention measures and a workforce code of conduct will be included in the Project Environmental Management Plan (PEMP) for offshore construction works and the Code of Construction Practice (CoCP) for onshore construction works.	DCO Requirement - Code of Construction Practice dML Condition - Project Environmental Management Plan

3.4 Environmental Audits

32. Environmental audits may comprise both internal audit and / or external audits.

33. The Project Team audit programme includes a requirement to audit construction sites on a periodic basis. An audit checklist would be used by the Undertaker to ensure that a standard approach is applied consistently. Environmental audits would be carried out by experienced auditors, either from within the Project Team, or via delegated specialists.

3.5 Vessel Inspections and Audits

34. Environmental vessel inspections would be based on the International Marine Contractors Association (IMCA) standards, IMCA M 189/S 004 (Marine Inspection Check List for Small Boats) or IMCA M 149 (Common Marine Inspection Document). A log of all vessel audits and associated close out actions would be maintained. This would be the approach adopted by the Project Team.

4 Environmental Sensitivities

35. The topic-specific chapters of the PEIR identify the environmental sensitivities to each phase of the Project. The relevant chapters have also identified commitments and control measures designed to mitigate the impacts from the construction, O&M and decommissioning of the Project, for which monitoring requirements will be secured through the dMLs and associated documentation. Key topics that are anticipated to require management and / or mitigation under the PEMP are as follows:

- Benthic and Intertidal Ecology (**Section 4.1**);
- Invasive Non-Native Species (INNS) (**Section 4.2**);
- Marine Mammals (**Section 4.3**);
- Offshore Ornithology (**Section 4.4**);
- Marine Archaeology (**Section 4.5**);
- Waste Management Plan (**Section 4.6**);
- Marine Pollution Contingency Plan (**Section 4.7**);
- Chemical Risk Assessment (**Section 4.8**);
- Fisheries Liaison and Coexistence Plan (**Section 4.9**);
- Climate Change Resilience (**Section 4.10**);
- Dropped objects in the marine environment (**Section 4.11**);

- Emissions to air (**Section 4.12**); and
- Method Statements and Risk Assessments (**Section 4.13**).

36. A brief overview of some of the potential anticipated key mitigation measures for each topic is provided below in **Sections 4.1** to **4.12**. However, it should be noted that the measures are not exhaustive and would be updated subject to the final design of the Project.

37. The PEMP(s) would include the mitigation measures to be adopted. This would enable communication of awareness for any sensitive areas and potential protected features to the designated members of the Project Team. The procedures to be adopted in the event of an incident in proximity to these features would also be set out in the PEMP(s).

4.1 Benthic and Intertidal Ecology

38. This section outlines the commitments relevant to benthic and intertidal ecology (see **Table 4-1**) to be implemented during the Project's offshore construction works to minimise impacts on benthic and intertidal ecology ecological receptors.

Table 4-1 Commitment Relevant to Benthic and Intertidal Ecology

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO23	At the landfall, trenchless installation techniques will be implemented and exit pits will be located beyond Mean Low Water Springs (MLWS). Installation will be at a suitable depth below the base of the cliff to avoid potential impacts to the Withow Gap Site of Special Scientific Interest (SSSI).	DCO Requirement - Code of Construction Practice
CO24	A Cable Specification and Installation Plan will be provided and submitted for approval prior to offshore construction. The Cable Specification and Installation Plan will detail the methods used for construction of offshore export and inter-array cables. Where possible, cable burial will be the preferred method for cable protection. Where cable protection is required, this will be minimised so far as is feasible. All cable protection will adhere to the requirements of Marine Guidance Note (MGN) 654 with respect to changes greater than 5% to the under-keel clearance in consultation with the Maritime and Coastguard Agency (MCA) and Trinity House.	dML Condition - Cable Specification and Installation Plan

Commitment ID	Proposed Commitment	How the Commitment will be Secured
	Any damage, destruction or decay of cables must be notified to the MCA, Trinity House, Kingfisher and UK Hydrographic Office (UKHO) no later than 24 hours after being discovered.	
CO26	Micro-siting of the offshore cables will be used to minimise the requirement for seabed preparation as far as is practicable.	dML Condition - Cable Specification and Installation Plan
CO29	An In-Principle Monitoring Plan (IPMP) will be provided in accordance with the Outline IPMP for relevant marine receptors, providing for relevant monitoring requirements during the construction and O&M (O&M) phases.	dML Condition - In Principle Monitoring Plan

39. Pre-construction surveys would be undertaken in advance of any cable and foundation installation works (as secured through the potential conditions attached to the dMLs as discussed in **Section 1.3**). The methodology of the pre-construction surveys would be agreed with the MMO and Natural England.

40. The offshore ECC was selected in consultation with key stakeholders to select route options which minimised impacts on designated sites, such as minimising the overall length within the Dogger Bank Special Area of Conservation (SAC). The Applicant has also committed to minimising external cable protection, where possible, along the entirety of the offshore ECC (see CO24 in **Table 4-1**).

41. Any seabed material arising from the activities within the DBD Array Area would also likely be disposed of within the Array Area, as the Project would look to dispose of sediment near the area of disturbance where it would be in a similar environment. This is the same for material arising from the activities associated with the Offshore ECC where material would be disposed of in the Offshore ECC.

42. Reasonable endeavours will be made to bury the Offshore Export Cables, thereby reducing electromagnetic fields and the need for surface cable protection. A Cable Specification and Installation Plan (CSIP), including a Cable Burial Risk Assessment would be submitted post-consent which would detail the anticipated export cable protection requirements. As part of the final CSIP a detailed cable laying plan providing details of the need, type, sources, quantity and installation methods for scour protection and cable protection (where required) would also be provided.

4.2 Invasive Non-Native Species

43. The risk of spreading INNS would be mitigated by compliance with the following relevant regulations and guidance:

- International Convention for the Prevention of Pollution from Ships (MARPOL). The MARPOL sets out appropriate vessel maintenance;
- The Environmental Damage (Prevention and Remediation) (England) Regulations 2015, which set out a polluter pays principle where the operators who cause a risk of significant damage or cause significant damage to land, water or biodiversity would have the responsibility to prevent damage occurring, or if the damage does occur would have the duty to reinstate the environment to the original condition; and
- The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention), which provide global regulations to control the transfer of potentially invasive species.

44. Post-construction surveys will also be required to be carried out, through the dML conditions, the scope of which will include survey of INNS.

4.3 Marine Mammals

45. This section outlines commitments relevant to marine mammals (see **Table 4-2**) to be implemented during the Project's offshore construction works to minimise impacts on marine mammals.

Table 4-2 Commitment Relevant to Marine Mammals

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO18	A VMP will be provided as part of the PEMP and will aim to minimise, as far as reasonably practicable, encounters with marine mammals and common scoter and red-throated diver. The Vessel Management Plan will adhere to latest relevant guidelines for reducing risk of collision with relevant marine species.	dML Condition - Project Environmental Management Plan
CO20	An Unexploded Ordnance (UXO) specific Marine Mammal Mitigation Protocol (MMMP) for UXO clearances will be provided and will include details on clearance options, and details of the proposed mitigation zone and any additional mitigation measures required in order to minimise potential impacts of any physical injury or Permanent Threshold Shift (PTS), for example, the activation of an Acoustic Deterrent Device (ADD) prior to the clearance, as much as is practicable.	Secured through a separate UXO Marine Licence

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO22	A piling Marine Mammal Mitigation Protocol (MMMP) will be provided in accordance with the Outline MMMP and will be implemented during construction. The piling MMMP will include details of the embedded mitigation, for the soft-start and ramp-up, as well as details of the proposed mitigation zone and any additional mitigation measures required in order to minimise potential impacts of any physical injury or permanent threshold shift (PTS), for example, the activation of an Acoustic Deterrent Device (ADD) prior to the soft-start, as much as is practicable.	dML Condition - Marine Mammal Mitigation Protocol
CO28	An Offshore Operations and Maintenance Plan (O&M) will be provided prior to commencement of operation and will outline the reasonably foreseeable O&M offshore activities.	dML Condition - Offshore Operations and Maintenance Plan

46. A construction method statement would be produced following detailed design, which would include the embedded mitigation for the soft-start and ramp-up of piling activities as detailed in an **Outline MMMP** (document reference 8.1) submitted with the PEIR.

47. The **Outline MMMP** (document reference 8.1) would be updated and agreed in its final form prior to the start of construction and would detail the proposed mitigation measures to reduce the risk of any physical or permanent auditory injury to marine mammals during all piling operations.

48. It should be noted that the MMMP will cover only mitigation relating to piling activities, and not UXO clearance activities. Any mitigation relating to UXO clearance will be addressed in a separate MMMP under a separate ML application.

49. In addition to the Outline MMMP for piling and UXO clearance, a **Report to Inform Appropriate Assessment** (document reference 5.3) sets out the approach for the Undertaker to deliver the required mitigation measures for the Project to ensure the avoidance of significant disturbance of harbour porpoise in relation to the SNS SAC site Conservation Objectives. It should be noted that the SNS SAC falls outside of the Array Area and overlaps a limited section of the offshore ECC.

50. Further underwater noise modelling would be conducted prior to construction to inform development of the MMMP, based on the final foundation type(s) and installation method(s), to determine if further mitigation measures which reduce sound propagation and disturbance are required. If they are required, then a review would be conducted to determine what is the most appropriate and effective method based on the latest and available information prior to construction. This would include a review of all suitable noise abatement measures at that time, taking into account the latest position statements (Defra, 2025).

51. It is likely that a wildlife licence and a related risk assessment for European Protected Species (EPS) (cetaceans) would be required for piling and/or UXO. This will be applied for ahead of any piling / clearance works commencing.

4.3.1 Vessel Good Practice and Code of Conduct to Avoid Marine Mammal Collisions

52. The Vessel Management Plan (VMP) will include mitigation to reduce vessel collision risk with marine mammals and birds (specifically red-throated diver, see **Section 4.1**). It is anticipated that measures such as the following would be included:

- Vessel movements, where possible, would follow set vessel routes and hence areas where marine mammals are accustomed to vessels, in order to reduce any increased collision risk.
- All vessel movements would be kept to the minimum number that is required to reduce any potential collision risk.
- Operators of all vessels would be made aware of the risk and measures to avoid marine mammal collisions during mobilisation briefings. In order to reduce the risk of collisions, meetings would be undertaken between the contractors and the vessel operators to promote collision awareness and avoidance, including code of conduct.
- A code of conduct for vessel operators would be produced and issued to all relevant contractors to reduce the risk of collision with marine mammals across all phases of the Project. The code of conduct for good practice would be developed prior to construction based on the latest information and guidance, and anticipated to include, but not be limited to:
    - Avoid deliberately approaching marine mammals when sighted;
    - Avoid abrupt changes to course or speed should marine mammals approach the vessel or bow-ride;

- Where possible, vessels would maintain a steady speed, and direction, to allow any marine mammals to predict where the vessel may be headed, and to move out of the way or avoid surfacing in the path of the vessel;
- Where possible and safe to do so, transiting vessels would maintain distances of 1km distance from the coast, particularly in areas near known seal haul-out sites when outside official shipping channels; and
- Include a protocol to report any collisions.

4.4 Offshore Ornithology

53. This section outlines the commitments (see **Table 4-3**) to be implemented during the Project's offshore construction works to minimise impacts on offshore ornithology.

Table 4-3 Commitment Relevant to Offshore Ornithology

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO18	A Vessel Traffic Management Plan (VMP) will be provided as part of the PEMP and will aim to minimise, as far as reasonably practicable, encounters with marine mammals and common scoter and red-throated diver. The Vessel Management Plan will adhere to latest relevant guidelines for reducing risk of collision with relevant marine species.	dML Condition - Project Environmental Management Plan
CO19	An Ecological Clerk of Works (ECoW) will be present during construction works at the landfall to keep a watching brief for Red Throated Diver. Should high densities of Red Throated Diver be observed during construction, mitigation measures will be adopted to reduce disturbance to this species as needed, such as temporary stoppage of those construction activities causing disturbance.	dML Condition
CO30	An Ornithological Monitoring Plan (OMP) will be provided in accordance with the Outline OMP. The OMP will set out proposals for ornithological monitoring.	dML Condition - Ornithological Monitoring Plan

4.4.1 Best Practice Protocol for Minimising Disturbance to Red-throated Diver

54. There is potential for vessel traffic to disturb red-throated diver *Gavia stellata* within the Greater Wash Special Protection Area (SPA) dependent upon the location of construction ports. In addition, a short section of the offshore ECC crosses the Greater Wash SPA. This area of the SPA has low densities of red-throated diver recorded, and the nearshore sections (relevant to the landfall) were not identified as within the species' distribution (Natural England and Joint Nature Conservation Committee (JNCC), 2016).

55. The PEMP(s) would include procedures to be adopted within vessel transit corridors to minimise disturbance to red-throated diver during construction.

56. Potential impacts on red throated diver during construction would be mitigated where practicable through the following indicative measures:

- Selecting routes that avoid known aggregations of birds;
- Restricting vessel movements to existing navigation routes (where the densities of red-throated divers are typically relatively low);
- Seasonal restriction to avoid works in the core winter months to avoid pathway for disturbance and displacement impacts when red-throated divers' energy budgets are at their tightest;
- Maintaining direct transit routes (to minimise transit distances through areas used by red-throated diver);
- Considering the potential for crew transfer vessels (CTVs) to travel in convoy en route to the wind farm sites and seeking to do so where it is considered practicable;
- Ecological Clerk of Works (ECoW) oversight during construction will detect intertidal and offshore overwintering birds if present at the landfall;
- Avoidance of over-revving of engines (to minimise noise disturbance); and
- Briefing of vessel crew on the purpose and implications of these vessel management practices (through, for example, toolbox talks).

57. The Project Team would make vessel operators aware of the importance of the species and the associated mitigation measures through toolbox talks.

4.5 Marine Archaeology

58. This section outlines the Offshore WSI (see commitments set out in **Table 4-4**) to be implemented during the Project's offshore construction works to minimise impacts on archaeological impacts.

Table 4-4 Commitment Relevant to the Archaeological Written Scheme of Investigation

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO1	An Offshore Written Scheme of Investigation (WSI) and Protocol of Archaeological Discoveries (PAD) will be developed in accordance with the Outline Offshore WSI in consultation with Historic England.	To be secured as dML Condition - Offshore Written Scheme of Investigation
CO2	A Layout Plan (including sub-sea cables and wind turbines) will be provided and agreed with the Marine Management Organisation (MMO) following consultation with Trinity House and the Maritime and Coastguard Agency (MCA). The Layout Plan will take account of the distribution of geophysical anomalies of archaeological interest and the requirement to avoid Archaeological Exclusion Zones (AEZ).	To be secured as dML Condition - Layout Plan
CO3	Archaeological input will occur into specifications for and analysis of future pre-construction geotechnical and geophysical surveys, including a provision for sampling, analysis and reporting of recovered cores, if appropriate. For post-construction marine geophysical data, archaeological assessment will include an assessment of AEZ. The results of all geoarchaeological investigations will to be compiled in final report.	To be secured as dML Condition - Offshore Written Scheme of Investigation
CO4	All anomalies of possible archaeological potential will be reviewed against the final offshore layout and design. If they are likely to be impacted by the development, these anomalies would undergo further archaeological investigation.	To be secured as dML Condition - Offshore Written Scheme of Investigation
CO5	Archaeologists will be consulted in the preparation of any pre-construction Remotely Operated Vehicle (ROV) or diver surveys and in monitoring / checking of data, if appropriate, based upon the findings of the archaeological assessment of geophysical survey data.	To be secured as dML Condition - Offshore Written Scheme of Investigation
CO6	The implementation of AEZ around known heritage assets to avoid impacts will be observed.	To be secured as dML Condition - Offshore Written Scheme of Investigation

59. An Archaeological WSI (offshore) will be produced post-construction, in accordance with an Outline Offshore WSI which will be produced for the DCO Application. The Offshore WSI will be submitted to the MMO for approval to discharge the relevant dML condition. The WSI will set out the commitments for the investigation, mitigation and recording of any archaeological remains that may be encountered, or suspected, during the construction of the Project.

60. The Offshore WSI would be monitored and updated throughout the pre-construction and construction phase to ensure that the scheme of investigation is appropriate to the final design. The requirement for this will be secured in the conditions attached to the dMLs.

61. Archaeological requirements for the O&M and decommissioning phases of the Project would be determined based on the outcomes of the approach for the preceding phases.

4.6 Waste Management Plan

62. This section provides an overarching framework of procedures and principles to be followed for waste management and disposal arrangements for the relevant phases of work of the Project. These are intended to be the minimum standards that contractors and sub-contractors will be required to meet during the relevant phases of works.

63. Detailed waste management principles and measures will be set out in the PEMP(s), but are expected to include the following:

- Prior to disposal, any waste would be considered for reuse, recycling or recovery where it is practical and economically feasible. Where practical, waste management and disposal would follow Defra's waste hierarchy (Defra, 2011) to ensure that there is minimal waste, and that the disposal of such waste would have no significant detrimental effect on the environment.
- The Principal Contractor would be responsible for the overall management of the site. Each contractor would be required to be responsible for the collection, storage and disposal of any waste produced during construction of the Project. Vessel operators are required to liaise with port operators to facilitate appropriate storage, transfer, segregation and disposal of waste.

4.6.1 Waste Water Discharges

64. Controls for any wastewater discharges (such as effluent discharges, ballast waters, bilge waters, and deck runoff) would be included in the PEMP(s), in accordance with the latest legislation, regulatory limits and good practice.

65. Monitoring records in relation to the disposal of foul water, bilge water or ballast water during the construction phase must be retained.

4.7 Marine Pollution Contingency Plan

66. This section outlines marine pollution contingencies (as committed to in **Table 4-5**) to be implemented during the Project's offshore construction works to minimise marine pollution.

Table 4-5 Commitment Relevant to the Marine Pollution Contingency Plan

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO25	A Project Environmental Management Plan (PEMP) will be provided in accordance with the Outline PEMP and will include: • A Marine Pollution Contingency Plan (MPCP), which will include plans to address the risks, methods and procedures to deal with any spills and collision incidents in relation to all activities carried out below Mean High Water Springs (MHWS) to safeguard the marine environment; • Best practice measures for the storage, use and disposal of lubricant and chemicals will be undertaken throughout the construction phase; • A Chemical Risk Assessment (CRA) to ensure any chemicals, substances and materials to be used will be suitable for use in the marine environment and in accordance with the Health and Safety Executive and the Environment Agency Pollution Prevention Control Guidelines or latest relevant available guidelines; • A marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised; and • Details of waste management and disposal arrangements.	dML Condition - Project Environmental Management Plan

67. The production of a MPCP will be a condition of the PEMP in the dMLs. The MPCP will be the key document for managing marine pollution risks and will be aligned with the emergency response procedures of the vessels relevant to the phase of construction that the PEMP covers. All vessels involved would be required to comply with the International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78.

68. The intention of the MPCP is to provide guidance to the Project personnel, its contractors and subcontractors on the actions and reporting requirements in the event of spills and collision incidents (including oil, chemical and grout spills) during construction of the Project.

69. Pollution incidents are typically classified according to the response levels they are most likely to require based on the severity of the spill and therefore the resources required to respond to the spill. The three tiers used to define spills are as follows:

- Tier 1- is the lowest response level and can be dealt with using resources that are available locally, e.g. on site;
- Tier 2- is for larger incidents where resources available on site are insufficient to deliver a proper response and resources from a regional centre may be required to assist with monitoring and clean up; and
- Tier 3- is for very large pollution incidents where national (or international) resources may be required to assist with monitoring and clean up.

70. The MPCP would include the following:

- An outline of the roles of regulatory bodies;
- An identification of pollution types and sources;
- An assessment of the likelihood of the three tiers of pollutants from wind farm vessels and wind farm structures;
- Incident response procedures, including an incident response matrix;
- Reporting procedures for Tier 2 and Tier 3 oil spills; and
- Waste management plans (specific to pollution management).

4.8 Chemical Risk Assessment

71. A CRA would be produced for the Project, with the aim of minimising the risk of pollution incidents occurring by assessing the risks of spills occurring, stating how the chemicals would be stored and transported and ensuring best practice techniques are used when handling chemicals. The requirement for this will be secured through a condition for a PEMP in the dMLs.

72. This section outlines the CRA commitments (as committed to in **Table 4-6**) to be implemented during the Project's offshore construction works to minimise impacts on chemicals.

Table 4-6 Commitment Relevant to the Chemical Risk Assessment

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO25	A Project Environmental Management Plan (PEMP) will be provided in accordance with the Outline PEMP and will include: • A Marine Pollution Contingency Plan (MPCP), which will include plans to address the risks, methods and procedures to deal with any spills and collision incidents in relation to all activities carried out below Mean High Water Springs (MHWS) to safeguard the marine environment; • Best practice measures for the storage, use and disposal of lubricant and chemicals will be undertaken throughout the construction phase; • A Chemical Risk Assessment (CRA) to ensure any chemicals, substances and materials to be used will be suitable for use in the marine environment and in accordance with the Health and Safety Executive and the Environment Agency Pollution Prevention Control Guidelines or latest relevant available guidelines; • A marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised; and • Details of waste management and disposal arrangements.	dML Condition - Project Environmental Management Plan

73. Contractors would be expected to consider the delivery, storage and handling of hazardous materials, including oils and fuels. Applicable legal requirements and best practice guidelines (for example Guidance note for the Control of Pollution (Oil Storage) (England) Regulations (Defra, 2001) must be followed). This includes selecting chemicals that have limited impacts to the environment.

74. Furthermore, all chemicals used (including paints) would be certified for use in the marine environment (unless otherwise agreed with the MMO) to ensure that there would be no risk anticipated to arise from normal O&M of the Project. As part of this, contractors will be required to ensure that any chemicals proposed to be used are on the List of Notified Chemicals which are assessed for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002 (as amended).

75. Oils and chemicals must be clearly labelled and each contractor would retain an up-to-date hazardous substance register. Activities involving the handling of large quantities of hazardous materials, such as deliveries and refuelling, would have detailed method statements in place and be undertaken by designated and trained personnel. Oil and fuel storage tanks must be robust and provide adequate secondary containment and be located in designated areas taking into account security, the location of sensitive receptors and pathways, and safe access and egress for plant and manual handling.

76. Spill response materials would be provided nearby and be readily accessible, with local project personnel trained in spill response.

4.9 Fisheries Liaison and Coexistence Plan

77. This section outlines the fisheries liaison and coexistence plan (see commitment set out in **Table 4-7**) to be implemented during the Project's offshore construction works.

Table 4-7 Commitment Relevant to Fisheries Liaison and Coexistence Plan

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO15	A Fisheries Liaison and Coexistence Plan (FLCP) will be provided in accordance with the Outline FLCP. The FLCP will include commitment to ongoing liaison with fishermen throughout all stages of the Project, based upon the Fisheries Liaison with Offshore Wind and Wet Renewables Group (FLOWW) (2014, 2015) guidance (or latest relevant available guidance) and specifically the following: The appointment of a company Fisheries Liaison Officer (FLO) to maintain effective communications between the Project and fishermen; Appropriate liaison with relevant fishing interests to ensure that they are appropriately fully informed of development planning and any offshore activities and works; The provision of advance warning and accurate location details of construction, maintenance and decommissioning operations, associated safety zones and advisory passing distances, to be given via Notices to Mariners and Kingfisher Bulletins; and Specific to the UK potting fishery the implementation of evidence-based mitigation in line with relevant FLOWW guidelines.	dML Condition - Fisheries Liaison and Coexistence Plan

78. A Fisheries Liaison and Coexistence Plan will be prepared in accordance with an Outline Fisheries Liaison and Coexistence Plan, as shown in **Plate 1-1** with an aim of ensuring relevant fishing fleets are notified of the commencement of licensed activities and to address the interaction of the Project's construction activities with fishing activities.

79. The Fisheries Liaison and Coexistence Plan will include (but not be limited to) the following:

- Timely and efficient Notice to Mariners, Kingfisher notifications and other navigational warnings (of the position and nature of works including offshore cable corridor crossings) would be issued to the fishing community;
- Appropriate liaison would be undertaken with all relevant fishing interests to ensure that they are informed of development planning, construction and maintenance activities and any items which may accentuate risk such as unexploded ordnance (UXOs), unburied cables, locations of any cable protection, cut and weighted cables, etc.; and
- Appointment of a FLO to establish and maintain effective communication between the Project Team, contractors and fishers, ensuring that information is provided in a timely manner to minimise disruptions to fishing activities.

4.10 Climate Change Resilience

80. This section outlines climate change resilience measures (see **Table 4-8**) to be implemented during the Project's offshore construction works.

Table 4-8 Commitments Relevant to Climate Change Resilience

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO93	Climate change resilience measures to ensure occupational health and safety standards are maintained under future climate conditions during construction will be included in the Project Environmental Management Plan (PEMP) for offshore construction works and the Code of Construction Practice (CoCP) for onshore construction works. The PEMP and CoCP will be developed in accordance with the Outline PEMP and Outline CoCP respectively.	DCO Requirement - Code of Construction Practice dML Condition - Project Environmental Management Plan

Commitment ID	Proposed Commitment	How the Commitment will be Secured
	Risk assessments, health and safety protocols and guidelines on safety working practices for the works will take into consideration site-specific weather and metocean conditions and potential for relevant extreme weather events at the time of construction to ensure appropriate preparation and response measures are in place.	
CO94	An appropriate Project Emergency Response Plan or similar will be provided as part of the Project Environmental Management Plan (PEMP) and Emergency Response and Contingency Plan (ERCoP) for offshore construction works and the Code of Construction Practice (CoCP) for onshore construction works. The PEMP and CoCP will be developed in accordance with the Outline PEMP and Outline CoCP respectively. The Project Emergency Response Plan will detail protocols that would be undertaken in the event of an emergency, including occupational health and safety and environmental incidents, and set out clear roles and responsibilities, emergency contacts and reporting and escalation pathways. Protocols for extreme weather events will also be included.	DCO Requirement - Code of Construction Practice dML Condition - Project Environmental Management Plan

81. The PEMP(s) will include provisions for the monitoring of site weather and metocean conditions and severe weather alert services such as The Met Office's extreme weather warnings and Shipping Forecast. Construction activities will be scheduled considering seasonality and short to medium range weather forecasts from the Met Office and other approved providers. Impacts of extreme weather events on construction activities will be included in risk assessments prepared by the Principal Contractor(s).

82. A severe weather protocol will be developed by the Principal Contractor(s) for relevant extreme weather events at the time of works and included in the Project Emergency Response Plan. Potential management measures include but are not limited to the following, which will vary depending on the site and nature of works:

- Adjusting the construction programme to delay affected activities until working conditions are deemed safe and / or in response to extreme weather forecasts;
- Incorporating severe weather considerations into site safety bulletins, toolbox talks and PPE specifications;

- Altering shift patterns within the core working hours to cooler times during the day and providing additional rest breaks during heatwaves;
- Inspecting marine vessels and construction plant and equipment for physical damage regularly and following extreme weather events;
- Implementing permissible thresholds above which construction activities would be halted until site conditions are determined to be safe, e.g. halting marine vessel operations or working at height when wave heights or wind speeds exceed the safe threshold;
- Securing stored equipment and materials and delaying crane operations during high wind and wave events; and
- Specifying use of de-icing equipment during cold spells.

4.11 Dropped Objects

83. This section outlines commitments relevant to dropped objects (see **Table 4-9**) to be implemented during the Project's offshore construction works.

Table 4-9 Commitment Relevant to Dropped Objects in the Marine Environment

Commitment ID	Proposed Commitment	How the Commitment will be Secured
CO31	All dropped objects will be reported to the Marine Management Organisation (MMO) using the dropped object form as soon as reasonably practicable and in any event within 24 hours of the undertaker becoming aware of an incident.	dML Condition

84. The PEMP(s) will outline procedures to follow in the case of both floating and non-floating objects. It would detail who to report the incident to, where to document the incident, and methods for recovery. Designated members of the Project Team and the Regulator must review the procedure before contractors may begin work.

4.12 Emissions to Air

85. Vessel emissions associated with the Project would comply with MARPOL Annex VI requirements in relation to the following regulations:

- Ozone depleting substances;
- Nitrogen oxide;
- Sulphur oxide; and

- Particulate and volatile organic compounds.

86. Where relevant, vessels must have a valid International Air Pollution Prevention certificate.

4.13 Method Statements and Risk Assessments

87. It would be the responsibility of the Principal Contractor to ensure that method statements and risk assessments for any relevant piece of work in relation to surveys, construction, O&M, and decommissioning are in place before the commencement of the relevant works. Contractors will have a responsibility to develop and comply with the method statements and risk assessments which should cross reference applicable environmental risk assessments.

88. The risk assessments would identify environmental hazards and outline subsequent control measures. Control measures would be developed, implemented and monitored to ensure that any impact on the environment is avoided or minimised.

89. A hazard workshop would be presented by the contractor to key personnel involved in the work activities. This would consist of a method statement outlining the risks involved and the control measures personnel are expected to comply with. Individuals must sign a method statement attendance briefing record sheet, providing acknowledgment of their presence at the briefing. The contractor would retain these records. Hazard workshops are an opportunity for the Principal Contractor to disclose any other environmental sensitivities that the contractors must be aware of.

5 Personnel, Training and Induction

5.1 Training and Competence

90. All offshore contractors, subcontractors and their suppliers would be required to observe the relevant provisions of the PEMP(s) and provide evidence on how they would ensure its requirements are implemented and monitored through their own Environmental Management Plans.

91. Compliance with the PEMP(s) would not absolve the Principal Contactor(s) or subcontractors from the obligation of compliance with all legislation and byelaws relating to their construction activities.

92. All offshore construction staff employed on the Project would receive training from the Principal Contractor(s) on their responsibilities for minimising the risk to the environment and implementing the measures set out in this Outline PEMP and the PEMP(s).

93. The Principal Contractor(s) would ensure that contractors employ an appropriately qualified and experienced workforce and would be responsible for identifying the training needs of their personnel. The training would include site briefings and toolbox talks as necessary to equip the workforce with the relevant knowledge on health, safety and environmental topics.

5.1.1 Sub-Contractor Management

94. The PEMP(s) would set out how the Principal Contractor manages their sub-contractors. For example, expectations of contractors working on behalf of the Undertaker are primarily detailed in the PEMP(s) and the following documents:

- Contract Schedules including specific environmental requirements;
- Environmental Policy; and
- The ES (Volume 1, Chapters 1 to 31).

5.2 Environmental Induction and Training

95. All employees and contractors would receive appropriate induction and training to ensure that they are aware of their environmental responsibilities and are competent to carry out the work. Environmental requirements would be explained to employees during the Project's induction, on-going training (via toolbox talks), briefings and notifications as required. Records would be made to demonstrate competence and training of employees; this includes maintaining copies of certificates in personnel files and sign off sheets for toolbox talks and other awareness programmes. Records would be managed in line with data protection legislation.

96. The HSE Induction would be integrated into the Project's induction and as a minimum would include:

- The significant environmental aspects and potential impacts of their work;
- How to submit environmental improvement ideas, near misses and incidents;
- Emergency response procedures;
- The implications of not complying with environmental requirements; and
- Environmental site rules and requirements.

5.2.1 Vessel Inductions

97. The overarching project induction would include reference to compliance with the relevant requirements and conditions of the Project including those specific to vessel management practices.

98. A vessel induction would take place with all vessel personnel present and include an environmental component. The contractor's project team would nominate designated personnel to be responsible for the preparation and delivery of site induction and maintaining attendee records.

99. The environmental component of the vessel induction is expected to include reference to (but not be limited to):

- Environmental management contacts;
- Site specific environmental sensitivities;
- Waste management arrangements;
- Hazardous material management;
- Fuel, oil, and chemical management;
- Environmental emergency response; and
- Reporting of incidents and complaints.

5.2.2 Toolbox Talks

100. Toolbox talks are an effective method for the dissemination of information relating to work activities. The contractor must deliver environmental toolbox talks to all on-site personnel when required. Attendee records must be kept by the contractor as they are likely to be inspected as part of environmental audits.

6 Communication and Reporting

6.1 Internal Communication

101. To ensure that the environmental requirements of the Project are met, the Environment Manager would act as a single point of contact between all internal stakeholders for all matters relating to environmental issues.

6.2 External Communication

102. The Environment Manager would ensure all relevant stakeholders are consulted at appropriate times during the pre-construction and construction phases and effective dissemination of information to the identified points of contact.

6.2.1 External Meetings

103. Environmental meetings and debriefs must be held locally to the Offshore Development Area. Health, safety and environment meetings must take place on all construction vessels with representatives from the Project Team, the Principal Contractor, and key sub-contractors. Minutes of meetings would be recorded, and standard agenda items would include status of outstanding items, reports of environmental incidents or complaints, stakeholder engagement, toolbox talks issued / delivered, and key findings of environmental inspections and audits.

104. The Principal Contractor and Project Team are expected to host meetings whereby important environmental information would be shared with the wider Project Team, contractor and subcontractor group members to raise awareness of environmental issues.

6.2.2 Community Complaints

105. The Undertaker value their relationship with the communities that surround the Project. All work would be carefully planned to minimise disturbance to neighbouring communities. Contractors must ensure that any complaints are reported to the designated members of the Project Team and investigated promptly. The PEMP(s) would detail the procedure in place to report public complaints in relation to offshore works.

6.2.3 Fisheries Liaison

106. As discussed in **Section 4.9**, a FLO would be appointed for the duration of the construction works.

6.2.4 Stakeholders

107. Reference would be made in the PEMP(s) to any reporting requirements in relation to stakeholders, as will be set out in the DCO and / or potential dML(s).

6.3 Environmental Incident Response

6.3.1 Offshore Safety Management

108. Project vessels would ensure compliance with Flag State regulations including the Convention on the International Regulations for Preventing Collisions at Sea (COLREGs) (International Maritime Organization (IMO), 1972/77) and International Convention for the Safety of Life at Sea (SOLAS) (IMO, 1974).

109. All recommendations as appropriate within MGN654 "Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues (or any equivalent guidance that replaces or supersedes it) and its annexes" would be adequately addressed unless otherwise agreed with the Maritime and Coastguard Agency (MCA) and Trinity House.

110. As stated in **Section 4.6.1** for the offshore activities, an MPCP would also be developed for the Project.

6.3.2 Reporting

111. All environmental incidents (including dropped objects into the marine environment) and near misses must be reported, investigated and recorded to the designated members of the Project Team, in line with the HSE Conditions of the Contract and Project Specific Incident Notification Procedure.

112. Contractors will be required to produce monthly reports. A KPI Template would be provided in the PEMP(s) for the designated members of the Project Team to record health, safety and environmental performance.

6.3.3 Lessons Learned / Incident Follow-Up

113. If an environmental incident occurs, it must be thoroughly investigated by the relevant contractor, in line with the Project Specific Incident Notification Procedure, to establish the root cause and prevent any recurrence. Dependent on the severity of the incident, the Project Team may wish to manage or assist with the investigation process, or escalate to the relevant authorities, as required.

7 Documentation and Records Management

7.1 Documented Information

114. Suitable and sufficient documentation would be produced to ensure that compliance to legal and other obligations, including those set within consent conditions, permits, licences and authorisations. Documentation would be produced that provides evidence of compliance against the statements written within procedures, management plans and other EMS documentation as required by the PEMP(s).

115. As a minimum, documentation would include:

- Title;
- Date;

- Author;
- Reference number; and
- Version history.

116. The author shall select the most appropriate format, language and media; and the documentation would be protected from damage, loss of data and breaches in confidentiality. Documents would be located conveniently for use (if applicable), for example, Risk Assessments and Method Statements located at the worksite.

117. Compliance obligations, such as those within licences, may require documentation to be displayed in specific locations. If there are specific requirements for the display or access to documentation, this would be written within relevant management plans and communicated to the relevant Project employees, contractors, or other relevant persons.

7.2 Records

118. The contractor shall retain all relevant HSE records relating to its work, in line with relevant legislation and access shall be given to these records on request. Some examples of records include:

- Risk assessments;
- Training records;
- Evidence of consultation / communication with stakeholders;
- Maintenance records (proactive & reactive);
- Marine licence acknowledgement forms;
- Monitoring and measuring results;
- Incidents, near misses and observations;
- Audit results;
- Management review outputs; and
- Corrective actions reports.

References

Defra (2001) Guidance note for the Control of Pollution (Oil Storage) (England) Regulations. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69255/pb5765-oil-storage-011101.pdf [Accessed May 2025].

Defra (2011). Guidance on applying the waste hierarchy. [Online] Available at: https://www.gov.uk/government/publications/guidance-on-applying-the-waste-hierarchy [Accessed May 2025].

IMO (1972/77). Convention on International Regulations for Preventing Collisions at Sea (COLREGs).

IMO (1974). International Convention for the Safety of Life at Sea (SOLAS).

UK Government and Defra (2025). Policy Paper. Reducing marine noise. 21st January 2025. Available from: https://www.gov.uk/government/publications/reducing-marine-noise/reducing-marine-noise. [Accessed May 2025].

Natural England and JNCC (2016). Departmental Brief: Greater Wash potential Special Protection Area.

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List of Acronyms

Acronym	Definition
A&E	Accident and Emergency
AEZ	Archaeological Exclusion Zones
ADD	Acoustic Deterrent Device
CoCP	Code of Construction Practice
COLREGs	Convention on the International Regulations for Preventing Collisions at Sea
CRA	Chemical Risk Assessment
CTV	Crew Transfer Vessel
CSIP	Cable Specification and Installation Plan
DBD	Dogger Bank D Offshore Wind Farm
DCO	Development Consent Order
dML	Deemed Marine Licence
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EMS	Environmental Management System
EPS	European Protected Species
ERCoP	Emergency Response and Contingency Plan
ES	Environmental Statement
FLCP	Fisheries Liaison and Coexistence Plan
FLO	Fisheries Liaison Officer
FLOWW	Fisheries Liaison with Offshore Wind and Wet Renewables Group
JNCC	Joint Nature Conservation Committee
IMCA	International Marine Contractors Association
IMO	International Maritime Organisation

Acronym	Definition
INNS	Invasive Non-Native Species
IPMP	In Principle Monitoring Plan
ISO	International Organization for Standardization
MARPOL	International Convention for the Prevention of Pollution from Ships
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
MHWS	Mean High Water Springs
MMO	Marine Management Organisation
MMMP	Marine Mammal Mitigation Protocol
MPCP	Marine Pollution Contingency Plan
NHS	National Health Service
OMP	Ornithological Monitoring Plan
OREI	Offshore Renewable Energy Installation
PAD	Protocol of Archaeological Discoveries
PEIR	Preliminary Environmental Information Report
PEMP	Project Environmental Management Plan
PTS	Permanent Threshold Shift
ROV	Remotely Operated Vehicle
SAC	Special Areas of Conservation
SHW	Safety, Health and Wellbeing
SNS	Southern North Sea
SOLAS	International Convention for the Safety of Life at Sea
SPA	Special Protection Area
SSSI	Special Scientific Interest
UK	United Kingdom

Acronym	Definition
UKHO	UK Hydrographic Office
UXO	Unexploded Ordinance
VMP	Vessel Management Plan
WMP	Waste Management Plan
WSI	Written Scheme of Investigation