

The logo for FIVE ESTUARIES features the word "FIVE" in a sans-serif font. The letter "I" is grey, "V" is purple, and "E" is pink. To the right of "FIVE" are three wavy lines representing water, colored teal, green, and yellow from top to bottom.

FIVE
ESTUARIES
OFFSHORE WIND FARM

FIVE ESTUARIES
OFFSHORE WIND FARM
OUTLINE PROJECT ENVIRONMENTAL
MANAGEMENT PLAN

Application Reference	EN010115
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Project	Five Estuaries Offshore Wind Farm
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DEFINITION OF ACRONYMS

Term	Definition
AfL	Agreement of Lease
CAR	Corrective Actions Reports
CoCP	Code of Construction Plan
DCO	Development Consent Order
dML	Deemed Marine Licence
EMS	Environmental Management System
ES	Environmental Statement
HS&E	Health, Safety and Environment
HWCN	Hazardous Waste Consignment Note
IPMP	In-Principle Monitoring Plan
MCA	Maritime and Coastguard Agency
MDR	Master Document Register
MMO	Marine Management Organisation
MPCP	Marine Pollution Contingency Plan
MW	Megawatt
NSIP	Nationally Significant Infrastructure Project
OPEMP	Outline Project Environmental Management Plan
PEMP	Project Environmental Management Plan
POLREP	Pollution Report Form
PPE	Personal Protective Equipment
RAMS	Risk Assessment and Method Statement
RITAS	Reporting, Incident & Audit System
SAC	Special Area of Conservation
SDS	Safety Data Sheets
SoS	Secretary of State
VE	Five Estuaries Offshore Wind Farm
VE OWFL	Five Estuaries Offshore Wind Farm Ltd
WTG	Wind Turbine Generator
WTN	Waste Transfer Note



GLOSSARY OF TERMS

Term	Definition
Array Area	The areas where the WTGs will be located.
Development Consent Order	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP) from the Secretary of State (SoS).
Environmental Statement	Environmental Statement (the documents that collate the processes and results of the EIA).
Export Cable Corridor (ECC)	The area(s) where the export cables will be located. The ECC is the wider cable corridor within which the preferred cable route is located.
Order Limits	The extent of development including all works.
Outline plan	An early version of a management plan produced to secure principles, which the final approved management plan will adhere to.
The Applicant	The company Five Estuaries Offshore Wind Farm Ltd.



1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 Five Estuaries Offshore Wind Farm Ltd (VE OWFL or the Applicant) has submitted an application to the Planning Inspectorate on behalf of the Secretary of State, for a Development Consent Order for the Five Estuaries Offshore Wind Farm (herein referred to as VE).
- 1.1.2 VE is the proposed extension to the operational Galloper Offshore Wind Farm located 37km off the coast of Suffolk and comprises both offshore and onshore infrastructure within the administrative area of Essex Country Council. VE will have an overall capacity of greater than 100 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under the Section 15 (3) of the Planning Act 2008. Such projects require a Development Consent Order (DCO) to be granted by the relevant UK Secretary of State (SoS).
- 1.1.3 This Outline Project Environmental Management Plan (OPEMP) has been produced as part of the DCO application in line with dML conditions. Condition 12 of Schedule 10 and Condition 13 of Schedule 11 of the DMLs state that the PEMP will include the following scope:
- 1.1.4 *a project environmental management plan in accordance with the outline project environmental management plan covering the period of construction for the relevant stage to include details of—*
- > *a marine pollution contingency plan to address the risks, methods and procedures to deal with and report any spills and collision incidents of the authorised development in relation to all activities carried out;*
 - > *a chemical risk register to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;*
 - > *a marine biosecurity plan detailing how the risk of introduction and spread of invasive non-native species will be minimised;*
 - > *waste management and disposal arrangements; and*
 - > *a working in proximity to wildlife plan, in accordance with the outline working in proximity to wildlife plan.*
- 1.1.5 The transmission DML condition 13 also requires that the working in proximity to wildlife plan include details of a best practice protocol for the protection of red throated divers within the Outer Thames Estuary special protection area between 1st November and 1st March (inclusive).

1.2 PURPOSE OF THIS OUTLINE PROJECT ENVIRONMENTAL MANAGEMENT PLAN

- 1.2.1 There are potential environmental effects associated with an offshore wind farm development which need to be identified and considered before construction of the project takes place.



- 1.2.2 These potential effects are described in the VE Environmental Statement, Volume 6 (ES). The ES also includes embedded environmental measures through design and additional mitigation in the form of good practice that will must be adhered to during the construction and operation phases of the Proposed Development.
- 1.2.3 This OPEMP is provided as part of the Development Consent Order (DCO) application to demonstrate how commitments made with regards to environmental management in the ES are secured and will be taken forward for construction.
- 1.2.4 The purpose of this OPEMP is to set out the framework and principles for the Project Environmental Management Plan (PEMP) produced for the construction and operational phase of the project and will be updated accordingly throughout those phases. This OPEMP includes the controls that are proposed to manage the environmental risks associated with the construction and operation of the offshore components of VE. The document is based on the Applicant's ES, industry good practice, and relevant legislation (at the time of preparation).
- 1.2.5 The objectives of the OPEMP are:
- > to ensure construction activities will be undertaken in an environmentally responsible manner; and
 - > to provide staff and construction contractors with clear, concise, and practical details of the environmental management measures that will be implemented.
- 1.2.6 The scope of this PEMP applies only to works associated with the Offshore works below Mean High Water Springs (MHWS) and will be finalised prior to construction setting out the controls and processes that are to be adopted to mitigate the offshore environmental impacts of VE and environmental measures set out to comply with consent conditions in the dMLs.
- 1.2.7 A series of contractors will be responsible for the detailed design, construction and installation of the main infrastructure associated with the Proposed Development, including Wind Turbine Generators (WTG), foundations, WTG erection, offshore cable laying, offshore electrical platforms and export cable landfall.
- 1.2.8 The PEMP will be communicated to contractors, where required, to discharge the relevant licence conditions and to communicate the environmental requirements and standards that must be incorporated into their Environmental Management Plans and Risk Assessments and Method Statements (RAMS).

1.3 STRUCTURE OF THE PEMP

- 1.3.1 The Final PEMP will include the following information:
- > Details of relevant deemed Marine Licence (dML) conditions;
 - > Overview of project activities to which the PEMP applies;
 - > Overview of relevant regulations and guidance;



- > Details of the various plans and documents that interface with the PEMP and how they interface;
- > Roles and responsibilities;
- > Environmental objectives and targets;
- > Environmental aspects and impacts;
- > Training and awareness;
- > Communication and stakeholder management;
- > Documentation and records management;
- > Arrangements for compliance monitoring and auditing;
- > Approach to waste management;
- > Approach to complaints and incident management;
- > Arrangements and documentation for marine pollution contingency planning;
- > Dropped objects protocol; and
- > Arrangements for chemicals risk assessment and management

1.4 REVIEW AND UPDATE PROCESS

- 1.4.1 In line with the dML conditions the PEMP will be updated at least six months prior to construction commencing and submitted to the Marine Management Organisation (MMO), in consultation with relevant stakeholders as set out in the dML, for review and approval.
- 1.4.2 It will also be reviewed quarterly during construction and annually in the O&M phase. These reviews will focus on :
- > changes in roles and responsibilities of the VE project team;
 - > changes in legislative or other requirements; and
 - > changes to processes or procedures; and
 - > changes in project phases – e.g. the plan will updated prior to commencement of the operations and maintenance phase of the project.
- 1.4.3 Subsequent updates, following initial approval of the document by the MMO, will be provided to the MMO for information and to ensure they hold an up-to-date copy.



2 PROJECT OVERVIEW

2.1 PROJECT DESCRIPTION

2.1.1 Details of project parameters, outline construction program, and construction methods are set out in Volume 6, Part 2, Chapter 1: Offshore project description. The version of the PEMP submitted prior to construction will provide an updated overview of the key components and parameters of the project, in so far as they are relevant to the PEMP. Further details of the proposed methods and programme of works will be detailed in other documents detailed in the dML conditions. All construction works will be designed to fall within the parameters set out in Volume 6, Part 2, Chapter 1: Offshore project description and Volume 6, Part 2, Chapters 1 – 13.

2.2 ENVIRONMENTAL SENSITIVITIES

2.2.1 Details of the environmental characteristics of the project area and environmental sensitivities are set in detail in Volume 6, Part 2, Chapters 1 – 13.

2.2.2 The PEMP will set out the relevant controls and procedures to be adopted to mitigate the environmental impacts associated with the project, in accordance with the Schedule of Mitigation - Routemap (Volume 9, Report 31). These measures will be specific to the final design of the Project and subject to further stakeholder engagement. The PEMP will set out measures to avoid, reduce or mitigate impacts on topics including:

- > Marine ecology
- > Marine archaeology
- > Dropped objects in the marine environment
- > Wastewater
- > Oils, fuels and chemicals
- > Waste management
- > Emissions to the air.



3 REGULATIONS AND GUIDANCE

- 3.1.1 VE OWFL will require all contractors to develop and maintain a register of relevant environmental legislation and guidance appropriate to the scope of works during the offshore construction works. Each contractor will have responsibility for compliance with all applicable statutory and regulatory requirements for their work scope up to project handover for the operations and maintenance phase of the project.
- 3.1.2 All contractors will also be required to produce Risk Assessments and Method Statements (RAMS) and implement management controls as appropriate within their RAMS, which shall be reviewed by VE OWFL. The RAMS will also make reference to the relevant elements of various guidance that will be implemented as part of their management controls.
- 3.1.3 VE OWFL will also produce an offshore consents matrix that will detail all the offshore obligations placed on the Project by the Planning Inspectorate on behalf of the Secretary of State and MMO, including commitments made within the Environmental Statement. This document will set out client and contractor requirements in relation to compliance with the DCO and the ES.



4 INTERFACING PLANS AND DOCUMENTS

- 4.1.1 The list below details other related plans and documents that are referred to in the DCO and associated dMLs and relate to ensuring management and control of environmental impacts. These documents were produced as outline plans for the DCO application and will be updated by VE OWFL and approved by the MMO prior to construction. They will sit alongside the PEMP for construction and will be provided to all contractors who shall be required to comply with them. The list is not exhaustive and may be added to prior to the commencement of construction.
- > Cable Specification and Installation Plan (available in outline – Volume 9, Report 12: Outline Cable Specification and Installation Plan)
 - > Fisheries Liaison and Co-existence Plan (available in outline – Volume, 9 Report 16: Outline Fisheries Liaison and Co-Existence Plan)
 - > Marine Mammal Mitigation Protocol – Piling (available in outline – Volume 9, Report 14.1 : Outline Marine Mammal Mitigation Protocol- Piling and Volume 9 Report 14.2: Outline Marine Mammal Mitigation Protocol- UXO)
 - > Site Integrity Plan (available in outline- Volume 9, Report 15, Outline Southern North Sea Special Area of Conservation Site Integrity Plan)
 - > Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan (Volume 9, Report 13, Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan)
 - > Marine Written Scheme of Investigation (available in outline - Volume 9, Report 19, Outline Marine Written Schemes of Investigation)
 - > Navigation and Installation Plan (available in outline - Volume 9, Report 20, Outline Navigation and Installation Plan)
 - > Working in Proximity to Wildlife in the Marine Environment (Volume 9, Report 18.1, Working in Proximity to Marine Environment)



5 ROLES AND RESPONSIBILITIES

5.1.1 The RACI (responsible, accountable, consulted, informed) matrix set out below provides summary of the roles and responsibilities of VE and its contractors. Roles and responsibilities will be further defined in the Final PEMP for construction.

Procedural Responsibilities		Project Manager	Senior Consent Manager	Onshore and Offshore Consents Managers	HS&E Advisor	Workforce/ Sub-contractors
R	Responsible for performing the action					
A	Accountable to ensure action happens					
C	Consulted during the action					
I	Informed after the action is complete					
Ensure adequate resources and budgetary support are provided for overall implementation of this PEMP.		A & R	R	C	C	R
Oversees the implementation of the PEMP and relevant environmental monitoring programs required.		A	R	R	R	I
Develops and implements objectives and targets ensuring the goals of the PEMP and Environmental Policies are achieved and maintained.		A	C	C	R	I
Ensures environmental impacts are minimised and environmental obligations set out in the PEMP are met.		A	R	R	C	R
Ensures that environmental compliance auditing is undertaken in accordance with all relevant project Environmental Management Systems monitors changes in legislation, communicate results to relevant stakeholders.		A	C	R	R	R
Identifies all environmental risks and management measures associated with activities.		A	C	C	C	R
Provides training and advice on environmental legislation and compliance obligations for operational staff and contractors.		A	C	C	R	I
Inform all contractors of the PEMP and disseminate associated documentation as required.		A	R	R	R	I
Ensure compliance with provisions of the PEMP.		A	R	R	C	R
Ensures continual improvement of Environmental Management at VE		A	R	C / I	R	I



6 ENVIRONMENTAL MANAGEMENT PRINCIPLES

6.1 ASPECTS AND IMPACTS

6.1.1 All contractors undertaking works for VE OWFL will be required to produce aspects and impacts registers related to the works. Such registers will include details of:

- > Aspects associated with (but not limited to) emissions to air, water, land and groundwater; waste production, storage and disposal; chemical use and management; transport; and use of amenities and utilities;
- > Details of potential impacts, legal and other requirements; and environmental management measures.

6.2 FIVE ESTUARIES ENVIRONMENTAL COMMITMENTS AND MITIGATIONS

6.2.1 Full details of all commitments and associated mitigations are detailed in the Schedule of Mitigation - Route Map (Volume 9, Report 31). All contractors will detail the relevant mitigations that apply to their works and how these will be implemented and complied with in their RAMS.

6.2.2 These mitigations and commitments include but not limited to:

- > Dredge material from the northern array area will not be disposed of within the southern array area, to ensure sediment characteristics of the southern array area are maintained.
- > Implementation of a best practice protocol for minimising disturbance to the Outer Thames Estuary SPA population of red-throated diver during construction, operation and maintenance works, which is summarised in Volume 9, Report 18.1: Working in Proximity to Wildlife; and
- > No piling within the array areas will be undertaken during the peak Downs herring spawning period. The Applicant considers that a peak spawning period which has been defined from 6 November until 1 January is appropriate to avoid population impacts on herring. Specific details can be found in Volume 6, Part 5, Annex 6.4: Herring Seasonal Restriction Note.

6.2.3 The Final PEMP will describe details of the mitigations and other measures to be included in the various RAMS, covering the topics as set out in Paragraph 2.2.2.



7 PERSONNEL, TRAINING AND INDUCTION

7.1 LEADERSHIP AND COMMITMENT

7.1.1 To demonstrate and foster a culture of commitment to the Health Safety & Environment (HS&E) policy there shall be:

- > Participation of senior project management to ensure the adoption and management of the PEMP;
- > Sufficient resources assigned to fulfil the requirements of the PEMP and sub-plans;
- > Support provided to other managers with environmental responsibilities;
- > Regular communication of project environmental performance and promotion of contributing / offering improvement opportunities;
- > Sharing of environmental lessons learned;
- > Identification and management of environmental risks;
- > Appropriate incident investigation and corrective action management.

7.2 ENVIRONMENTAL INDUCTION & TRAINING

7.2.1 All construction contractors shall receive an appropriate induction and training to ensure that they are aware of their environmental responsibilities and are competent to carry out the work. Environmental requirements shall be explained to employees during the VE induction, on-going training via toolbox talks, briefings and notifications as required.

7.2.2 Records shall be made to demonstrate competence and training of contractors; this includes checking qualifications and sign off sheets for tool box talks and other awareness programmes. Records shall be managed in line with data protection legislation.

7.2.3 The Environmental Induction shall be integrated into the VE induction. The Environmental Induction shall as a minimum include:

- > VE OWFL Environmental Policy;
- > The significant environmental aspects and potential impacts of the work;
- > How to submit environmental improvement ideas, near misses and incidents;
- > The implications of not complying with environmental requirements;
- > Environmental site rules and requirements.

7.2.4 All VE OWFL employees, contractors and subcontractors shall complete the induction.



8 COMMUNICATION AND STAKEHOLDER MANAGEMENT

8.1.1 The communications strategy for VE OWFL is built around the following fundamental principles:

- > Provision of relevant information to specific stakeholder groups during construction and operation (e.g., website, newsletter, local media, letter drops) as appropriate.
- > During construction, provision of a 24-hour freephone line, direct email and website contact form.

8.1.2 The broader community shall be kept informed of the project through general media which may include newspaper advertisements and press releases. .

8.1.3 Stakeholders, including members of the public, will be able to contact VE OWFL during construction by way of the direct email address, freephone or through the website contact form, as detailed in Table 1 below.

Website (contact form):	www.fiveestuaries.co.uk
Email:	fiveestuaries@rwe.com
Freephone:	0333 880 5306
Address (for written correspondence):	Five Estuaries Offshore Wind Farm Ltd Windmill Hill Business Park Whitehill Way, Swindon, Wiltshire, SN5 6PB

Table 1 – Methods for contacting VE OWF by stakeholders.

8.1.4 All communication via these methods will be directed to, and managed by, the Five Estuaries communications team. Response will be within five working days for standard communications. Where more urgent action is required, a response will be initiated on the same-day.

8.2 INTERNAL COMMUNICATION

8.2.1 To ensure that the environmental requirements of VE OWFL are met, the Five Estuaries HS&E Advisor / Consents Manager will act as a single point of contact between all internal stakeholders for all matters relating to environmental issues / consent issues respectively.

8.3 EXTERNAL COMMUNICATION – STAKEHOLDER AND COMMUNITY

8.3.1 The HS&E Advisor / Consents Manager in consultation with the Public Relations Manager and Project Manager shall ensure all relevant stakeholders are consulted at appropriate times during the planning and development phase and effective dissemination of information to the identified points of contact.

8.4 EXTERNAL COMMUNICATION – ENVIRONMENTAL REGULATORY AGENCIES

8.4.1 Consultation with a range of environmental or other regulatory agencies will be required throughout the construction and operation of the wind farm. The HS&E Advisor / Consents Manager shall consult and cooperate with all relevant regulatory agencies in meeting the project environmental conditions as required under legal obligations and consents (as they become relevant).



8.5 CROWN ESTATE AGREEMENT FOR LEASE

- 8.5.1 The Agreements of Lease (AfL) for the arrays and the ECC, and subsequent lease agreement, will contain a number of clauses relating to environmental protection, as reflected below.
- 8.5.2 VE OWFL shall avoid nuisance, pollution or harm to the environment during the operations which take place under the Agreement for Lease.
- 8.5.3 VE OWFL shall report Serious Incidents to the Crown Estate as soon as reasonably practicable and in any event, within 48 hours. Serious Incidents are defined as “any fatal RIDDOR Reportable Incident or Health and Safety Incident which involves serious threat to life, harm or damage to the environment or property including but not limited to vehicle or vessel collisions, structural collapses, explosions or fires, releases of flammable liquids and gases, hazardous escapes of substances”.
- 8.5.4 Reports shall be made using the HSI Notification form (see Appendix 8) via email to HealthandSafety@thecrownestate.co.uk.



9 DOCUMENT AND RECORDS MANAGEMENT

9.1 DOCUMENTED INFORMATION

- 9.1.1 VE OWFL shall produce suitable and sufficient documentation to ensure compliance with legal and other obligations, including those set within consent conditions, permits, licenses and authorisations.
- 9.1.2 As a minimum, documentation shall include the title, date, author, reference number and version history. The author shall select the most appropriate format, language and media; and the documentation shall be protected from damage, loss of data and breaches in confidentiality. Documents shall be located conveniently for use (if applicable) e.g., Risk Assessments and Method Statements located at the worksite. Compliance obligations such as those within licences, may request documentation to be displayed in specific locations. If there are specific requirements for the display or access to documentation, this shall be written within relevant management plans and communicated to the relevant VE OWFL employees, contractors or other relevant persons.
- 9.1.3 VE OWFL maintains all formal documentation and maintains a Master Document Register (MDR) of formal documentation.

9.2 RECORDS

- 9.2.1 Records shall be kept where there is requirement under a statutory or other obligation. Records may also be kept for information purposes. It is expected that contractors will maintain records appropriately and make these available when requested for audit or other purposes. Some examples of records include:
- > Risk assessments;
 - > Training records;
 - > Evidence of consultation / communication with stakeholders;
 - > Waste Transfer Notes (WTN);
 - > Hazardous Waste Consignment Notes (HWCN);
 - > Maintenance records (proactive & reactive);
 - > Marine license acknowledgement forms;
 - > Modifications made to plant;
 - > Monitoring and measuring results;
 - > Incidents, near misses and observations;
 - > Audit results;
 - > Management review outputs;
 - > Corrective Actions Reports (CAR).



- 9.2.2 Although not an exhaustive list, this indicates the variety of records required for environmental management. The record keeper shall ensure that the records are suitable and sufficient to ensure that they fulfil their purpose. This includes being completed correctly and, in the detail, necessary to fulfil the associated obligations. For example, WTN and HWCN shall contain all the details required by the Environment Agency.
- 9.2.3 Records shall also be stored for the length of time required by any associated obligations. For example, WTN and HWCN shall be stored for 2 & 3 years respectively. Where there are no obligations for record retention, the record shall be kept for the lifetime of the wind farm or as stated otherwise.



10 ENVIRONMENTAL MONITORING AND AUDITING

10.1 ENVIRONMENTAL MONITORING

10.1.1 During construction and O&M phase, environmental monitoring to confirm compliance with commitments and regulatory requirements will be carried out in line with the PEMP. All pre and post construction monitoring commitments are set out in Volume 9, Report 31: Schedule of Mitigation and Mitigation Route Map and Volume 9, Report 32 Offshore In-Principle Monitoring Plan (IPMP) (which will be revised post-consent) .

10.2 ENVIRONMENTAL AUDITING

10.2.1 During construction of VE, audits of compliance obligations shall be completed by the HS&E Advisor, who may be supported by a Consents Manager. Audits will:

- > Assess compliance with the requirements of legislation, licenses and approvals that apply to the project.
- > Assess the environmental performance of the project.
- > Review the effectiveness and adequacy of the environmental management of the project.

10.2.2 Table outlines the environmental audit requirements at VE.. Timings are determined at a minimum frequency; however, the frequency may be greater if deemed necessary by e.g., the results of previous internal / external audits, or changes to operations.

Audit Scope	Auditor	Timing
Project Compliance to VE OWFLEMS, including this PEMP	HS&E Advisor	Not less than once in a three-year period
Project Compliance to a Marine Licence & other consent conditions	Consents Manager	Within one year of commencement of works
Project Compliance to Chemical Management; Dropped Object Management; and Pollution Prevention (onshore & offshore).	HS&E Advisor	Annually

Table 2 – Environmental Audit Requirements

10.2.3 Records of all audits and inspections undertaken shall be reported to the VE OWFL Project Manager, a summary of inspection and audit findings shall be discussed at HS&E Meetings; Management Reviews; or other HSE forums as appropriate.

10.3 NON-CONFORMANCES AND CORRECTIVE ACTIONS

10.3.1 Corrective action shall be identified for non-conformances that arise from incidents, audits and deviation from this PEMP.

10.3.2 Corrective action to re-establish compliance shall be taken as soon as possible. The steps to corrective action shall involve:



- > Review of the audit reports by the Project Manager or Assistant Project Manager in consultation with the HS&E Advisor / Consents Manager (as appropriate – see Table 2);
- > An investigation to identify and analyses the root cause of the non-conformance;
- > Development of objectives, targets and resource plans to correct or prevent the non-conformance.

10.3.3 The solution may involve remedial actions and:

- > Changes to this PEMP, standard operating procedures (SOPs), emergency response plan and other EMS documentation.
- > Identification and implementation of specific environmental training.

10.3.4 The effectiveness of actions taken will be reviewed at the subsequent audit, the interval for which will be determined on a risk basis.

10.3.5 Preventive actions identified during audits, or on an ad hoc basis will be fully explored and implemented where considered appropriate.

10.4 ENVIRONMENTAL REPORTING

10.4.1 Environmental performance information for monthly and annual reports will be collated and included by the HS&E Advisor, for communication to the VE OWFL Project Manager. The reports shall be sent to the VE OWFL Investment committee and Board of Directors. The reports will include relevant information with regards to environmental performance and may include the following:

- > Progress to KPIs;
- > Results of environmental monitoring;
- > Results of environmental audits;
- > Environmental incidents, near misses and observations;
- > Relevant communications from stakeholders such as complaints;
- > Opportunities for improvement of environmental management.



11 MANAGEMENT REVIEW

11.1.1 Periodic management reviews shall be conducted to evaluate the effectiveness, suitability and adequacy of the agreed objectives and targets of the PEMP. The agenda for the management review shall include but not limited to:

- > The status of actions from previous management reviews;
- > Audit findings and non-conformities from other sources - verification of the effectiveness of corrective and preventive actions;
- > Review of environmental goals and objectives and status thereof (performance review);
- > Review of resource adequacy;
- > Continued validity of the PEMP;
- > Key changes to legislation and which might impact upon the PEMP, anticipated legislation forthcoming and evaluation of compliance relating to existing legislation;
- > Significant changes in operations;
- > Internal and external communication, including complaints, and changes to the needs and expectations of stakeholders;
- > Lessons learned from significant environmental incidents;
- > Changes to environmental aspects;
- > Environmental risks and opportunities for improvement.



12 COMPLAINTS AND INCIDENT MANAGEMENT

12.1 COMPLAINTS PROTOCOL

- 12.1.1 All complaints and public enquiries shall be dealt with in accordance to the communication process outlined in section 8 of this PEMP.
- 12.1.2 Close liaison shall be maintained between the local community to provide effective feedback in regard to perceived environmental issues.

12.2 ENVIRONMENTAL INCIDENT RESPONSE

- 12.2.1 All environmental incidents and near misses shall be reported in accordance with the Five Estuaries Incident Reporting Process (Appendix 2).
- 12.2.2 It is expected that contractors conducting works on behalf of VE OWF shall provide evidence of incident response procedures covering environmental incidents which could occur during the works. In all other circumstances the following procedures shall be
 - > Releases of oil or hazardous substances to the marine environment Appendix 3);
 - > Releases of oil or hazardous substances to the terrestrial environment or inland waterways (Appendix 4);
 - > Dropped objects to the marine environment (Appendix 5).



Appendix 1. RWE RENEWABLES HEALTH, SAFETY AND ENVIRONMENTAL POLICY STATEMENT

RWE

RWE Renewables Health, Safety and Environment Policy Statement



As a member of the RWE family, RWE Renewables rallies behind RWE's purpose: Our energy for a sustainable life. It describes why we exist and what drives us forward every day. We are passionate about renewables and the impact we create for the world. We are responsible corporate citizens and have a positive environmental, economic and societal contribution.

Health, Safety and Environmental Excellence the Cornerstone of Sustainable Performance

At RWE Renewables we believe that long-term, sustainable success can only be reached through people. We create and provide safe and healthy working conditions. We believe that all accidents are preventable and therefore, one accident is one too many. We are passionate about helping to protect our planet and are committed to support societies globally to meet the United Nations' two degree target and commit to net zero by 2040.

In short: We care for each other, our assets and the environment wherever we operate, whatever we do.

Our Care Commitments

We live the following commitments and require all colleagues and encourage all business partners to abide by these and act accordingly:

- Our management visibly demonstrates leadership in Health, Safety and Environment (HSE) throughout all our business processes, activities and decisions.
- We take decisive action to ensure and promote the health and safety of all employees, business partners and neighbours as well as to assure the protection of the environment – no matter where we are or what we do. We avoid hazards, reduce risk and continually improve our performance.
- We devote energy and attention to prevent harm, and to maintain and improve the health and wellbeing of employees, business partners and others involved with us along the value chain.
- We empower and expect our colleagues and business partners to take personal responsibility, role-model HSE and be brave by stopping unsafe work and challenging unsafe conditions.
- We appreciate and recognize good HSE behaviour and performance, strive to find safer ways of working and take pride in actively sharing good HSE practice.
- We welcome constructive feedback and challenge on the implementation of our HSE Policy.
- We take a holistic, life-cycle wide approach to environmental protection aiming at reducing environmental impacts whilst increasing the production, storage and use of green energy.
- We are committed to ensuring the integrity of our assets to increase clean energy production whilst preventing harm to people and the environment.

We care today, so everyone enjoys tomorrow

Anja-Isabel
Dotzenrath

Tom Glover

Holger Himmel

Silvia Ortín Ríos

Sven Utermöhlen

Katja Wünschel

rwe.com

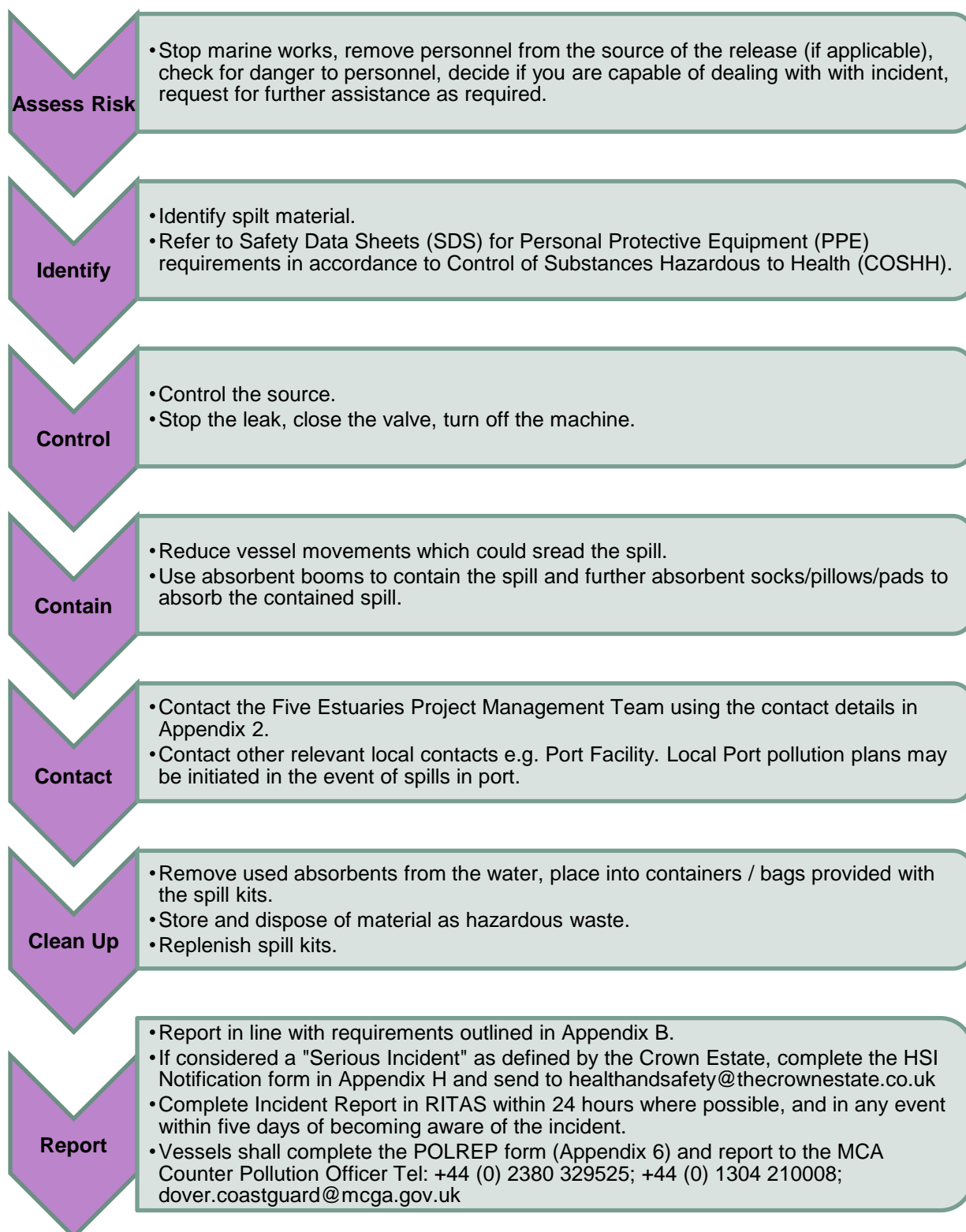


Appendix 2. **FIVE ESTUARIES INCIDENT REPORTING PROCEDURE**

The relevant reporting procedure will be included at time of update to the PEMP.

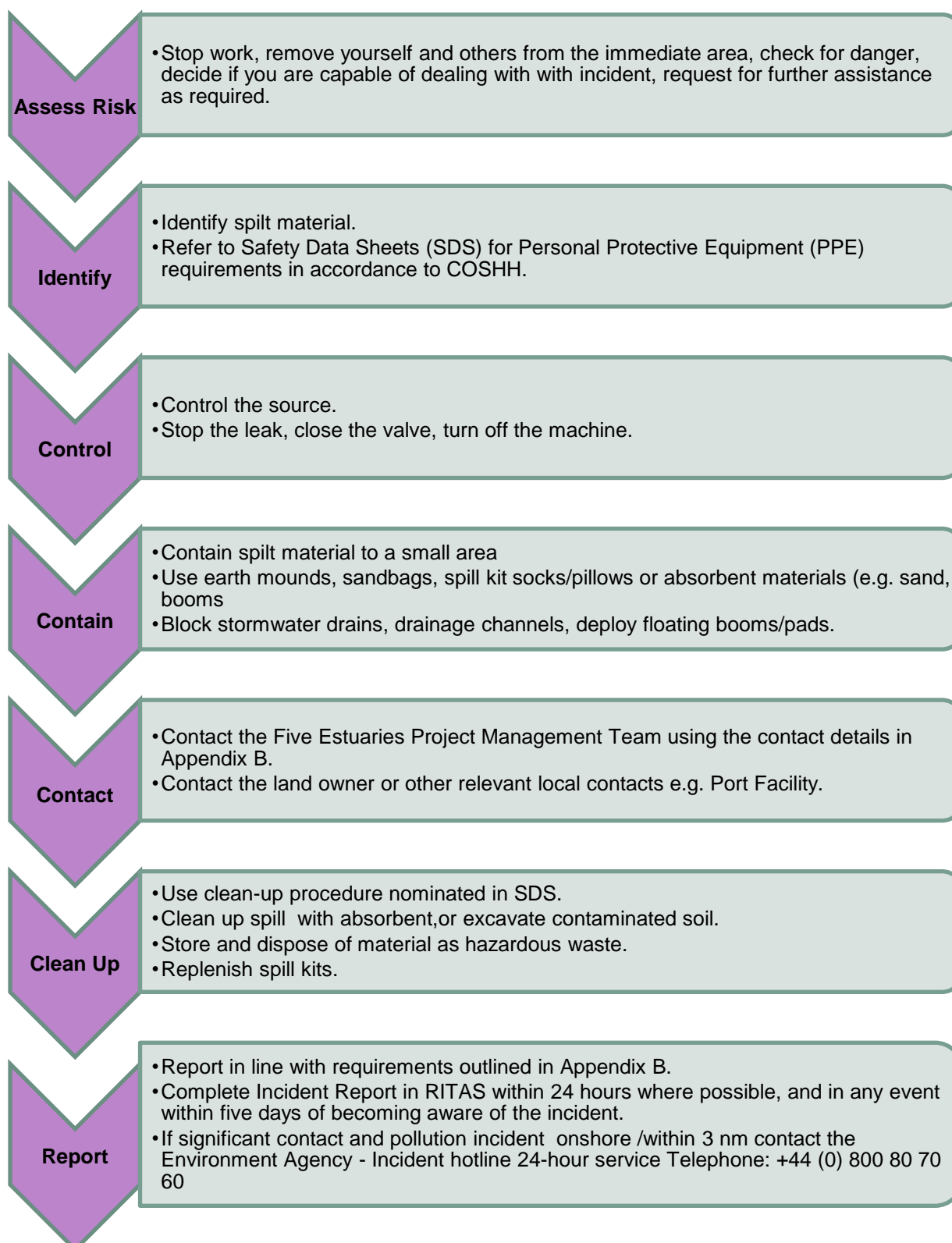


Appendix 3. FIVE ESTUARIES MARINE SPILL PROCEDURE



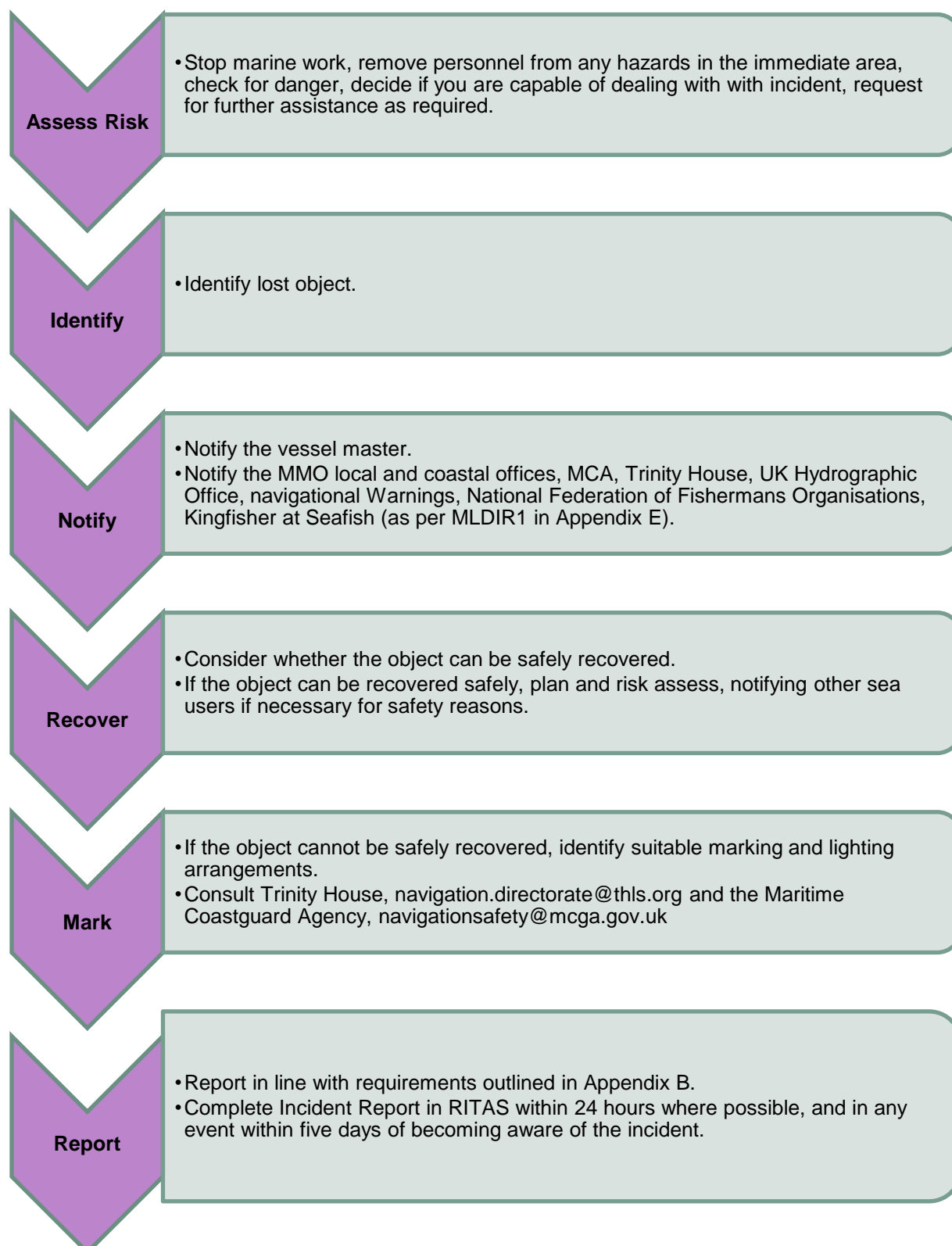


Appendix 4. FIVE ESTUARIES TERRESTRIAL / INLAND WATERWAYS SPILL PROCEDURE





Appendix 5. FIVE ESTUARIES DROPPED OBJECT PROCEDURE





Appendix 6. POLREP – POLLUTION REPORT FORM FOR VESSELS

Initial Pollution Report Format of CG77 POLREP		
A	Classification of incident (Doubtful / Probable / Confirmed)	
B	Date and Time (Pollution observed / reported and identity of observer / reporter)	
C	Position and extent of pollution (Latitude and Longitude where possible. State range and bearing from prominent landmark. Estimate amount of pollution, e.g., extent of polluted area, number of tonnes of oil spilled, number of drums / containers lost).	
D	Tide and wind (Speed and direction)	
E	Weather (Conditions and sea state)	
F	Characteristics of pollution (Type of pollution, e.g., liquid, floating solid, semi liquid, discolouration of sea, visible vapour etc.)	
G	Source and cause of pollution (From vessel or other source. If vessel state whether deliberate discharge or casualty (give details). Where possible give name, type, size, nationality, and Port of Registry of polluting vessel. If relevant give course, speed and	
H	Vessels in area (If polluter cannot be identified give details of possible polluting vessels.)	
J	Records (State whether photographs have been taken, or samples for analysis)	
K	Remedial action Describe action taken or intended to deal with	
L	Likely effect of pollution (e.g., arrival on beach/landfall with estimated timing).	
M	Names Record organisations/contacts who have been informed.	
N	Other (e.g., names of other witnesses, references to other instances of pollution pointing to source).	
	Print Name:	Job Title:



Appendix 7. MARINE LICENSE DROPPED INCIDENT REPORT – MLDIR1

Marine Licence Dropped Incident Report

MMO pro-forma for reporting the loss or dumping of synthetic materials and other refuse at sea. Forward to the MMO within 24 hours where possible, and in any event within five days of becoming aware of loss or dumping incident:

MMO Marine Licensing:

MMO Local Office (Lowestoft)
 Maritime & Coastguard Agency
 Trinity House
 UK Hydrographic Office
 Navigational Warnings
 National Federation of Fisherman's Organisations
 Kingfisher at Sea fish

marine.consents@marinemanagement.org.uk
lowestoft@marinemanagement.org.uk
navigationsafety@mcga.gov.uk
navigation.directorate@thls.org
navwarnings@ukho.gov.uk
navwarnings@btconnect.com
nffo@nffo.org.uk
kingfisher@seafish.co.uk

Identity of Reporter	
Full Name:	Date of Report:
Company	Position/Title:
Contact Telephone No:	Contact E-Mail:
Marine Licence / DCO ref:	
Operator/Organisation/Company Responsible for Incident:	
Name of Installation or Vessel responsible for the loss or dumping of the material	
Location/position of the installation/vessel at the time of the loss or dumping:	Quad and Block Number
Latitude (WGS84 DDD MM.MMM):	Longitude (WGS84 DDD MM.MMM):
Date of Loss/Dumping:	Time (24hours):
Weather conditions at time of loss/dumping:	Depth of Water (metres):
Wind Direction (0-360 degree):	Wind Speed (knots):
Beaufort Scale:	Wave Height (metres):
Tide rate:	Tide direction:
Number of hours before or after High Water item was lost:	



Materials lost or dumped provide as full a description as possible –i.e., clearly highlight if synthetic materials involved, are there wires involved, dimensions of materials etc – If photo's available please attach separately. Specify the purpose of the function of the materials	
Dimensions of object:	
Estimated clearance over object (including calculation methodology):	
If the materials are resting on the seabed are, they lying wholly within the 500M Safety Zone? Yes or No:	
Are the materials likely to float on sea surface or in water column? Yes or No:	
If the answer to question above is YES - are materials likely to reach shore or cross a median line? - please specify	
Reasons the loss or dumping (if Force Majeure is invoked please clearly state this):	
Are there plans to recover the materials? – If yes, specify details including anticipated timescales for the recovery operation. If there are no plans to recover the materials the reason for this must be clearly specified. Please detail if any further consent is required to undertake remediation action.	
Please provide details of any interim mitigation measures put in place to deal with immediate risks to navigation:	
Details of any radio Navigational Warnings and/or Notices to Mariner's:	
What are considered to be the risks and dangers to other users of the sea as a result of the lost or dumped materials not being recovered?	
Any further information that may be useful:	





Appendix 8. CROWN ESTATE HSI NOTIFICATION FORM

Form of HSI Notification

Details of business or undertaking notifying the incident: - FIVE ESTUARIES OFFSHORE WIND FARM

Legal name of business:	FIVE ESTUARIES OFFSHORE WIND FARM	
Name of site:	FIVE ESTUARIES OFFSHORE WIND FARM	
Business address:		
Contact phone number:	Work hours:	Mobile:
Business email address:		

Incident Details

Incident type		
This is to notify of:	<input type="checkbox"/> Serious incident	<input type="checkbox"/> Non-fatal RIDDOR Reportable Incident
Provide a brief explanation of the type of incident (i.e.) fall from height, vessel collision):		
Incident date, time and location		
Date of incident:	Location of incident:	
Time of incident:		
Description of the incident. Please provide as much detail as possible		
Do you propose to release a press/public statement in connection with the incident?		
<input type="checkbox"/> Yes <input type="checkbox"/> No		

Notifier's details

<input type="checkbox"/> Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Miss <input type="checkbox"/> Ms	First name:	Last name:
Position at workplace:	Contact phone number:	
Email:		
Is this the person that should be contacted for further information?		
<input type="checkbox"/> Yes <input type="checkbox"/> No		
If no, please provide the name and contact details of the appropriate person, should further information be required.		
<input type="checkbox"/> Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Miss <input type="checkbox"/> Ms	First name:	Last name:
Position at workplace:	Contact phone number:	

Please complete and return this form to healthandsafety@thecrownestate.co.uk



F I V E 
ESTUARIES
OFFSHORE WIND FARM

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