

Project Title	Seagreen Wind Energy Ltd
Document Reference Number	LF000009-CST-OF-PLN-0001

Operations Environmental Management Plan (OEMP)

Section 36 Consent, Condition 14
 For approval of the Scottish Ministers

This document contains proprietary information belonging to Seagreen Wind Energy Ltd /or affiliated companies and shall be used only for the purpose for which it was supplied. It shall not be copied, reproduced, disclosed or otherwise used, nor shall such information be furnished in whole or in part to third parties, except in accordance with the terms of any agreement under which it was supplied or with the prior consent of Seagreen Wind Energy Ltd and shall be returned upon request. © Copyright of Seagreen Wind Energy Ltd 2024

Rev	Date	Reason for Issue	Originator	Checker	Approver
03	13/05/2024	Approved for Use	<Redacted>	<Redacted>	<Redacted>

Table of Contents

Consent Plan Overview	4
1. Introduction	6
1.1 Consents and Licences	6
1.2 Project Description	6
1.3 Consent and Licence Requirements.....	8
1.4 Linkages with other Consent Plans and Consent Conditions.....	11
1.5 O&M Management	12
1.6 Updates and Amendments	13
2. Scope and Objectives.....	14
2.1 Compliance with the ES and ES Addendum	14
2.2 Structure of this Document	14
3. Environmental Management Framework	16
3.1 Seagreen Policies	16
3.2 Environmental Roles and Responsibilities	16
3.3 Communications	24
3.4 Compliance Monitoring and Reporting	24
3.5 Environmental Incidents and Non-Compliances.....	25
3.6 Personnel Competency and Training	28
4. Management of Environmental Aspects and Compliance Obligations	30
4.1 Overview	30
4.2 Marine Species.....	30
4.3 Marine Archaeology.....	30
4.4 Other Marine Users	30
4.5 Marine Pollution Prevention and Contingency Planning.....	31
4.6 Chemicals and Fuel Oil Usage	31
4.7 Marine Invasive Non-Native Species	33
4.8 Waste Management	36
4.9 Dropped Objects	37
4.10 Other	39



5. References	41
Appendix A – List of Abbreviations and Definitions	42
Appendix B – Change Management Procedure	45
Appendix C – OEMP Linkages to Other Consent Conditions	46
Appendix D – O&M Phase Contractor Reporting Deliverables	49
Appendix E – Contractor Pre-Commencement Checklist	54
Appendix F – Seagreen Non-Compliance Report Template	55
Appendix G – Seagreen Environmental Statement (ES)/ES Addendum Commitments Registers	56

Consent Plan Overview

Purpose of the Operations Environmental Management Plan

This Operations Environmental Management Plan (OEMP) has been prepared to address the specific requirements of the relevant conditions attached to the Section 36 (S36) Consents and OTA Marine Licence (collectively referred to as 'the Consents') issued to Seagreen Wind Energy Limited for the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms (OWFs) and the associated Offshore Transmission Asset (OTA). Seagreen Alpha and Seagreen Bravo OWFs and the OTA are collectively referred to as the 'Seagreen Project'.

The overall aims and objectives of the OEMP are to detail to those involved in the operation and maintenance of the Seagreen Project, the series of measures and requirements to manage environmental aspects based on commitments made by Seagreen and the requirements of the Consent conditions. This OEMP is intended to meet the requirement for an EMP to cover the operational phase of the project, providing continuity with the approved Offshore Construction Environmental Management Plan (CEMP).

All Seagreen Contractors (including their Sub-Contractors) involved in the operation and maintenance (O&M) of the Seagreen Project are required to comply with this OEMP through conditions of contract.

Scope of the OEMP

This OEMP covers, in line with the requirements of the Consents, and in line with industry standards and good practice, the following:

- environmental management framework for the Seagreen Project including: roles, responsibilities and chains of command in respect of environmental management for the protection of environmental interests; compliance monitoring and reporting; environmental incident management; and personnel competency
- management measures to prevent adverse impacts to environmental interests including, but not limited to: marine species; marine archaeology; pollution prevention measures; marine invasive non-native species (INNS) prevention strategy; dropped objects prevention and recovery strategy; and overarching waste management guidance.

This OEMP applies to the OWF assets and the OTA. When the OTA is transferred to an OFTO, this OEMP will be further updated to remove reference to the OTA since Seagreen will no longer have any interests or compliance responsibilities in relation to these assets.

OEMP Audience

This OEMP will be submitted for approval to the Scottish Ministers/Licensing Authority and other stakeholders in relation to monitoring compliance with the specific requirements of the relevant consent conditions.

Compliance with this OEMP will be monitored by: the Seagreen Environmental Advisor, Seagreen's appointed Contractors and the Marine Scotland Licensing and Operations Team (MD-LOT).

Copies of this OEMP are to be held in the following locations:

- Seagreen head office;
- Seagreen Marine Coordination Centre;
- at the premises of any Contractor;
- aboard any vessel engaged in O&M works.

1. Introduction

1.1 Consents and Licences

Seagreen Wind Energy Limited (SWEL) was awarded Section 36 Consents (S36 Consents) under the Electricity Act 1989 by Scottish Ministers in October 2014 for Seagreen Alpha and Seagreen Bravo Offshore Wind Farms (OWFs). Marine Licences for Seagreen Alpha OWF, Seagreen Bravo OWF and the Offshore Transmission Asset (OTA) were also awarded by Scottish Ministers in October 2014 under the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009. Together the wind farms Seagreen Alpha and Seagreen Bravo and the OTA collectively comprise 'the Seagreen Project'.

In 2018, following application by SWEL, the existing 2014 consents for the Project Alpha and Project Bravo OWFs were varied by Scottish Ministers, to remove the consented OWF capacity limits, to allow the installation of higher rated wind turbine generators (WTGs).

This Operations and Maintenance Environmental Management Plan (OEMP) ensures compliance with conditions of the S36 Consents as varied, for Seagreen Alpha and Seagreen Bravo, and the OTA Marine Licence (together 'the Consents') in relation to an operations phase Environmental Management Plan.

The Seagreen Project also benefits from a Marine Licence permitting the use of an alternative landfall cable installation methodology from that licensed in the OTA Marine Licence. This Marine Licence will expire at or before the end of construction and its requirements will not apply to the O&M phase. The other conditions of the OTA Marine Licence will continue to apply, however.

The Marine Licences for the construction and operation of the Seagreen Project will continue to apply until Decommissioning. Other Marine Licences and European Protected Species Licences were secured for various seabed preparation and pre-construction survey activities. All construction specific licenses have or will expire before the project is fully commissioned and their requirements will not apply to the O&M phase. New licenses will be secured, as required, following discussions with MD-LOT. For example, an EPS Licence to cover O&M activities will be secured and new marine licences may be required for activities which are not covered by the construction and operation Marine Licences or by related Seagreen consent condition documents.

1.2 Project Description

The Seagreen Project is located in the North Sea, in the outer Firth of Forth and Firth of Tay region and comprises the OWFs (the WTGs, their foundations and associated array cabling), together with associated infrastructure of the OTA (Offshore Substation Platforms (OSPs), their foundations and the offshore export cables), to facilitate the export of renewable energy to the national electricity transmission grid. The location of the Seagreen Project is shown in Figure 1.1.

Phase 1 of the Seagreen Project, to which this OEMP applies, consists of the following key components:

- 114 WTGs installed on three-legged steel jackets, each installed on suction bucket caissons;
- One OSP, installed on 12 pin pile foundations;
- A network of 286km of inter-array subsea cables to connect strings of WTGs together and to connect these WTGs to the OSP;

Inter-array cables were buried where possible and where burial was not possible cable protection is being installed.

- Three subsea export cables, totaling 189km in length, to transmit electricity from the OSP to the landfall at Carnoustie and connecting to the onshore export cables for transmission to the onshore substation and connection to the National Grid network. Export cables were buried where possible and where burial was not possible cable protection was installed.

The remaining infrastructure (up to 36 further WTGs, one or more further OSPs, a network of inter-array cables and a single HVDC export cable to Cockenzie, East Lothian) will be installed in Phase 1A of the Seagreen Project and is not detailed in or covered by this OEMP.

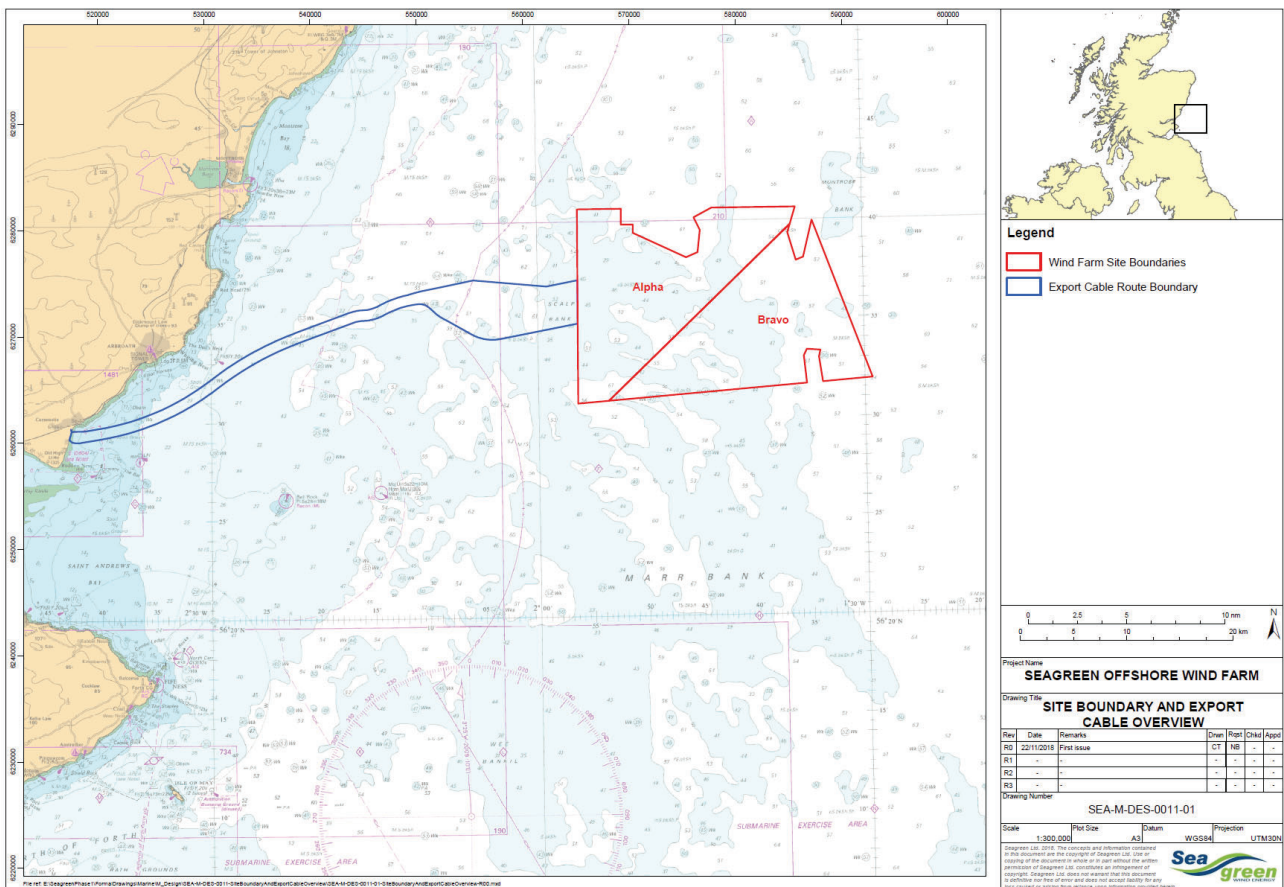


Figure 1.1 Seagreen Project Location

1.3 Consent and Licence Requirements

This OEMP has been prepared to part-satisfy the requirements condition 14 of the S36 Consents (for both Seagreen Alpha and Seagreen Bravo) and condition 3.2.1.2 of the OTA Marine Licence, as set out in Table 1.1. This OEMP is intended to meet the requirement for an EMP as required by the Consents.

Table 1.1 - Consent Conditions to be discharged by the OEMP

Document	Condition Reference	Condition Text	Where Addressed in OEMP
S36 Consent	Condition 14	The EMP must provide the over-arching framework for on-site environmental management during the phases of development as follows: (...) b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation (Environmental management during decommissioning is addressed by the Decommissioning Programme provided for by condition 3).	This OEMP applies to the operational phase and replaces the Offshore Construction EMP for the operational (Phase 1) assets ¹
	Condition 14	The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures.	Section 2.1 (Compliance with the ES and ES Addendum) Section 4 (Management of Environmental Aspects)
	Condition 14	The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development.	Section 3.2 (Environmental Roles and Responsibilities)

¹ The offshore CEMP will continue to apply to Phase 1A construction works, following review and update

Document	Condition Reference	Condition Text	Where Addressed in OEMP
	Condition 14	The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 27) over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG.	Section 1.5 (Updates and Amendments)
	Condition 14	The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.	Section 4 (Management of Environmental Aspects)
	Condition 14	The Company must, no later than 6 months prior to the Commencement of the Development, submit an Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company).	<i>The Offshore Construction EMP was submitted and approved before the Commencement of the Development.</i> This document sets out the OEMP to apply during the operational phase
	Condition 14	Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.	Section 1.5 (Updates and Amendments)

Document	Condition Reference	Condition Text	Where Addressed in OEMP
OTA Marine Licence	Condition 3.2.1.2	The Licensee must, no later than 6 months prior to the Commencement of the Works, submit an EMP, in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with the JNCC, SNH, SEPA and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.	<i>The Offshore Construction EMP was submitted and approved before the Commencement of the Works</i>
	Condition 3.2.1.2	Any updates or amendments made to the EMP by the Licensee must be submitted, in writing, by the Licensee to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with Angus Council.	Section 1.5 (Updates and Amendments)
	Condition 3.2.1.2	The EMP must provide the over-arching framework for on-site environmental management during the phases of works as follows: (...) the operational lifespan of the Works from the Final Commissioning of the Works until the cessation of electricity transmission (environmental management during decommissioning is addressed by condition 3.2.2.2).	This OEMP applies to the operational phase
	Condition 3.2.1.2	The EMP must set out the roles, responsibilities and chain of command of any Licensee personnel, Contractors or sub-Contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Works.	Section 3.2 (Environmental Roles and Responsibilities)
	Condition 3.2.1.2	It must address, but not be limited to, the following over-arching requirements for environmental management: a) Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the Application and pre-consent and pre-construction surveys, and include the relevant parts of the Construction Method Statement ("CMS");	Section 4 (Management of Environmental Aspects) <i>Note the CMS does not apply in the O&M phase</i>
	Condition 3.2.1.2	b) A completed Written Scheme of Investigation ("WSI") approved by Historic Scotland;	Section 4.3 (Marine Archaeology) See also separate approved WSI & PAD document

Document	Condition Reference	Condition Text	Where Addressed in OEMP
	Condition 3.2.1.2	c) A Marine Pollution Contingency Plan (“MPCP”) to include, but not necessarily limited to, provision in respect to spills and collision incidents occurring during construction and operation of the works, whilst taking into account existing plans for all operations including Offshore installations that may have an influence on the MPCP. Practices used to refuel vessels at sea which must confirm to industry standards and to relevant legislation. The MPCP must also set out how any oil leaks within the structures are to be remedied and that such relevant repairs are required to be undertaken without undue delay;	Section 4.5 (Marine Pollution Prevention and Contingency Planning) See also separate MPCP document
	Condition 3.2.1.2	d) Management measures to prevent the introduction of marine non-native marine species;	Section 4.7 (Invasive Non-Native Species)
	Condition 3.2.1.2	e) Measures to minimise, recycle, reuse and dispose of waste streams; and	Section 4.8 (Waste Management)
	Condition 3.2.1.2	The Licensee must, no later than 6 months prior to the Final Commissioning of the Works, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Works to the Licensing Authority for their written approval. Such approval may be given only following consultation with the JNCC, SNH, SEPA and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.	Section 1.6 (Updates and Amendments) <i>See note below</i>
	Condition 3.2.1.2	The EMP must be regularly reviewed by the Licensee and the FTRAG (refer to conditions 3.2.2.18 and 3.2.3.10) over the lifespan of the Works and be kept up to date (in relation to the likes of construction methods and operations of the Works in terms of up to date working practices) by the Licensee in consultation with the FTRAG.	Section 1.6 (Updates and Amendments)
	Condition 3.2.1.2	The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.	Section 4 (Management of Environmental Aspects)

1.4 Linkages with other Consent Plans and Consent Conditions

This OEMP document sets out the overarching environmental management framework to be applied during the O&M phase of the Seagreen Project. Note that following transfer of the OTA to an OFTO, this OEMP will

apply only to the Seagreen OWFs. This OEMP forms part of a suite of approved Consent Plans required under the Consents that will provide the framework for the management of the Seagreen Project and which should be read alongside each other. The Consent Plans are listed in table 1.2.

Table 1.2 – List of Consent Plans applicable to the O&M phase of the Seagreen Project

S36 Condition	OTA ML Condition	Consent Plan	Relevant section of this OEMP
14	3.2.1.2(c)	Marine Pollution Contingency Plan (MPCP)	Section 4.5
26	3.2.1.1	Project Environmental Monitoring Programme (PEMP)	Section 4.2
22	3.2.1.2	Marine Archaeology Written Scheme of Investigation (WSI) and Protocol for Archaeological Discoveries (PAD)	Section 4.3
16	-	Operations and Maintenance Programme (OMP) (Wind Farm Assets)*	n/a
-	3.2.3.2	Operations and Maintenance Programme (OMP) (Offshore Transmission Assets)*	n/a
3	3.2.2.2	Decommissioning Programme	n/a

* The OMPs incorporate the requirements of the other Consent Plans required under the S36 Consents and OTA Marine Licence

The OEMP will necessarily be consistent with a number of other Consent conditions. Details of the linkages and relevant cross references are set out in Appendix C.

It should be noted that information is not repeated across Consent Plans, rather, where pertinent information is available in linked Consent Plans, the relevant Consent Plans are referred to within this OEMP. The plans are not required for approval of the OEMP but are provided for ease of reference.

1.5 O&M Management

The Seagreen Project will be operated and maintained by SSE Renewables (SSER). However, for clarity, the term 'Seagreen' is used to refer to the part of the SSER business responsible for the operation and maintenance of the Seagreen Project

The majority of maintenance works will be contracted to specialist Contractors. Seagreen will act as contract manager and works supervisor in these cases. However, some minor maintenance works will be undertaken by Seagreen-employed technicians. The remainder of this OEMP is focused on the management of contracted works to ensure environmental and consents compliance is secured. However, the management arrangements set out in this OEMP will also apply, where relevant, to non-contracted ('in house') works.

Seagreen shall select Contractors to undertake O&M works in accordance with an approved selection process that includes an assessment of past environmental performance and compliance and resourcing for environmental management.

Seagreen's Contractors and their Sub-Contractors, in undertaking O&M activities on the Seagreen Project, will ensure compliance with all relevant environmental and maritime legislation, licences and permissions.

Seagreen require that design embedded measures and adherence to good working practices, in order to minimise risks to the environment, are applied by Seagreen's Contractors (and their Sub-Contractors).

Contractors may also be required to complete an Environmental Risk Assessment and Method Statement prior to the commencement of any major works, for review and acceptance by Seagreen. This document ensures that Contractors have appropriate environmental/consents compliance and risk management measures in place before commencing work. This document shall refer to this OEMP, the OMP and other Consent Plans as appropriate.

Good working practices that will be applied during the operation and maintenance of the Seagreen Project are set out in the Operations and Maintenance Plan (Wind Farm Assets) (LF000009-CST-OF-PRG-0001) and Operations and Maintenance Plan (Offshore Transmission Infrastructure) (LF000009-CST-OF-PRG-0004). Method statements that reflect these good working practices (and any others identified as being relevant to the works) shall be prepared by Contractors sufficiently in advance of their works, to be subject to review by Seagreen for acceptance.

1.6 Updates and Amendments

Updates to this OEMP might be required, for example, due to changes to the proposed operation methodology (that require additional management or mitigation measures, or changes to measures already proposed), new environmental sensitivities identified by monitoring post construction, or, emerging guidance, or new legislative requirements.

The change management process for any updates required to the OEMP, including resubmission of the plan for approval, is outlined in Appendix B.

This process will also be followed for the review and update of the OEMP following divestment of the OTA to an OFTO.

2. Scope and Objectives

This OEMP has been prepared to address the specific requirements of the relevant conditions attached to the Section 36 consents and Marine Licences (collectively referred to as 'the Consents') issued to Seagreen Wind Energy Limited (Seagreen) and applies to all O&M activities from the point of first commissioning of the works until the cessation of electricity transmission.

The onshore transmission cable runs from landfall (Mean High Water Springs at Carnoustie) to final connection at Tealing substation and is not within the scope of this document. This document applies to the offshore assets below Mean High Water Springs.

The overall objective of this OEMP is to provide the overarching framework for Environmental Management during the operation and maintenance of the Seagreen Project.

The OEMP has three primary functions:

- i. to ensure environmental consent and licence requirements relevant to the operation and maintenance of the OWFs and the OTA are implemented and fulfilled;
- ii. to ensure overarching compliance with legislative requirements and relevant industry good practice; and
- iii. to ensure consistency in approach to environmental performance management across Seagreen and Seagreen's Contractors during operation and maintenance of the OWFs and the OTA.

All Seagreen personnel and Seagreen's Contractors (including their Sub-Contractors) involved in the Seagreen Project must comply, as a minimum, with the OEMP.

2.1 Compliance with the ES and ES Addendum

The relevant Consent conditions require that the Seagreen Project be operated in accordance with the methods assessed in the ES and ES Addendum and that O&M related mitigation proposed in the ES and ES Addendum is to be delivered. A register of the mitigation, management and monitoring commitments (as applicable to the O&M phase) made in the ES and ES Addendum, required by consent conditions is set out in the Commitments Register included at Appendix G.

2.2 Structure of this Document

The remainder of this document sets out information required to fulfil the criteria of the conditions of the Consents as set out in section 1.3. The OEMP has been structured accordingly, as set out in Table 1.3.

Table 1.3 Structure of the OEMP

Section	Title	Overview
3	Environmental Management Framework	Specifies Seagreen’s overarching Environmental Management Framework including details on roles and responsibilities in relation to this OEMP. This section also includes Seagreen’s approach to reporting, communications, training and awareness, and compliance monitoring.
4	Management of Environmental Aspects and Compliance Obligations	Presents a series of measures to manage environmental aspects based on commitments made by Seagreen with the application and the requirements of the consent conditions. This section also sets out measures to manage specific issues identified within the consent conditions, including marine pollution, chemical usage, marine INNS, waste, and dropped objects.
5	Seagreen Document References	Lists the document references made within this OEMP
Appendices	Appendix A – List of Abbreviations and Definitions Appendix B –Change Management Procedure Appendix C – OEMP Condition Linkages to Other Consent Conditions Appendix D – O&M Phase Contractor Reporting Deliverables Appendix E – Contractor Pre-Commencement Checklist Appendix F – Seagreen Non-Compliance Report Template Appendix G – ES/ES Addendum Commitments Registers	

3. Environmental Management Framework

This section details the environmental management framework required in order to manage environmental commitments made by Seagreen and mitigation requirements as identified in the Environmental Statement (ES), and by the requirements of the conditions of the Consents, as detailed in section 1.3 of this document.

Furthermore, this section aims to identify good practice and requires that Seagreen and Seagreen's Contractors comply with the requirements of relevant and current environmental and maritime legislation as standard.

The environmental management framework consists of six key areas:

- Policies;
- Roles and Responsibilities;
- Communications;
- Compliance Monitoring and Reporting;
- Environmental Incidents and Non-Compliances; and
- Personnel Competency and Training.

3.1 Seagreen Policies

Seagreen is implementing SSE policies with regards to health and safety and environmental management. Seagreen committed through the SSE 'Environment and Climate Change Policy' to protecting the environment, preventing pollution and minimising adverse environmental impacts. Furthermore, where possible, Seagreen will seek to bring about positive environmental outcomes.

Seagreen recognises the complex global challenge of climate change and the role an energy company has to play in taking action on climate change and helping the UK and Ireland move towards a less carbon intensive energy system.

SSE's 'Sustainability and Corporate Responsibility Policy' is intended to ensure that in meeting SSE's core purpose, *to provide energy needed today and strive for a better world of energy for tomorrow*, its actions and decisions are responsible and sustainable, both in its direct operations and its value chain.

3.2 Environmental Roles and Responsibilities

This section sets out the roles and responsibilities of key personnel in Seagreen relevant to the delivery, management and compliance to this OEMP.

Key roles in Seagreen are:

- Site Operations Manager
- Commercial Managers
- Shift Supervisors
- Balance of Plant Technicians

- Environmental Advisor
- Control Room Operator (Marine Coordinator)
- SHW (Safety, Health and Wellbeing) Advisor

Supporting roles to this structure providing advice and implementation of environmental requirements are::

- Fisheries Liaison Officer
- Archaeological Consultant

The key responsibilities of the roles listed above, including reporting arrangements, are provided in the following subsections.

3.2.1 **Site Operations Manager**

Reports to: SSE Offshore Wind Fleet Manager

The Site Operations Manager has the following responsibilities in relation to the OEMP:

- Ensuring that sufficient resources and processes are in place across Seagreen, to deliver/comply with the obligations set out in this OEMP and to manage potential environmental risks;
- Ensuring that provision is made for environmental management issues to form part of Seagreen meetings and communications;
- Providing senior direction in relation to cases of Contractor (and their Sub-Contractor) non-compliance;
- Ensuring that the Environment Advisor is integrated into the daily project reporting and notifications received, in order to monitor contractor compliance with Seagreen consents and the OEMP; and
- Ensuring that any corrective actions arising from environmental incidents and/or non-compliances are implemented.

3.2.2 **Commercial Managers**

The Commercial Managers are responsible for establishing contractual obligations for Contractors (and their Sub-Contractors) in relation to this OEMP and administering the contractual requirements in relation to incidence of Contractor (and their Sub-Contractor) non-compliance.

3.2.3 **Shift Supervisors**

Reports to: Site Operations Manager

Shift Supervisors are based offshore and are responsible for the co-ordination and supervision of offshore works to ensure that O&M is executed safely and efficiently. Their key responsibilities include:

- Planning and co-ordinating with Contractors, the Control Room Operator and others to ensure the delivery of works within the requirements of the SHE requirements and the Consents;

- Reporting environmental incidents in accordance with the procedures defined in section 3.5 of this OEMP;
- Observe environmental protection measures and raise any concerns with the Contractor/vessel;
- Ensure environmental incidents are adequately reported, investigated and that agreed corrective actions are implemented;
- Assist with conducting inspections/checks of vessel and assets; and
- Regularly interface with the Seagreen Environmental Advisor as necessary, acting as a link between onshore environmental management and the Contractors/vessels operating offshore.

The Site Operations Manager is supported by a **Site Operations Assistant** for administrative support including record keeping necessary for compliance with this OEMP.

3.2.4 Balance of Plant Technicians

Reports to: Site Operations Manager

Balance of Plant Technicians are responsible for undertaking maintenance tasks that do not fall within a Contractor scope. Their key responsibilities therefore include:

- Ensuring compliance with this OEMP in relation to their own work;
- Reporting environmental incidents in accordance with the procedures defined in section 3.5 of this OEMP; and
- Co-ordinating with Contractors working on the same vessel or asset with respect to environmental management matters.

3.2.5 Control Room Operator (Marine Coordinator)

Reports to: Control Room Manager

The role of Marine Coordinator is combined with that of Control Room Operator. The Control Room Operator is responsible for the monitoring of people, vessels and offshore structures with regards to the safe operation and maintenance of the assets. Key responsibilities relevant to the OEMP include:

- Issue navigational safety notifications, including Notice to Mariners (NtMs), Notice to Airmen (NOTAMs) (as required);
- Coordination of responses to safety and environmental incidents, including as detailed in the MPCP and in section 3.5 of this OEMP (with input and support from the Environmental Advisor as required); and
- Implementation of mitigation measures in relation to vessel management and navigational safety as specified in the relevant Consent Plans.

3.2.6 Environmental Advisor

Reports to: SSE Renewables Environment & Stakeholder Manager

The O&M team will include a suitably qualified and experienced Environmental Advisor, who is responsible for monitoring and reviewing compliance with the project consents and environmental legislation and for the implementation of this OEMP. The responsibilities of the Environmental Advisor include:

- Providing guidance to the O&M Team on compliance with consent conditions and environmental commitments and providing mechanisms for compliance monitoring;
- Providing environmental and consents compliance training (alongside the SHW Advisor) to the O&M Team and Contractors, and developing training materials to be used by Contractors, as part of the Contractor responsibilities to deliver ongoing toolbox talks;
- Acting as a primary contact point (and advisor to the Control Room Operator) in the event of an incident (such as a pollutant spill, dropped object or Archaeological Exclusion Zone (AEZ) incursion) or non-compliance, in accordance with the MPCP and section 3.5 of this OEMP;
- Supporting the identification and implementation of corrective action following an incident or non-compliance;
- Ensuring that Marine Coordination Centre personnel are familiar with the environmental requirements set out in the Consents documents, and that procedures are in place to ensure compliance;
- Oversee a programme of environmental reviews in relation to incident response readiness, including observations of Contractor environmental drills and exercises;
- Review outputs from vessel inspections (carried out by suitably qualified persons) to ensure compliance with project requirements in relation to waste, fuel and chemical storage and management, and pollution control measures (to be conducted pre-mobilisation and regularly during deployment);
- Reviewing Contractor documentation – including risk assessments and method statements for activities that may have an environmental impact – for acceptance in advance of the works commencing;
- Reviewing Contractor Environmental Management Systems, risk assessments and method statements, and environmental and incident procedures to ensure compliance with the requirements of this OEMP;
- Where appropriate and in co-ordination with the SSER Offshore Fisheries Manager, liaising with fishing industry groups, with assistance from the appointed FLO, and implementing agreed actions as appropriate;
- Acting as the primary contact for MD-LOT, FTRAG, regulators and other marine stakeholders for environmental and consents compliance matters, representing Seagreen at meetings/forums as appropriate;

- Commissioning and managing environmental surveys as required under the PEMP, following consultation with the appropriate FTRAG groups and Marine Scotland;
- Reporting to MD-LOT and FTRAG with regard to the monitoring commitments made in the PEMP;
- Submit all notifications required under the conditions of the Consents to MD-LOT (and other regulators and stakeholders) including, for example, Contractor chemicals lists;
- Manage the process of updating this OEMP and any of the other Consent Plans required by the Consents, as required;
- Engaging with Marine Scotland in light of unplanned or unforeseen works which may require additional approvals and/or licences; and
- Ensuring an adequate and effective spill response/dropped objects recovery contract is in place.

Where required and on request, the Environmental Advisor will have access to outputs from vessel inspections, such as Contractor's Marine and Vessel Inspection documents (CMID), to enable review of compliance with project environmental requirements.

Contractors are responsible for identifying, implementing and auditing their own environmental mitigation, compliance and incident response procedures. For O&M works undertaken by SSE personnel, the Environmental Advisor will be responsible for identifying, implementing and auditing environmental mitigation, compliance and incident response procedures for these activities.

3.2.7 SHW Advisor

Report to: SHWE Manager

In regard to the OEMP, the SHW Advisor is responsible for the overall Incident Reporting Process and as such is the first point of Seagreen contact for all incidents for Seagreen personnel. However, for those of an environmental nature (as defined in section 3.5) the Environmental Advisor works alongside the SHW Advisor who provides advice on incident classification and supports escalation of the incident, as necessary. Where an incident has both an environmental and H&S impact, the SHW Advisor and Environmental Advisor will take joint responsibility for assisting with the management, reporting and investigation of the incident.

3.2.8 Fisheries Liaison Officer (FLO)

Reports to: Environmental Advisor

Seagreen will retain the services of an external FLO during the O&M phase, to ensure effective communications with fisheries interests are maintained as fishing activity resumes within the wind farm site.

The responsibilities of the FLO in relation to the Consents including this OEMP are as follows:

- Provide information relating to the safe operation of fishing activity within and in the vicinity of the Site;
- Participate in the Forth and Tay Commercial Fisheries Working Group (CFWG), to facilitate commercial fisheries dialogue on behalf of Seagreen;

- Monitor compliance with good practice guidelines and the Fisheries Mitigation and Management Strategy (FMMS) (Annex 4 of the OMP (LF000009-CST-OF-PRG-0001)).
- Liaise with Seagreen Environmental Advisor regarding compliance with the FMMS and provide advice in relation to the adequacy of the mitigation measures in place; and
- Develop material on compliance with the FMMS to Seagreen personnel for use in inductions, presentations, production of awareness material, regarding good practice in managing coexistence and good relations between all O&M personnel (including Contractors) and activities and the commercial fishing vessels.

3.2.9 Archaeological Consultant

Reports to: Environmental Advisor

Seagreen will retain the services of an external Archaeological Consultant during the O&M phase. They will be responsible for advising Seagreen on all archaeological matters relating to the OWFs that might impact upon archaeological and cultural heritage resources.

The Archaeological Consultant has the following responsibilities:

- Assume clear role of interface between Seagreen and Historic Environment Scotland in the event of a potential find or an infringement of an AEZ, as detailed in the Marine Archaeological Written Scheme of Investigation & Protocol for Archaeological Discoveries (WSI/PAD);
- Support the Environment Advisor in the event of a potential find or an infringement of an AEZ;
- Support the Environment Advisor regarding compliance with the PAD in the event of a find of potential archaeological interest; and
- Develop and deliver training on relevant aspects of the WSI/PAD to Seagreen O&M and Contractor personnel including input to inductions, presentations and production of awareness material;

Noting that during the O&M phase, interactions with the seabed are likely to be limited, in relation to reporting of finds of archaeological interest, the Archaeological Consultant will:

- Brief Seagreen personnel and Contractor personnel on the types of archaeological finds and features that may be encountered and appropriate measures for interim conservation and safe storage;
- Advise Seagreen on the identification of finds and features and, if reasonably practicable, the character of their seabed locations;
- Advise Seagreen on material conservation of any recovered finds and any appropriate actions to be taken; and
- Where appropriate, pass on all details and records associated with any discoveries to MD-LOT and Historic Environment Scotland.

3.2.10 Contractors

Report to: Engineering/Contract Managers

All Contractors shall ensure that their own procedures comply with the mitigation and management measures and commitments presented in all Seagreen Consents and Consent Plans, including this OEMP, specific to their contractual obligations.

Adherence to the Seagreen OEMP is a contractual requirement and Contractors will be required to develop their own task-specific method statements and risk assessments to facilitate this.

Contractors therefore have the following responsibilities in relation to environmental compliance and this OEMP:

- Ensuring that sufficient and suitably qualified resources are in place to manage compliance with Seagreen consents and environmental requirements required by the Consents including this OEMP and compliance with all maritime and environmental legislative requirements applicable to their activities;
- Ensuring that all inductions provided will cover environmental management and environmental incident management procedures;
- Ensuring that all Contractor personnel and Sub-Contractors are made aware of environmental risks, the requirement to comply with this OEMP, applicable Seagreen Consents and Consent Plans and relevant environmental legislation relating to the operation and maintenance of the Seagreen Project;
- Developing and maintaining processes in place to comply with the Seagreen consents including this OEMP to manage potential environmental risks;
- Developing task specific method statements and risk assessments in place in advance of works (to cover environmental aspects), to ensure consistency and compliance with the Seagreen OEMP and MPCP;
- Ensuring that Sub-Contractors adhere to the requirements of Seagreen OEMP and produce task specific method statements and risk assessments for their activities;
- Monitoring compliance with the Contractor's task specific method statements and risk assessments, and in so doing the Seagreen OEMP. Activities are likely to include (but are not limited to) audits, spot-checks, inspections and drills;
- Ensuring they have capability to respond to leaks, spills and loss of containment in order to minimise risks of pollution to the marine environment;
- Reporting any environmental incident or non-compliance directly to the Seagreen Control Room Operator and Environmental Advisor;
- Producing and maintaining records of environmental related activity on-site and communicating those to the Environmental Advisor;

- Ensuring copies of the Marine Licences (as provided by Seagreen and as applicable to their work scope) are available for inspection at the locations specified in the Marine Licences
- Liaising with the Environmental Advisor, and Seagreen's FLO and Archaeological Consultant, where required; and
- Demonstrating compliance with the pre-commencement requirements listed in Appendix E of this OEMP.

3.3 Communications

3.3.1 Internal Communications

Seagreen's approach to communications and reporting will be informed by experience from other offshore wind farms within the UK. Seagreen personnel and Contractors shall be required to report regularly on SHE compliance during O&M activities. Reporting will include information on environmental management, such as details of environmental incidents (if any), and records of environmental checks and inspections undertaken, and other information as may be required to complete reporting responsibilities and to effectively monitor environmental performance.

All Seagreen personnel and Contractors will be required to report any environmental concerns, non-compliances or other issues to the O&M Site Manager and the Environmental Advisor immediately. Further details on incident reporting can be found in Section 3.5.

3.3.2 External Communications

Seagreen will liaise with MD-LOT, and other regulators and stakeholders, on environmental matters including consent conditions compliance and incident reporting.

The consents include a number of reporting requirements that apply in the O&M phase. The relevant consent conditions and reporting requirements, along with the expected or required frequency for reporting to MD-LOT, are set out in the relevant parts of section 4 and are referenced in Appendix C.

MD-LOT may also undertake monitoring of compliance with the consent conditions and approved Consent Plans through periodic site inspections. With appropriate notification, Seagreen will facilitate access to the site for this purpose.

Seagreen will continue to report non-compliances with the consent conditions to MD-LOT. See section 3.5.

3.4 Compliance Monitoring and Reporting

During the operation phase, weekly (or as required) progress meetings (generally via conference call) will take place involving the O&M Site Manager, Environmental Advisor, Control Room Operators and Contractors' representatives. The agenda for operational progress meetings will include an opportunity for discussion on consents compliance and environmental management issues that arise.

Contractors will be required to report regularly to Seagreen on operation activity. Contractor reporting will include information on environmental management, such as details of environmental incidents (if any), environmental statistics, non-compliances and records of environmental audits and inspections undertaken, and such other information as may be required for the Environmental Advisor to complete their internal and external (where required) reporting responsibilities.

Table 3.1 details the sources of data that may be utilised by the Environmental Advisor in order to monitor compliance with Consent Plans and conditions and to review environmental management performance more generally.

Table 3.1 Proposed routine operational environmental monitoring

Source	Description	Responsibility	Frequency
Daily Progress Reports (DPRs)	Log of daily activities covering the previous 24 hours, including records of any environmental incidents/observations	Contractor (if required)	Daily
Daily activity logs	Log of daily activities upon Seagreen directly chartered vessels covering the previous 24 hours, including records of any environmental incidents/observations	Seagreen directly chartered vessels (if applicable)	Daily
Marine coordination update	Daily call to discuss Safety, Health and Environment (SHE) incidents, activities during the previous 24 hours and a look ahead to activities taking place over the following 24 hours. Interaction with fisheries shall also be covered.	Marine Coordinator	Daily
Marine coordination update minutes	Written record of daily marine coordination updates	Marine Coordinator	Daily
SHE Observation Cards (HOCs)	Format of reports will depend on the safe system of work/Safety Management System used	Contractor, Seagreen, Seagreen chartered vessels (if applicable)	As and when they occur
Incident notifications	Reported environmental incidents (see section 3.5)	Contractor, Seagreen, Seagreen chartered vessels (if applicable)	As and when they occur
Marine Pollution Contingency Plan (MPCP) drills	Monitoring of MPCP drills for relevant vessel and offshore installations depending on spill risk and duration of contractor appointment. Note this is in addition to vessel SOPEP drills required under MARPOL.	Seagreen Environmental Advisor	During works activity (risk based)
Contractor notifications	As listed in Appendix D	Contractor	As specified in Appendix D

Appendix D lists the deliverables contractors are required to provide to enable Seagreen to effectively monitor environmental performance and to ensure compliance with consent conditions.

3.5 Environmental Incidents and Non-Compliances

3.5.1 Incidents

The Contractor is responsible for identifying and documenting all risks to the environment associated with their activities during the Seagreen project works and ensuring all suitable controls and processes to prevent spillage, environmental incidents and non-compliances with the Seagreen consents are, as far as is

reasonably practicable, implemented in advance of their works commencing. This shall be recorded in the Contractor’s Environmental Risk Assessment and Method Statement where required, prior to the commencement of any major works.

The Contractor is further responsible for having suitable response and reporting processes in place in advance of the works, if the above prevention measures fail, to be employed in the event of any spillage, environmental incident or non-compliance with the Seagreen consents. Contractors shall ensure that their incident response and reporting procedures are compliant with the procedures listed in Table 3.1 and the required actions (according to the incident classification) in Table 3.2.

Contractors shall take prime responsibility for responding to incidents occurring during the course of their work, in accordance with their incident response and reporting procedures.

Table 3.1: Response procedures according to incident type

Incident type	Location of Seagreen response procedure
Pollution incident (oil or chemical spill)	MPCP (Part 2)
Archaeology – infringement on Archaeological Exclusion Zones (AEZs) or archaeological discoveries	WSI and PAD <i>(References to ‘ECoW’ shall be read as references to the Environmental Advisor)</i>
Dropped objects	Renewables Dropped Objects (DROPOB1 form)

In the unlikely event that a wildlife incident occurs, such as injury to a marine mammal or an observed fish or bird mortality, the contractor or responsible member of staff will notify Seagreen as soon as reasonably practicable. This should be to the Environmental Advisor in the first instance. Seagreen shall develop and issue detailed incident response and reporting procedures for specific incident types and scenarios, as appropriate.

Similarly, in the event of a fluorinated gas (F gas) leak, of any quantity, from the Seagreen OSP, the contractor or responsible member of staff will notify Seagreen as soon as reasonably practicable. This should be to the Environmental Advisor in the first instance. The incident will be reported internally within 30mins, in line with incident reporting requirements, Seagreen shall develop and issue a detailed incident response to MD-LOT

The SHW Advisor will be responsible for the reporting of dropped objects only. The responsibility for notifying all other environmental incidents to Marine Scotland and for continued liaison during and after the response will fall to the Environmental Advisor.

Table 3.2: Environmental incident and non-compliance definitions and required actions

Class	Definition	Actions
Major environmental incident	<p>An event that is likely either by emission or breach of regulatory authorities consents, to cause major environmental impact.</p> <p>The remediation of the environmental damage is outside of the capability of Contractor. May require assistance from government agencies and/or other external resources</p> <p>Many widespread or long-term complaints</p> <p>Fatalities</p> <p>Serious disability</p> <p>Major Permit breach</p> <p>Damage to key operational component</p> <p>Disruption to operation (<1 year)</p> <p>Regional media coverage</p> <p>Prohibition notice or similar/ Business unit prosecution</p>	<ul style="list-style-type: none"> • Immediate stoppage of works by Contractor • Contractor to immediately implement incident response procedures • Incident requires immediate notification to SeagreenMarine Coordinator and Environmental Advisor • Incident requires immediate notification of the regulatory authorities by Seagreen • Following the incident, Contractor to complete incident reporting and issue to Environmental Advisor and SHE Advisor • Seagreen and Contractor to hold incident meeting. • Following the incident meeting, Seagreen Major Environmental Incident/Non-Compliance Report (Appendix F) to be completed with input from the Contractor and Seagreen and issued to the regulatory authorities. Meeting to be held between Seagreen and the regulatory authorities to discuss the content of the Report • Incident likely to require management practices in addition to those in this OEMP. Where this is the case, management practices must be agreed with Seagreen and regulatory authorities where appropriate prior to implementation • Environmental Advisor to log event and all follow up actions • Incident requires logging in the Seagreen SEARs database system
Serious environmental incident	<p>An event that is likely either by emission or breach of regulatory authorities consents, to cause serious environmental impact, but which remediation of the environmental damage is within the capability of the Contractor</p> <p>Reportable injury</p> <p>Reportable disease</p> <p>Serious Permit breach</p> <p>Prohibited activity</p> <p>Damage to major item</p> <p>Disruption to operation (<1 month)</p> <p>Prolonged media coverage</p> <p>Other enforcement notice from SHE regulator</p>	<ul style="list-style-type: none"> • Contractor to immediately implement incident response procedures. • Incident requires immediate notification to directly to the Marine Coordinator and Environmental Advisor • Incident to be reported to the relevant regulatory authorities as per specific incident procedures. • Following the incident, Contractor to complete incident reporting and issue to Environmental Advisor • Environmental Advisor to log event and discuss with relevant regulatory authorities at update meetings (if convened) • Incident likely to require management practices in addition to those in this OEMP. Where this is the case, management practices must be agreed with Seagreen and regulatory authorities where appropriate prior to implementation • Incident requires logging in the Seagreen SEARs database system
Minor environmental incident	<p>A localised environmental event such as release, spillage or discharge that does not typically require outside notification and can be corrected by available personnel and/or materials.</p>	<ul style="list-style-type: none"> • Contractor to implement incident response procedures. • Incident will be reported by the Contractor to Seagreen by e-mail or within their DPR • Seagreen Environmental Advisor to log event • Incident can be appropriately managed through implementation of Contractor procedures

Class	Definition	Actions
	Medical treatment injury Lost time injury (not reportable) Minor environmental impact Minor permit breach Damage to large stock item Disruption to operation (<1 week) Local media coverage Fee for intervention (material breach) or equivalent from SHE regulator.	<ul style="list-style-type: none"> Incident does not require regulatory authorities to be involved but is reported to Environmental Advisor for logging onto Seagreen SEARs database system

3.5.2 Non-Compliances

Non-compliances are a breach of one or more of the following:

- Seagreen Consents (S36 and Marine Licences);
- Seagreen Consent Plans, including this OEMP, the MPCP and those listed in Appendix C;
- Seagreen environmental procedures (where issued);
- Seagreen Employer’s Environmental Requirements;
- Contractor environmental procedures (including Environmental Risk Assessment and Method Statement);
- Applicable UK or Scottish environmental legislation (whether or not specifically referenced in any of the above).

Non-compliance may or may not be associated with an environmental incident.

Where a non-compliance is identified, the observer shall report it to the Contractor and Seagreen Shift Supervisor for onward reporting to the Environmental Advisor.

The Environmental Advisor and Site Operations Manager shall decide if works are required to stop until the non-compliance has been investigated and rectified.

Corrective action shall be agreed (with the relevant Contractor) and implemented for all non-compliances.

Reporting of non-compliances to MD-LOT will be done using the template provided in Appendix F.

Seagreen shall monitor the effectiveness of corrective actions, and refine them where necessary,

3.6 Personnel Competency and Training

Contractors will provide appropriate training to all Contractor personnel (including Sub-Contractor personnel) covering the content of their Environmental Risk Assessment and Method Statement, this OEMP, the Seagreen MPCP and the Seagreen Consents.

The Contractors will maintain training records and provide copies of the records to Seagreen, as required.

In addition, each Contractor will ensure all personnel are made aware of the Contractors compliance monitoring registers, to ensure evidence is provided of compliance to all Seagreen Consents and licences.

4. Management of Environmental Aspects and Compliance Obligations

4.1 Overview

This section splits out the key environmental aspects that relate to the O&M phase and then details the overarching approach to management of related environmental impacts, as identified in the Seagreen Environmental Statement (ES) and ES Addendum. See Appendix G: Seagreen ES and ES Addendum commitments registers.

In addition, each Contractor may be required to complete an Environmental Risk Assessment and Method Statement to demonstrate that the Contractor has identified and mitigated the environmental risks associated with their work scope.

4.2 Marine Species

The environmental surveys completed for the ES identified environmental sensitivities and the appropriate management and mitigation commitments to be followed as part of the consent applications and reflected in the consent conditions.

Monitoring plans are detailed in the Project Environmental Monitoring Programme (PEMP) (LF000009-CST-OF-PRG-0003), which presents measures to monitor any environmental effects of the Seagreen Project, which includes post-construction surveys. The PEMP is a live document and will be amended as the project progresses and further monitoring data becomes available. The results of those surveys will be considered in terms of the environmental sensitivities identified and where necessary consideration will be given to the need for additional environmental mitigation and/or further monitoring work, to be developed in discussion with MD-LOT and FTRAG.

In the unlikely event that a wildlife incident occurs, such as injury to a marine mammal, or an observed fish or bird mortality, this shall be reported to the Seagreen Environmental Advisor in accordance with section 3.5.1.

The requirement to manage vessel operations to take account of potential disturbance to marine mammals and birds is set out in the Vessel Management Plan (VMP) (Annex 1 of LF000009-CST-OF-PRG-0001). Where applicable, the Scottish Marine Wildlife Watching Code will be observed.

Where specific maintenance activities are likely to disturb or injure European Protected Species, an EPS Licence will be secured, in accordance with the applicable legislation.

4.3 Marine Archaeology

The procedures to be followed on discovering any marine archaeology during the operation, maintenance and monitoring of the Seagreen Project, is set out in the Marine Archaeological Written Scheme of Investigation & Protocol for Archaeological Discoveries (WSI & PAD) (LF000009-CST-OF-PLN-0002).

4.4 Other Marine Users

Seagreen's approaches to manage and mitigate potential impacts on other marine users are provided in the following Consent Plans:

- Navigational Safety Plan (Navigational Safety Plan) (Annex 2 of LF000009-CST-OF-PRG-0001)
- Lighting and Marking Plan (LMP) (Annex 3 of LF000009-CST-OF-PRG-0001)
- Fisheries Mitigation and Management Strategy (FMMS) (Annex 4 of LF000009-CST-OF-PRG-0001)
- Vessel Management Plan (VMP) (Annex 1 of LF000009-CST-OF-PRG-0001).

Specifically, measures covered by these plans include:

- Appropriate notification of major maintenance activities to other marine users;
- Appropriate charting of the OWFs;
- A clear process of marine coordination of all vessels and vessel activity;
- Appropriate marking and lighting of vessels;
- Appropriate marking and lighting of the Wind Farm and OTA; and
- Vessel transit planning, commercial fisheries relations and management of commercial fisheries interactions.

4.5 Marine Pollution Prevention and Contingency Planning

In the event of a pollution incident, construction personnel should refer immediately to PART 2 of the MPCP for details on appropriate response procedures.

The requirement to set out the environmental management framework for the pollution prevention and contingency planning arises from the S36 consent condition 14b and OTA Marine Licence Condition 3.2.1.2c related to this OEMP, with the relevant condition set out in Table 1.1.

Detailed plans for the prevention of pollution incidents on-site, and management of any incidents that may occur are presented in the MPCP.

4.6 Chemicals and Fuel Oil Usage

The requirement to set out the environmental management framework for the use of chemicals during the operation of the OWFs arises from specific requirements in the Marine Licences, specifically:

Wind Farm/OTA Marine Licence Condition 3.1.7: "The Licensee must ensure that all chemicals which are to be utilised in the Works have been approved in writing by the Licensing Authority prior to use. All chemicals utilised in the Works must be selected from the List of Notified Chemicals assessed for use by the Offshore oil and gas industry under the Offshore Chemicals Regulations 2002, unless approved in writing by the Licensing Authority".

Wind Farm/OTA Marine Licence Condition 3.1.8: "...The Licensee must ensure that all substances and objects deposited during the execution of the Works are inert (or appropriately coated or protected so as to be rendered inert) and do not contain toxic elements which may be harmful

to the marine environment, the living resources which it supports or human health..." [for full condition refer to Marine Licences]

Wind Farm/OTA Marine Licence Condition 3.2.2.7: "The Licensee must ensure suitable bunding and storage facilities are Offshore employed to prevent the release of fuel oils, lubricating fluids associated with the plant and equipment into the marine environment".

4.6.1 Environmental Management Associated with Chemical Usage

The List of Notified Chemicals is a product of the Offshore Chemical Notification Scheme (OCNS) which manages chemical use and discharge by the UK and Netherlands Offshore petroleum industries. The scheme is regulated in the UK by the Department of Business, Energy and Industrial Strategy (BEIS) using scientific and environmental advice from Centre for Environment, Fisheries and Aquaculture Science (Cefas) and Marine Scotland.

During the O&M phase, each Contractor must submit a list of all chemicals which through their mode of use, are expected in some proportion to be discharged to sea and those chemicals that will be included within closed systems in equipment operated in and/or over the marine environment. No other chemicals are required to be listed.

This chemical list is to be provided to Seagreen prior to the commencement of offshore works and is expected to be periodically updated by the Contractor. General rules for chemical usage, for chemicals that fall under the above requirements, is that they cannot be used until the Contractor has submitted to Seagreen on their chemical list and Seagreen has approved them following approval from MD-LOT.

Those chemicals expected in some proportion to be discharged to sea during the works are required to be on the OCNS list, and where not, they cannot be used unless they fall within a maintenance chemical exemption category agreed with MD-LOT, or otherwise approved by MD-LOT.

For chemicals that will be included within closed systems in equipment operated in and/or over the marine environment and not discharged to sea these need to be notified to Seagreen in the Contractor chemical list prior to use. They do not require to be a chemical listed on the OCNS list or require prior approval by Seagreen or MD-LOT (for environmental reasons) but Seagreen and MD-LOT do require prior notification before use.

In addition, Seagreen require that all Contractors (and their Sub-Contractors) have in place appropriate procedures for the use, transport and storage of **all** chemicals (as appropriate) to prevent spillages. These measures must also be compliant with other chemical regulation including the Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH). Where spillage does take place, Contractors are required to follow specific spill prevention and response measures as detailed within the Seagreen MPCP, vessel SOPEPs and Contractor Environmental Risk Assessment and Method Statement.

4.6.2 Environmental Management Associated with Fuel Oil and Lubricating Fluids

Fuel oil is not considered 'a chemical' requiring to be noted on each Contractor's list of chemicals as this is under separate regulation.

Fuel oil is to be transferred at port only, whilst engaged in the Seagreen Project. Offshore fuel bunkering **will not be permitted** unless otherwise agreed in advance by Seagreen personnel including the Seagreen

Environmental Advisor and Control Room Operator. Offshore fuel bunkering if approved will be considered a contingency measure only.

Where offshore fuel bunkering has been agreed in advance with Seagreen, Ship to Ship Transfer regulations exemption is required by each Contractor (or their Sub-Contractors) with MCA. This is typically a request for exemption to MCA via letter.

Information required by MCA from each Contractor (or their Sub-Contractors) to consider the exemption will include a bunker plan and procedure arrangements. It will also include additional precautions required by MCA such as fuel bunker hose certification and regular inspections, bunker station emergency stop, trained SOPEP team, offshore response contractors providing support during bunkering and details of the fuel oil provider(s) to be used and a summary of their precautions, bunkering procedures and experience and certifications. Exact arrangements must be confirmed by each Contractor with MCA and approval is required by MCA sufficiently in advance of offshore fuel bunkering taking place. This approval **must be confirmed to Seagreen prior to offshore fuel bunkering taking place**. On-going notification to MCA is required prior to each offshore fuel bunkering taking place and the Seagreen Environmental Advisor and Control Room Operator must be copied into communications with MCA.

Fuel oil management measures required by each Contractor (and/or their Sub-Contractors) must be compliant with MARPOL Annex I (including fuel oil management, machinery space discharges and record keeping) Seagreen MPCP response measures and MARPOL Annex VI (including fuel efficiency and air pollution control measures) and also with corresponding UK merchant shipping regulations. The percentage fuel sulphur content to be used on vessels by Contractor (and/or their subcontractors) must be compliant with up-to-date North Sea location specific percentage sulphur requirements required by law.

A lubricating fluid may be appropriate depending on its use i.e. a lubricant used in the construction works would be considered a chemical required to be added on the above list of chemicals. Lubricating fluids exempt from the list of chemicals would be those used for maintenance for vessel equipment not used over or in the water.

In addition, Seagreen require that all Contractors (and their Sub-Contractors) have in place appropriate procedures for the use, transport and storage of fuel oil and lubricating fluids during the operational phase of the OWFs (as appropriate) to prevent spillages. These measures must also be compliant with other fuel oil and lubricating oil handling regulations. Where spillage does take place, Contractors are required to follow specific spill prevention and response measures detailed within the Seagreen MPCP.

4.7 Marine Invasive Non-Native Species

4.7.1 Invasive Non-Native Species Prevention Measures

In adopting management measures to prevent the introduction of invasive non-native species (INNS), Seagreen will:

- Require through conditions of contract that all Contractors (and their Sub-Contractors) adopt the relevant and most current legislative requirements and guidelines at the time of carrying out their works;

- Require through conditions of contract that the Contractors (and their Sub-Contractors) produce EMPs setting out in detail procedures to prevent the introduction of INNS.

The most current legislation and guidelines relevant to the control of INNS, are shown in Table 4.1.

Table 4.1– Legislation or guidelines relating to management measures to prevent the introduction of INNS

Legislation / Guidelines	Summary	Relevant requirement
International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) – adopted 2004	Objective to prevent, minimise and ultimately eliminate the transfer of harmful aquatic organisms and pathogens through control and management of ships' ballast water and sediments. Under this Convention, all ships of 400 gross tonnes and above will be required to have on board an approved Ballast Water Management Plan and a Ballast Water Record Book, and to be surveyed and issued with an International Ballast Water Management Certificate.	Ballast Water and Sediments Management Plan Ballast Water Record Book International Ballast Water Certificate
The Merchant Shipping (Anti-Fouling Systems) Regulations 2009	Prohibits the use of harmful organotin compounds in anti-fouling paints used on ships and will establish a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems and provides the UK legal framework for enforcement of Regulation (EC) 782/2003 on the prohibition of organotin compounds on ships. Requires an International Anti-fouling System Certificate issued by the MCA to be held by ships of 400 gross tonnage or above and every ship which is certified to carry 15 or more persons.	International Anti-fouling System Certificate
Resolution Mepc.207(62) 2011 Guidelines for the Control and Management of Ships Biofouling to Minimise the Transfer of Invasive Aquatic Species	The Guidelines are intended to provide useful recommendations on general measures to minimize the risks associated with biofouling for all types of ships.	General guidance on minimising biofouling risks

Legislation / Guidelines	Summary	Relevant requirement
<p>Check-Clean-Dry partnership campaign between government, recreational bodies and others.</p>	<p>The Guidelines are intended to provide useful recommendations on general measures to minimize the risks associated with biofouling all submersible / immiscible equipment e.g., ROVs (if required) to be subject to pre-use and post-use checks including checks for the presence of marine growth, following check-clean-dry principles. All equipment will be required to be free of marine growth prior to mobilisation.</p>	<p>General guidance on minimising biofouling risks</p>

Specific measures that Seagreen will require are adopted by all Contractors (and their Sub-Contractors) will include, but not be limited to:

- A requirement for all vessels of 400 gross tonnage (gt) and above to be in possession of a current international Anti-fouling System (AFS) certificate;
- A requirement for all vessels of 24m or more in length (but less than 400gt) to carry a declaration on AFS signed by the owner or authorised agent accompanied by appropriate documentation;
- A requirement for the details of all ship hull inspections and biofouling management measures be documented by the Contractors (and their Sub-Contractors) and, where applicable, recorded in the Planned Maintenance System;
- A requirement for all submersible/immiscible equipment (such as ROVs, if required) to be subject to pre-use and post-use checks following check-clean-dry principles, including checks for the presence of marine growth. All equipment will be required to be free of marine growth prior to mobilisation;
- A requirement for all vessels to be compliant (where applicable) with the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention, developed and adopted by the International Maritime Organisation (IMO) and which came into force on 8th September 2017):
- A requirement, where relevant, for the management of ballast water in accordance with an approved Ballast Water and Sediments Management Plan and records of such management in a Ballast Water Record Book in accordance with the provisions of the Convention;
- A requirement that, where appropriate, ballast water management meets the ballast water performance standards as detailed in the BWM Convention;
- A requirement to meet MCA timescales for BWM compliant ballast water treatment systems to be installed on relevant vessels (in line with vessel types and their International Oil Pollution Prevention re-certification dates);

- A requirement, in the interim prior to ballast water treatment systems requiring to be installed per MCA timescales, where reasonably practicable, and if required, for Ballast Water Exchange to take place at least 50 nm from the nearest land and in 200 m water depth; and
- A requirement, where intra-country North Sea Ballast Water Exchange is required, that because of lack of suitable water depths that exchange is conducted in agreed locations with MCA and the Seagreen Environment Manage

Seagreen's preference is for vessels to have ballast water treatment systems installed which are compliant with BWM Convention requirements. Where the Contractor (and their Sub-Contractors) cannot meet this standard, their proposed alternative ballast water management strategy must be agreed and provided to MCA (who will also consult with NatureScot and SEPA). Contractors must provide evidence of MCA approval to the Environmental Advisor where applicable.

In addition, Contractors (and their Sub-Contractors) are required to consider the recommendations of Resolution MEPC.207(62) 2011 guidelines for the control and management of ship's biofouling to minimise the transfer of invasive aquatic species including, for example, the implementation of a Biofouling Management Plan outlining the biofouling management measures to be undertaken on vessels.

4.7.2 Marine Growth Removal

The Seagreen substructures will require occasional marine growth removal above the low tide line to allow continued safe access for O&M teams. Since marine growth removal is essential to maintaining safe working conditions, this work will be undertaken as a routine O&M operation, as described in the OMPs.

If substantial marine growth removal is required (e.g. from larger portions of substructures and foundations), then Seagreen will notify MD-LOT in advance of any works to discuss licencing requirements. Seagreen would look to minimise, where possible, the discharge of marine growth by exploring potential removal techniques available, should it be possible to carry out such techniques safely and practically. The potential risk of INNS introduction during marine growth removal will be minimised by following prevention measures outlined in section 4.7.1 above. Furthermore, all records relating to the location and frequency of marine growth removal activities will be kept.

4.8 Waste Management

Seagreen require through conditions of contract that all Contractors (and their Sub-Contractors) produce a Waste Management Plan (or include waste management measures in their Environmental Risk Assessment and Method Statement), that detail all waste management procedures for their activities, details of expected waste arisings and proposed procedures for waste management.

The following will be included in the Waste Management Plan, as the Contractors' responsibilities:

- Meet all relevant legislative requirements and obtain whatever additional permits and licences are necessary in relation to waste management;
- Handle waste materials and refuse so that it causes the least practicable damage and disturbance;

- Place all waste in suitably labelled secure containers;
- Reduce waste to landfill through waste elimination, reduction and recycling measures where feasible;
- Contain, recover and bring all relevant waste back to shore and dispose of such waste in accordance with the legal waste management framework; and
- Transfer of waste or refuse to be conducted only by licensed waste carriers and waste treatment and waste disposal is conducted by licensed and permitted waste management companies, in compliance with applicable waste legislation.
- Be compliant with and use the current version of Transfrontier Shipment of Waste Regulations where Seagreen waste is being exported by Contractors (or their subcontractors). Export of waste will also be in line with the principles of the Basel Convention of 1989, which was agreed internationally to avoid hazardous waste being unfairly exported to developing countries.
- All qualifying vessels must demonstrate compliance with MARPOL Annex V (and equivalent current UK merchant shipping regulations) for waste management generally and MARPOL Annex IV (and equivalent current UK merchant shipping regulations) for sewage waste specifically.
- Waste incineration offshore is not permitted on the Seagreen project unless clear demonstration on compliance with MARPOL North Sea waste incinerations exemptions can be provided prior to vessel mobilisation and are approved by Seagreen in advance of any waste incineration being conducted.
- Waste incineration at port is not permitted.

The Contractor will provide the Waste Management Plan (or Environmental Risk Assessment and Method Statement which includes waste management measures) to Seagreen for acceptance prior to the commencement of works.

Where Seagreen have procured waste management facilities, use of these facilities by contractors shall be agreed in advance, and arrangements documented in the contractor's Waste Management Plan.

The management of Seagreen-procured waste management facilities onshore shall be in accordance with the following SSE Renewable Generation work instructions:

- WI-REN-SHE-001-300-001 Guide to Waste Management Recycling
- WI-REN-SHE-001-300-002 Internal Movements of Special Waste (Scotland)

4.9 Dropped Objects

The requirement to record, notify and potentially recover objects lost or accidentally deposited on the seabed during operations and maintenance arises from specific requirements in the Marine Licences, specifically:

Wind Farm/OTA Marine Licence Condition 3.1.3: "Should the Licensee or any of their agents, contractors or sub-contractors, by any reason of force majeure deposit anywhere in the marine

environment any substance or object, then the Licensee must notify MD-LOT of the full details of the circumstances of the deposit within 48 hours of the incident occurring (failing which as soon as reasonably practicable after that period of 48 hours has elapsed). Force majeure may be deemed to apply when, due to stress of weather or any other cause, the master of a vessel or vehicle operator determines that it is necessary to deposit the substance or object other than at the Site because the safety of human life or, as the case may be, the vessel, vehicle or marine structure is threatened. Under Annex II, Article 7 of the Convention for the Protection of the Marine Environment of the North-east Atlantic, MD-LOT is obliged to immediately report force majeure incidents to the Convention Commission.”.

During the O&M phase, all dropped objects will be recorded on the SSE SEARs database and the notification of dropped objects will be completed using the template reporting form agreed with MD-LOT (DROPOBS1). See also section 3.5.1 on incident reporting.

The process to be followed in the event of any vessel personnel becoming aware that any object has been accidentally (or by need of Force Majeure) dropped or otherwise deposited is set out below in Table 4.3.

Note that separate provisions apply for the accidental loss of pollutants; these procedures are set out in the MPCP - see also sections 4.5 and 4.6.

Table 4.3 – Dropped objects notification and remediation process

Dropped Objects
<p>This Dropped Objects Procedure identifies the measures to be put in place to manage dropped objects during the operational phase of the Seagreen Offshore Wind Farm OWFs, including recovery where reasonably practicable, and the recording of losses. This also includes procedures for communicating deposits made under circumstances of Force Majeure.</p> <p>Dropped objects can present a significant hazard to other sea users and the marine environment. Notification of dropped objects enables MD-LOT, in consultation with other relevant stakeholders, to decide what action should be taken and to allow notification of other sea users of any navigational hazards.</p>
Prevention
<p>Consideration should be given to minimising wherever reasonably practicable the potential for objects to be dropped or otherwise accidentally deposited. Each Contractor (and their Sub-Contractors) should have its own process for ensuring equipment and materials are adequately stored and controlled and staff are adequately trained and briefed on avoiding dropped objects or accidental deposits, and in the event that they do occur on this notification procedure.</p> <p>For major maintenance activities, each Contractor should complete a vessel manifest to record all materials, equipment and components being loaded, transported and installed.</p>
Identification

Dropped Objects

If any Contractor or their Sub-Contractors become aware of any substance or objects on the manifests that are missing, or an accidental deposit occurs (for example by personnel observing or reporting that an object has been lost) the responsible Contractor (or their Sub-Contractor) will log the loss as soon as becoming aware of the incident and notify the Seagreen Marine Coordinator of the incident.

Note that every reasonable measure should be taken to immediately retrieve dropped objects where this is considered reasonably practicable (a Marine Licence is not required for such recovery under The Marine Licensing (Exempted Activities) (Scottish Inshore and Offshore Regions) Amendment Order 2012).

Notification

If the object is not retrieved the Contractor (or their Sub-Contractors) will complete the agreed Dropped Object form and submit it to the Seagreen Safety Health and Wellbeing (SHW) Advisor to notify MD-LOT within 48 hours.

The completed form will, at the same time, be provided to other relevant contacts stipulated by MD-LOT on current Dropped Objects Pro-forma.

MD-LOT must also be notified of any activities to recover dropped objects that have been conducted but not been successful (or are considered unlikely to be successful) or that are planned (but may take some time) at the time of notification.

Recovery

MD-LOT will provide advice to Seagreen/Contractor on appropriate remedial action in relation to each incident reported.

MD-LOT may deem it necessary to carry out a side scan survey to locate the substances or objects and may require the deposits to be removed by Seagreen (as set out under Wind Farm Marine Licence Condition 3.2.2.1 and OTA Marine Licence Condition 3.2.3.3).

The results of any such surveys must be analysed as soon as reasonably practicable and the proposed remedial action and proposals for recovery of the Dropped Object if appropriate must be provided to MD-LOT.

4.10 Other

Where Contractors (and or/their subcontractors) have Radioactive Sources e.g. for measurement or for other reasons to be used offshore or at port, this must be declared to Seagreen in advance of use. The compliant Scottish Environment Protection Agency (SEPA) registration or licence (depending on type) will be required to be provided by each Contractor to Seagreen for each source and details of control measures will be reviewed by Seagreen prior to approval.

Unexploded Ordinances (UXO) could have a significant environment impact if triggered during offshore works, but as the applicable regulations are focussed on safety predominantly UXO controls will be covered by Contractors in their SHE Plan and fall out with the scope of this document.

5. References

Table 5.1 Seagreen Document References

Seagreen Document Number	Title
LF000009-CST-OF-PLN-0002	Marine Archaeological Written Scheme of Investigation & Protocol for Archaeological Discoveries
LF000009-CST-OF-PLN-0012	Marine Pollution Contingency Plan
LF000009-CST-OF-PRG-0003	Project Environmental Monitoring Programme
LF000009-CST-OF-PRG-0004	Offshore Transmission Assets Operation and Maintenance Programme
LF000009-CST-OF-PRG-0001	Offshore Wind Farm Operations and Maintenance Programme
SWEL-PLN-006	Emergency Response and Co-operation Plan

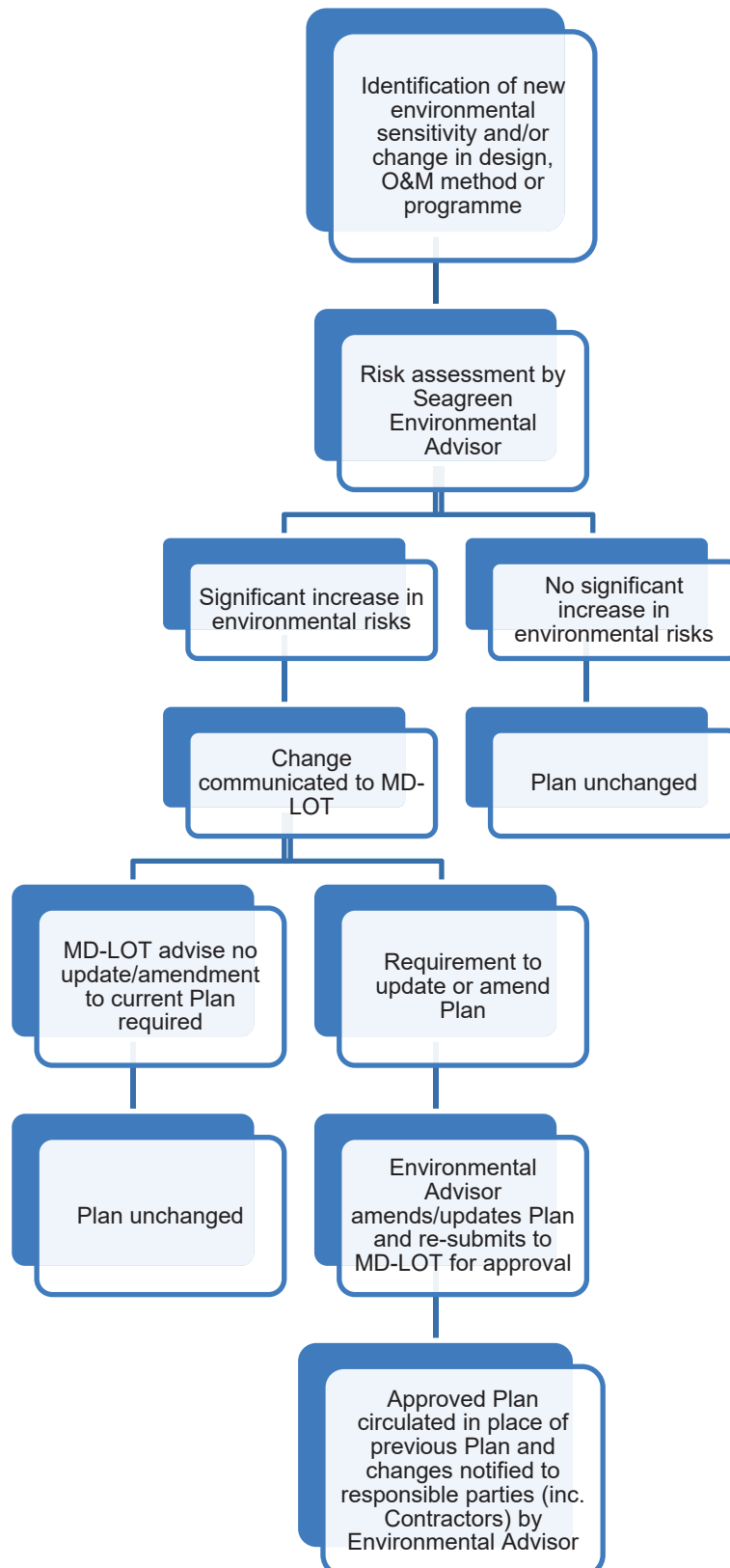
Appendix A – List of Abbreviations and Definitions

Term	Description
CaP	Cable Plan
CEMP	Construction Environmental Management Plan
Consents	Collective term used to describe the Section 36 consents and Marine Licences for Seagreen Alpha OWF, Seagreen Bravo OWF and the OTA
Consent Plan	A document submitted for the approval of the Scottish Ministers as required by conditions of the Consents
Contractor	Any party appointed to undertake work on the Seagreen project on behalf of Seagreen
DPR	Daily Progress Report
EPS	European Protected Species
ERP	Emergency Response Plan
ERCoP	Emergency Response Co-operation Plan
ES	Environmental Statement submitted to the Scottish Ministers on 15 October 2012 as part of the application for the Consents
ES Addendum	Environmental Statement Addendum submitted to the Scottish Ministers on 18 October 2013 as part of the application for the Consents
FLO	Fisheries Liaison Officer
FMMS	Fisheries Management and Mitigation Strategy - the term used to describe the deliverable required under Condition 31 of the Section consents and the Offshore Transmission Assets Marine Licence Condition 3.2.1.4
Forth and Tay CFWG	Forth and Tay Commercial Fisheries Working Group – formed to facilitate commercial fisheries dialogue on behalf of Seagreen
FTRAG	Forth and Tay Regional Advisory Group
HOC	Hazard Observation Card
IMO	International Maritime Organisation
INNS	Invasive non-native species
JNCC	Joint Nature Conservation Committee
Landfall	The point above MHWS where the OTA export cables connect to the onshore transmission works
Licensing Authority	Marine Scotland acting on behalf of the Scottish Ministers
Licensee	Seagreen Alpha Wind Energy Ltd, having its registered office at No. 1 Forbury Place, 43 Forbury Road, Reading. RG1 3JH.

Term	Description
Marine Coordination	The management and surveillance of people, vessels and offshore structures with regard to the safe preparation and execution of offshore activities, in order to minimise the probability of an incident, and to provide effective response if an incident does occur
Marine Licence	Licence granted by the Scottish Ministers under Section 20(1) of the Marine (Scotland) Act 2010 and/or Section 65(1) of the Marine and Coastal Access Act 2009
MCA	Maritime and Coastguard Agency
MHWS	Mean High Water Springs
MPCP	Marine Pollution Contingency Plan, as required under Condition 14b of the Section 36 Consent and the Offshore Transmission Asset Marine Licence Condition 3.2.1.2c
MD-LOT	Marine Scotland Licensing and Operations Team
NLB	Northern Lighthouse Board
Non-compliance	As defined in section 3.5.2 of this OEMP
NSP	Navigational Safety Plan
NtM	Notice to Mariners
O&M	Operation and Maintenance
OCNS	Offshore Chemical Notification Scheme
OEMP	Operations Environmental Management Plan (this document)
OMP	Operations and Maintenance Programme
OSP	Offshore Substation Platform
OTA	Offshore Transmission Assets, connecting the OWFs to the onshore transmission works. This covers the OSPs and the cable route from the OSPs to the MHWS at Landfall at Carnoustie
OTA Marine Licence	Marine Licence granted by the Scottish Ministers in respect of the OTA on 10 October 2014 as amended by the revised Marine Licence granted by the Scottish Ministers on 6 March 2019 (reference 04678/19/0)
OWF Marine Licences	See 'Wind Farm Marine Licences'
OWFs	The Seagreen Alpha and Seagreen Bravo Offshore Wind Farms - including wind turbine generators, their substructures and foundations, and associated inter-array cabling
PEMP	Project Environmental Monitoring Programme
POLREP	Pollution Report for an Incident
S36 Consents	Consent under section 36 of the Electricity Act 1989 granted by the Scottish Ministers on 10 October 2014 in respect of the Seagreen Alpha and Seagreen Bravo offshore wind farms, both as varied by the Scottish Ministers by decision letter issued pursuant to an application under section 36C of the Electricity Act 1989 on 28 August 2018

Term	Description
Seagreen	Term used to describe the part of SSE Renewables (SSER) responsible for the maintenance and operation of the Seagreen Project
Seagreen Project	A collective term used to describe the OWFs and OTA
SEAR	Safety and Environmental Awareness Report
SEPA	Scottish Environment Protection Agency
SHE	Safety, Health, Environment
Site	The area outlined in red in Figure 1 attached to the S36 Consents Annex 1 and the area outlined in red in the figure contained in Part 4 of the Wind Farm Marine Licences
SNH	Scottish Natural Heritage (now NatureScot)
SOPEP	Shipboard Oil Pollution Emergency Plan
Toolbox talk	A short presentation given to team members, usually before the commencement of a task or shift, on an aspect of environmental management
TTP	Traffic and Transportation Plan
UKHO	United Kingdom Hydrographic Office
VMP	Vessel Management Plan
Wind Farm Marine Licences	Marine Licences granted by the Scottish Ministers in respect of the OWFs on 10 October 2014 as amended by the revised Marine Licence granted by the Scottish Ministers on 28 August 2018 (reference 04676/18/0 and 04677/18/0)
WNoO	Weekly Notice of Operations
WTG	Wind turbine generator

Appendix B – Change Management Procedure



Appendix C – OEMP Linkages to Other Consent Conditions

Reference	Linkage with this OEMP	Cross-reference in this OEMP
Seagreen Environmental Statement (ES) and ES Addendum (S36 Conditions 7 and 14)	The Development must be... operated in accordance with the terms of the Application and related documents, including the accompanying ES [and] SEIS... The EMP must be in accordance with the ES and ES Addendum as it relates to environmental management measures	Section 2.1 (Compliance with the ES and ES Addendum) Section 4 (Management of Environmental Aspects) Appendix G (Seagreen ES and ES Addendum commitments registers)
OWF Marine Licences Condition 3.2.2.7 and OTA Marine Licence Condition 3.2.1.6	The Licensee must ensure suitable bunding and storage facilities are employed to prevent the release of fuel oils, lubricating fluids associated with the plant and equipment into the marine environment	Section 4.6 (Chemicals and Fuel Oil Usage)
S36 Consent Condition 8 and OWF/OTA Marine Licences Condition 3.1.10	As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site	Section 3.3.2 (External Communications)
OWF/OTA Marine Licence Condition 3.1.3	Should the Licensee or any of their agents, Key Contractors or Sub-Contractors, by any reason of force majeure deposit anywhere in the marine environment any substance or object, then the Licensee must notify the Licensing Authority of the full details of the circumstances of the deposit within 48 hours of the incident occurring (failing which as soon as reasonably practicable after that period of 48 hours has elapsed)	Section 4.9 (Dropped Objects)
OWF/OTA Marine Licence Condition 3.1.7	The Licensee must ensure that all chemicals which are to be utilised in the Works have been approved in writing by the Licensing Authority prior to use	Section 4.6 (Chemicals and Fuel Oil Usage)

Reference	Linkage with this OEMP	Cross-reference in this OEMP
OWF/OTA Marine Licence Condition 3.1.8 (Part)	All reasonable, appropriate and practicable steps must be taken to minimise damage to the Scottish marine area and the UK marine licensing area	This OEMP, incorporating the requirements of Appendix G (ES/SEIS Commitments Register), the S36 Consents and OWF/OTA Marine Licences
	Any debris or waste material placed below MHWS during construction and operation must be removed for disposal above MHWS as approved by SEPA	Section 4.8 (Waste Management)
	All substances and objects deposited during the execution of the OWF/OTA must be inert (or appropriately coated or protected so as to be rendered inert) and must not contain toxic elements	Section 4.5 (Marine Pollution and Contingency Planning)
	The risk of transferring marine non-native species to and from the Site must be kept to a minimum by ensuring appropriate bio-fouling management practices are implemented	Section 4.7 (Marine Invasive Non-Native Species)
OWF/OTA Marine Licence Condition 3.1.9	The Licensee must ensure that copies of this licence are available for inspection by any authorised marine enforcement officer at: a) the premises of the Licensee; b) the premises of any agent, Contractor or sub-Contractor acting on behalf of the Licensee; c) any onshore premises directly associated with the Wind Farm/OTA; and d) aboard any vessel engaged in the Wind Farm/OTA.	Section 3.2.10 (Environmental Roles and Responsibilities: Contractors)
OWF Marine Licence Condition 3.2.3.6 and OTA Marine Licence Condition 3.2.4.9	Notification must be provided at least 3 months in advance of any maintenance of the Works where any additional deposits are required. In the event that these works are not assessed in the Application and are considered by the Licencing Authority as being material they will require further Marine Licences.	n/a – see OMP (Wind Farm Assets) and OMP (Offshore Transmission Assets)



Document Reference
LF000009-CST-OF-PLN-0001
Rev: 03
Page 48 of 65



Appendix D – O&M Phase Contractor Reporting Deliverables

Deliverable	Summary of requirement	Originator	Frequency	Reported to	End user(s)	Template ref.
Daily Progress Reports (DPRs) ²	To include details on environmental incidents	Contractor	Daily	Seagreen: O&M Manager, Environmental Advisor, Duty Marine Coordinator SHW Advisor	Seagreen	Contractor template
Ad-hoc reports	Contractors are required to submit/report the following, as and when they occur: <ul style="list-style-type: none"> - Environmental incidents - Observation cards (individually or as weekly summary) - Interactions with fisheries - Reports on pollution prevention and dropped objects drills/exercises – brief scenario and lessons learned - Audits/inspection reports – purpose and key findings 	Contractor	As required	Seagreen: O&M Manager, SHW Advisor Environmental Advisor	Seagreen	Contractor templates
Bi-monthly progress calls	Call to run through: <ul style="list-style-type: none"> - Actions of meeting tracker - Highlights from weekly environment reports - Environmental related incidents and observations - Environmental related drills, toolbox talks, awareness campaigns etc. 	Contractor	Bi-monthly	Seagreen: O&M Manager, Environmental Advisor, Duty Marine Coordinator, SHW Advisor	Seagreen	Contractor action tracker template

² As required, based on the Contractor’s work scope, duration of appointment and contractual requirements

Deliverable	Summary of requirement	Originator	Frequency	Reported to	End user(s)	Template ref.
Vessels, agents, Contractors and Sub-Contractors	Provide the name and function of any vessel, agent, Contractor or sub-Contractor appointed to engage in the works. Where applicable the notification must include the master's name, vessel type, vessel IMO Number, registration, vessel owner or operating company and Operator Type(s)	Contractor	No later than 3 weeks prior to mobilisation, updated weekly for duration of contract	Seagreen Lead Marine Coordinator and Seagreen Environmental Advisor	MD-LOT (via Seagreen website)	See Seagreen website ('Persons Acting on Behalf of the Licensee Report' and 'Vessel Report')
Notice to Mariners and Kingfisher Fortnightly Bulletin	Information required for Seagreen to produce and issue Notices to Mariners and information to Kingfisher Fortnightly Bulletin ³	Contractor	No later than 3 weeks prior to the specified marine activity	Seagreen Lead Marine Coordinator	Multiple users	Email
Dropped objects	All dropped objects shall be notified to the Seagreen Marine Coordination Centre as soon as possible and followed up with a dropped objects pro-forma within 24 hours. Contractor shall submit the dropped objects pro-forma to those listed on the pro-forma within 24 hours of the incident occurring.	Contractor / Vessel Master	As soon as reasonably practicable to Seagreen AND within 24 hours using proforma if object not recovered	Seagreen: Duty Marine Coordinator, SHW Advisor Environmental Advisor	MD-LOT ⁴	Current version of MS Renewables Dropped Objects Form

³ Will be primarily required for major maintenance works

⁴ If retrieval is not possible within 24 hrs of object being dropped.

Deliverable	Summary of requirement	Originator	Frequency	Reported to	End user(s)	Template ref.
Chemical usage	Submit list of all chemicals which through their mode of use, are expected in some proportion to be discharged and/or chemicals that will be included within closed systems in equipment operated in and/or over the marine environment, whether they appear on the List of Notified Chemicals or are excluded (requiring additional approval from the Licensing Authority unless falling within a maintenance chemical exemption category).	Contractor	6 weeks prior to chemical use	Seagreen: Environmental Advisor	Marine Scotland ⁵	Contractor List
Potential archaeology discoveries	Report any discoveries in line with Seagreen WSI and PAD	Contractor / Vessel Master	As soon as reasonably practicable	Seagreen: Duty Marine Coordinator, Environmental Advisor	Seagreen Archaeological Consultant, Historic Environment Scotland, Receiver of Wreck	Email
Infringements on AEZs	Report any AEZ infringements in line with Seagreen WSI and PAD	Contractor / Vessel Master	As soon as reasonably practicable	Seagreen: Duty Marine Coordinator, Environmental Advisor	Seagreen Archaeological Consultant, Historic Environment Scotland	Email

⁵ Approval in writing from Marine Scotland, where required



Document Reference

LF000009-CST-OF-PLIN-0001

Rev: 02

Page 52 of 65

Deliverable	Summary of requirement	Originator	Frequency	Reported to	End user(s)	Template ref.
Interaction with commercial fishing activity	Engage with the Seagreen FLO on matters where Contractor will or have impacted on commercial fishing activities so as to mitigate the effects on commercial fishing activity in the area. Notify any interactions with commercial fishing activity on a weekly basis. Where interactions involve any conflict, this shall be reported without delay.	Contractor / Vessel Master / FLO	Weekly and, where applicable, without delay	Seagreen: Duty Marine Coordinator, FLO	Seagreen	Email (can also be noted on daily progress reports and weekly environment reports
Force majeure	Full details of the circumstances of the deposit of any substance or object into the marine environment by reason of force majeure within 12 hours of the incident occurring.	Contractor	Immediately in the event of an incident (30 minutes as per SHE reporting guidelines) and in any event within 12 hours of the incident occurring	Seagreen: Duty Marine Coordinator, Environmental Advisor	Marine Scotland - depending on whether retrieval possible within 24 hours of object being dropped	Current version of MS Renewables Dropped Objects Form



Deliverable	Summary of requirement	Originator	Frequency	Reported to	End user(s)	Template ref.
Lighting failures	<p>If lighting failure occurs that will take > 36 hrs to diagnose/ repair, Notice to Airmen (NOTAM) to be issued.</p> <p>Upon completion of the remedial works, the Aeronautical Information Service (AIS) will be notified as soon as possible to enable a cancellation to be issued. The party that originally requested the NOTAM will then issue such notification so that a NOTAM cancellation notice can be issued. Such notification will include the name of the wind farm and the reference of the original NOTAM.</p> <p>If an outage is expected to last longer than 14 days, then the CAA will also be notified (at Windfarms@caa.co.uk) by Seagreen directly to discuss any issues that may arise and longer-term strategies.</p>	Contractor / Vessel Master	If failure will take >36hrs to repair/diagnose	Seagreen: Duty Marine Coordinator, and NOTAM section of the AIS	NOTAM section of the AIS, CAA	-
Waste returns	<p>Movements of special wastes (if applicable)</p> <p>Waste quantities generated and transferred</p>	Contractor / Vessel Master	As required Quarterly	Seagreen: Offshore Wind Site Operations Assistant / Environmental Advisor	Seagreen	Contractor template(s)

Appendix E – Contractor Pre-Commencement Checklist

The information listed in the table below is to be provided by the Contractor to Seagreen in advance of commencing works on site. The information listed in the table below only relates to requirements of this OEMP. As part of the Contract, other information provisions will be required from the Contractor. These are not listed here and, as such, this list is not exhaustive.

Item	Yes/No
Contractor has submitted to Seagreen, no later than 4 weeks prior to Contract Date, Contractor Environmental Risk Assessment and Method Statement detailing how the Contractor will, as a minimum, implement and deliver the commitments set out in this OEMP.	
Contractor in receipt of Seagreen acceptance of Contractor Environmental Risk Assessment and Method Statement	
Contractor has submitted to Seagreen, no later than 3 weeks prior to mobilisation, the name and function of any vessel, agent, Contractor or sub-Contractor appointed to engage in the works. Where applicable the notification must include the master's name, vessel type, vessel IMO Number, registration, vessel owner or operating company and Operator Type(s)	
Contractor has submitted to Seagreen, no later than 3 weeks prior to the specified marine activity, the information required for Seagreen to produce and issue the Notice to Mariners and information to Kingfisher Fortnightly Bulletin (as required)	
Using the Seagreen template, Contractor has submitted list of all chemicals to Seagreen; chemicals which through their mode of use, are expected in some proportion to be discharged and/or chemicals that will be included within closed systems in equipment operated in and/or over the marine environment, no less than 6 weeks prior to their use	
Contractor in receipt of approval from Marine Scotland for any chemicals not included on the Offshore Chemical Notification Scheme (OCNS) list of chemicals. Unless such chemicals fall within a maintenance chemical exemption category agreed with, or otherwise approved by Marine Scotland.	
Contactor issued written confirmation to Seagreen that <ul style="list-style-type: none"> - Masters of vessels or vehicles operators, agents, Contractors or Sub-Contractors are aware, having read and understood, of the extent of the works for which the marine licenses have been granted; the activity which is licensed; and the terms of the conditions attached to the marine licenses - Copies of the marine licenses have been made available to any vessels, vehicle operators, agents, Contractors or sub-Contractors permitted to engage in the works - Copies of the marine licenses are held at the Contractor's premises and any site premises in relation to the works. 	

Appendix F – Seagreen Non-Compliance Report Template

Seagreen Environmental Non-Compliance Report



Date

Report No.

Originator

Report Rev.

1. Nature of Compliance Issue (including applicable consent condition, ES commitment or legal requirement)

2. Actions taken by Seagreen Environmental Manager

3. Actions taken by Contractor (if applicable)

4. Agreed corrective measures and recommendations

Approved by Seagreen Environmental Advisor

Signed-off by Seagreen Site Operations Manager

Appendix G – Seagreen Environmental Statement (ES)/ES Addendum Commitments Registers

Note: This Appendix includes commitments applicable to O&M activities only. Refer to the Construction EMP for a full register of commitments applicable to all project phases. Those parts of the Consent Plans applicable to O&M will be incorporated into the Operations and Maintenance Programmes at the end of construction, at which point this register shall be updated accordingly.

Table G1: General covering all assets (ES Chapters – Introduction, Legislation, Project Description)

Activity	Environmental management, mitigation and monitoring measures ES/ES Addendum reference	Mechanism for implementation	
		OEMP ref.	Other document/plan ref.
Works that could disturb European Protected Species	Commitment to obtaining an EPS Licence if required. Ref. 4.63 (ES September 2012)	4.2	
OFTO appointment	OFTO will be appointed through tender, post construction of the Transmission Asset Project. Ref. 5.9 (ES September 2012)	N/A	OMP (OTA) Annex 6 (CaP)
Spill response	A safe system of work governed by a full risk assessment and method statement process will be used to support staff and vessel crew trained and equipped to use spill kits, in the event of a break in containment occurring. Ref. 5.241 (ES September 2012)	3.2.10, 4.5	MPCP
Spill response	A spill response contract will be in place to control, manage, recover and dispose of any contaminants and dropped objects. Ref. 5.241 (ES September 2012)	3.2.6	MPCP
Waste management	A waste management procedure will be administered and managed to ensure it is strictly adhered to by site staff, contractors and visitors to the O&M Control Centre(s). Ref. 5.242 (ES September 2012)	4.8	
Waste management	All other waste is contained and recovered and disposed of onshore. Ref. 5.245 (ES September 2012)	4.8	

Table G2: Wind turbines (including foundations and substructures)

Activity	Potential Impact	Environmental management, mitigation and monitoring measures ES/ES Addendum Reference	Mechanism for implementation	
			OEMP ref.	Other document/plan ref.
Water quality and sediment quality				
Operational activity	Deterioration in water quality due to accidental spillages and waste water	Contractors will be required by Seagreen to put in place appropriate Site Environmental Management Plans (SEMP) and Pollution Control and Spillage Response Plans that would have been agreed with the Regulatory Authorities prior to offshore activities commencing. These plans will act to reduce the potential for accidental pollution and in the unlikely event of a pollution incident, would ensure a rapid and appropriate response. Ref. 8.231 (ES September 2012)	1.5, 4.5	MPCP
Marine mammals				
Monitoring	All marine mammal impacts	The monitoring programme will be developed in consultation with key regulators, advisors, academics and experts and will focus on undertaking data gathering which over time can provide a statistically robust data set, which builds on on-going research. Ref. 13.654, 13.661, 13.662 (ES September 2012)	N/A	PEMP
Commercial fisheries				
Safety zones (operational)	Safety Issues for Fishing Vessels	It is likely that safety zones of 50m may be applied around infrastructure such as WTGs (maximum of 75), meteorological masts (maximum of three) and OSPs (maximum of three) per project. Ref.14.163, 14.243 (ES September 2012)	N/A	OMP Annex 2 (NSP)
Shipping and navigation				
Design and installation of WTG	Impact of OWF on Recreational Vessels	The Project Alpha site is intersected by two 'medium-use' cruising routes and the Project Bravo site is intersected by one 'medium-use cruising route' which run in a north-south direction. However, vessels should be able to pass between turbines in suitable conditions (i.e. during good visibility and calm sea conditions), as well as being able to route around the Project Alpha and Project Bravo sites. Ref. 15.183 (ES September 2012)	N/A	OMP Annex 2 (NSP)

Activity	Potential Impact	Environmental management, mitigation and monitoring measures ES/ES Addendum Reference	Mechanism for implementation	
			OEMP ref.	Other document/plan ref.
All phases	Impacts of all project phases upon shipping and recreation vessels	<p>The following section presents mitigation measures which can be implemented for the OWF development to reduce the level of impact:</p> <ul style="list-style-type: none"> - promulgation of information and warnings through Notices to Mariners, Kingfisher publications, fisheries liaison, local recreation clubs and marinas and further appropriate media on construction activities, cable installation works and other OWF matters; - the use of guard vessels where appropriate to aid emergency situations and warn vessels; application for and use of safety zones to protect the construction/decommissioning of the sites; - use of appropriate means to notify and provide evidence of the infringement of construction safety zones; - use of vessels that are 'fit for purpose' for the construction activities including marked in accordance with International Regulations for the Prevention of Collisions at Sea (COLREGS) and fitted with an AIS transponder to prevent them becoming a risk factor; - Aids to Navigation in line with International Association of Lighthouse Authorities (IALA) O-139 (IALA, 2008) and MCA/ NLB Requirements (which will include a system of routine inspection and maintenance of lights and markings); - additional buoyage if required to assist safe navigation (this would be based on guidance from NLB); - creation of an Emergency Response Co-operation Plan (ERCoP) with the relevant Maritime Rescue Co-ordination Centre (MRCC) from construction phase onwards, including MCA standards and procedures for WTG shut down in the event of a search and rescue, counter pollution or salvage incident in or around an OWF; - monitoring by radar, AIS and Closed-Circuit Television (CCTV) or other agreed means; - fenders/ bumper bollards installed on structures; - clear notification of works (especially pre charting of cables); - subsea cables will be buried or trenched where possible to provide protection from dragged and dropped anchors and dropped objects; - where burial/ trenching is not possible, cables will be protected by other means such as rock dumping and concrete mattresses; - burial of array and export cables and post-installation surveys on array and export cables to confirm 'over-trawlability' of seabed - cable details will also be provided to the United Kingdom Hydrographic Office (UKHO) for inclusion on Admiralty Charts; - any cables installed within the cable corridor will be notified to Kingfisher Information Services and Cable Awareness (KISCA) for inclusion in cable awareness charts and plotters for the fishing industry; - consultation with fisheries stakeholders through the proposed regional Fisheries Working Group (see Chapter 14: Commercial Fisheries) to ensure that the cable protection method does not inhibit fishing activities; and - cable burial and bundling to reduce the effect of electromagnetic interference. <p>Ref. 15.277 (ES September 2012)</p>	N/A	ERCop, OMP (OTA) Annex 6 (CaP), OMP (OWF) Annexes 1 (VMP), 2 (NSP), 4 (FMMS) and 6 (CaP)

Activity	Potential Impact	Environmental management, mitigation and monitoring measures ES/ES Addendum Reference	Mechanism for implementation	
			OEMP ref.	Other document/plan ref.
All project phases	Impacts of all project phases upon shipping and recreation vessels	Monitoring will take place through the Seagreen Project's Safety Management System (SMS). The SMS will include an incident/ accident reporting system which will ensure that incidents and near misses are recorded and reviewed to monitor the effectiveness of the risk control measures in place at the site. In addition, any information gained from near misses/ accidents at other OWF sites is likely to be considered with respect to the control measures applied at Project Alpha and Project Bravo. Ref. 15.281 (ES September 2012)	N/A	OMP Annex 2 (NSP), ERP
All project phases	Shipping and navigational safety	A Marine Control Centre (MCC) monitoring AIS will be used to monitor and record the movements of vessels around the Seagreen Project as well as company vessels working at the site. Ref. 15.284 (ES September 2012)	N/A	OMP Annex 2 (NSP)
All project phases	Shipping and navigational safety	Any vessel observed to stray into a safety zone will be identified and contacted by a designated member of the crew of the OWF, guard vessel or from the MCC via multi - channel Very High Frequency (VHF) radio, including Digital Selective Calling (DSC), and warned that they have encroached a safety zone. Ref. 15.285 (ES September 2012)	N/A	OMP Annex 2 (NSP)
Other marine users and activities				
All project phases	Effects on other sea users	Consultation with the relevant wind farm project managers/ developers and operators, MOD and licensing authority to ensure logistics management is appropriate and to allow discussion of concerns and facilitate resolution of any potential issues. To this end Seagreen will continue to participate in on-going communication between the parties involved. The situation will also be monitored with regard any future development to assess potential impacts in the future. Ref. 20.43, 20.50, 20.55, 20.62, 20.68, 20.72, 20.73, 20.74, 20.75, 20.77 (ES September 2012)	N/A	OMP Annexes 1 (VMP), 4 (FMIMS) and 5 (TTP)
Mitigation and monitoring				
Monitoring	Various	Ensure development of an appropriate monitoring programme, in order to review the effectiveness of proposed measures by way of mitigation, and to identify effects that differ significantly to those predicted and so enable an appropriate response to be considered. Ref. 22.7 (ES September 2012)	4.2	PEMP, OMP Annex 4 (FMIMS)
Monitoring	Various	The approach to monitoring for 'an appropriate monitoring programme' will be developed in consultation with the regulatory authorities, consultees and stakeholders, as appropriate - with any monitoring arrangements/actions being compliant with relevant legislation, license requirements, and agreed with relevant statutory consultees and regulatory authorities (and/or other stakeholders) Ref. 22.8 (ES September 2012)	4.2	PEMP
Pre-decommissioning surveys	Potential loss of habitat to rare and important species	Surveying for Annex I habitat will be undertaken prior to decommissioning Ref. 22.19 (ES September 2012)	N/A	PEMP
Operational	Safety to fishing vessels	Dialogue between the fishing community and the Applicants will be ongoing throughout the operational phase. Ref. 22.29 (ES September 2012)	N/A	OMP Annex 4 (FMIMS)

Table G3: Inter-array cables

Activity	Potential Impact	Environmental management, mitigation and monitoring measures	
		ES/ES Addendum Reference	Mechanism for implementation OEMP ref. Other document/plan ref.
Water quality and sediment quality			
Operational activity	Deterioration in water quality due to accidental spillages and waste water	Contractors will be required by Seagreen to put in place appropriate Site Environmental Management Plans (SEMP) and Pollution Control and Spillage Response Plans that would have been agreed with the Regulatory Authorities prior to offshore activities commencing. These plans will act to reduce the potential for accidental pollution and in the unlikely event of a pollution incident, would ensure a rapid and appropriate response. Ref. 8.231 (ES September 2012)	1.5, 4.5 MPCP
Shipping and navigation			
All project phases	Impacts of all project phases upon shipping and recreation vessels	See equivalent entry in Table G2	
All project phases	Impacts of all project phases upon shipping and recreation vessels	Monitoring will take place through the Seagreen Project's Safety Management System (SMS). The SMS will include an incident/ accident reporting system which will ensure that incidents and near misses are recorded and reviewed to monitor the effectiveness of the risk control measures in place at the site. In addition, any information gained from near misses/ accidents at other OWF sites is likely to be considered with respect to the control measures applied at Project Alpha and Project Bravo. Ref. 15.281 (ES September 2012)	N/A OMP Annex 2 (NSP), ERP
All project phases	Shipping and navigational safety	A Marine Control Centre (MCC) monitoring AIS will be used to monitor and record the movements of vessels around the Seagreen Project as well as company vessels working at the site. Ref. 15.284 (ES September 2012)	N/A OMP Annex 2 (NSP)
All project phases	Shipping and navigational safety	Any vessel observed to stray into a safety zone will be identified and contacted by a designated member of the crew of the OWF, guard vessel or from the MCC via multi - channel Very High Frequency (VHF) radio, including Digital Selective Calling (DSC), and warned that they have encroached a safety zone. Ref. 15.285 (ES September 2012)	N/A OMP Annex 2 (NSP)
Other marine users and activities			
All project phases	Effects on other sea users	Consultation with the relevant wind farm project managers/ developers and operators, MOD and licensing authority to ensure logistics management is appropriate and to allow discussion of concerns and facilitate resolution of any potential issues. To this end Seagreen will continue to participate in on-going communication between the parties involved. The situation will also be monitored with regard any future development to assess potential impacts in the future. Ref. 20.43, 20.50, 20.55, 20.62, 20.68, 20.72, 20.73, 20.74, 20.75, 20.77 (ES September 2012)	N/A OMP Annexes 1 (VMP), 4 (FMMS) and 5 (TTP)
Mitigation and monitoring			
Monitoring	Various	Ensure development of an appropriate monitoring programme, in order to review the effectiveness of proposed measures by way of mitigation, and to identify effects that differ significantly to those predicted and so enable an appropriate response to be considered. Ref. 22.7 (ES September 2012)	4.2 PEMP, OMP Annex 4 (FMMS)

Activity	Potential impact	Environmental management, mitigation and monitoring measures ES/ES Addendum Reference	Mechanism for implementation	
			OEMP ref.	Other document/plan ref.
Monitoring	Various	The approach to monitoring for 'an appropriate monitoring programme' will be developed in consultation with the regulatory authorities, consultees and stakeholders, as appropriate - with any monitoring arrangements/actions being compliant with relevant legislation, license requirements, and agreed with relevant statutory consultees and regulatory authorities (and/or other stakeholders) Ref. 22.8 (ES September 2012)	4.2	PEMP
Pre-decommissioning surveys	Potential loss of habitat to rare and important species	Surveying for Annex I habitat will be undertaken prior to decommissioning Ref. 22.19 (ES September 2012)	N/A	PEMP
Operational	Safety to fishing vessels	Dialogue between the fishing community and the Applicants will be ongoing throughout the operational phase. Ref. 22.29 (ES September 2012)	N/A	OMP Annex 4 (FMMS)

Table G4: Offshore Substation Platforms (including foundations and substructure)

Activity	Potential impact	Environmental management, mitigation and monitoring measures ES/ES Addendum reference		Mechanism for implementation	
		ES/ES Addendum reference		CEMP ref.	Other document/plan ref.
Water quality and sediment quality					
Operational activities	Deterioration in water quality due to accidental spillages and waste water	Best practice for pollution prevention will be considered during the operational phases to mitigate the risk from accidental spillages. Ref. 8.206, 8.218 (ES September 2012)	4.5		OTA OMP, OWF OMP, MPCP
Operational activity	Deterioration in water quality due to accidental spillages and waste water	Contractors will be required by Seagreen to put in place appropriate Site Environmental Management Plans (SEMP) and Pollution Control and Spillage Response Plans that would have been agreed with the Regulatory Authorities prior to offshore activities commencing. These plans will act to reduce the potential for accidental pollution and in the unlikely event of a pollution incident, would ensure a rapid and appropriate response. Ref. 8.231 (ES September 2012)	1.5, 4.5		MPCP
Marine mammals					
Monitoring	All marine mammal impacts	The monitoring programme will be developed in consultation with key regulators, advisors, academics and experts and will focus on undertaking data gathering which over time can provide a statistically robust data set, which builds on on-going research. Ref. 13.654, 13.661, 13.662 (ES September 2012)	4.2		PEMP
Shipping and navigation					
All project phases	Impacts of all project phases upon shipping and recreation vessels	<i>See equivalent entry in Table G2</i>			
All project phases	Impacts of all project phases upon shipping and recreation vessels	Monitoring will take place through the Seagreen Project's Safety Management System (SMS). The SMS will include an incident/accident reporting system which will ensure that incidents and near misses are recorded and reviewed to monitor the effectiveness of the risk control measures in place at the site. In addition, any information gained from near misses/accidents at other OWP sites is likely to be considered with respect to the control measures applied at Project Alpha and Project Bravo. Ref. 15.281 (ES September 2012)	N/A		OMP Annex 2 (NSP), ERP
All construction	Shipping and navigational safety	CCTV will be installed to enable coverage of the OWF areas from key locations either on the WTGs or the substations. The CCTV will be adjustable for day/night conditions and allow operators in a central control room to identify vessel names from a distance to facilitate radio communications. Ref. 15.283 (ES September 2012)	N/A		OMP Annex 2 (NSP)
All project phases	Shipping and navigational safety	A Marine Control Centre (MCC) monitoring AIS will be used to monitor and record the movements of vessels around the Seagreen Project as well as company vessels working at the site. Ref. 15.284 (ES September 2012)	N/A		OMP Annex 2 (NSP)

Activity	Potential Impact	Environmental management, mitigation and monitoring measures ES/ES Addendum reference	Mechanism for implementation	
			CEMP ref.	Other document/plan ref.
All Project Phases	Shipping and navigational safety	Any vessel observed to stray into a safety zone will be identified and contacted by a designated member of the crew of the OWF, guard vessel or from the MCC via multi-channel Very High Frequency (VHF) radio, including Digital Selective Calling (DSC), and warned that they have encroached a safety zone. Ref. 15.285 (ES September 2012)	N/A	OMP Annex 2 (NSP)
Other marine users and activities				
All project phases	Effects on other sea users	Consultation with the relevant wind farm project managers/developers and operators, MOD and licensing authority to ensure logistics management is appropriate and to allow discussion of concerns and facilitate resolution of any potential issues. To this end Seagreen will continue to participate in on-going communication between the parties involved. The situation will also be monitored with regard any future development to assess potential impacts in the future. Ref. 20.43, 20.50, 20.55, 20.62, 20.68, 20.72, 20.73, 20.74, 20.75, 20.77 (ES September 2012)	N/A	OMP Annexes 1 (VMP), 4 (FMMS) and 5 (TTP)
Mitigation and monitoring				
Monitoring	Various	Ensure development of an appropriate monitoring programme, in order to review the effectiveness of proposed measures by way of mitigation, and to identify effects that differ significantly to those predicted and so enable an appropriate response to be considered. Ref. 22.7 (ES September 2012)	4.2	PEMP, OMP Annex 4 (FMMS)
Monitoring	Various	The approach to monitoring for 'an appropriate monitoring programme' will be developed in consultation with the regulatory authorities, consultees and stakeholders, as appropriate - with any monitoring arrangements/actions being compliant with relevant legislation, license requirements, and agreed with relevant statutory consultees and regulatory authorities (and/or other stakeholders). Ref. 22.8 (ES September 2012)	4.2	PEMP
Pre-decommissioning surveys	Potential loss of habitat to rare and important species	Surveying for Annex I habitat will be undertaken prior to decommissioning. Ref. 22.19 (ES September 2012)	N/A	PEMP
Operational	Safety to fishing vessels	Dialogue between the fishing community and the Applicants will be ongoing throughout the operational phase. Ref. 22.29 (ES September 2012)	N/A	OMP Annex 4 (FMMS)

Table G5: Export cables

Activity	Potential impact	Environmental management, mitigation and monitoring measures	
		ES/ES Addendum Reference	Mechanism for implementation CEMP ref. Other document/plan ref.
Shipping and navigation			
Cable burial/protection	Impact of Export Cable Installation on Fishing Vessels	The majority of export cables will be buried, although approximately 5% of the export cables may be protected by other means (i.e. rock placement or concrete mattresses). Ref. 15.113, 15.145 (ES September 2012)	N/A OMP (OTA) Annex 6 (CaP)
All project phases	Impacts of all project phases upon shipping and recreation vessels	<i>See equivalent entry in Table G2</i>	
All project phases	Impacts of all project phases upon shipping and recreation vessels	Monitoring will take place through the Seagreen Project's Safety Management System (SMS). The SMS will include an incident/accident reporting system which will ensure that incidents and near misses are recorded and reviewed to monitor the effectiveness of the risk control measures in place at the site. In addition, any information gained from near misses/accidents at other OWF sites is likely to be considered with respect to the control measures applied at Project Alpha and Project Bravo. Ref. 15.281 (ES September 2012)	N/A OMP Annex 2 (NSP), ERP
All project phases	Shipping and navigational safety	A Marine Control Centre (MCC) monitoring AIS will be used to monitor and record the movements of vessels around the Seagreen Project as well as company vessels working at the site. Ref. 15.284 (ES September 2012)	N/A OMP Annex 2 (NSP)
All Project Phases	Shipping and navigational safety	Any vessel observed to stray into a safety zone will be identified and contacted by a designated member of the crew of the OWF, guard vessel or from the MCC via multi-channel Very High Frequency (VHF) radio, including Digital Selective Calling (DSC), and warned that they have encroached a safety zone. Ref. 15.285 (ES September 2012)	N/A OMP Annex 2 (NSP)
Other marine users and activities			
All project phases	Effects on other sea users	Consultation with the relevant wind farm project managers/developers and operators, MOD and licensing authority to ensure logistics management is appropriate and to allow discussion of concerns and facilitate resolution of any potential issues. To this end Seagreen will continue to participate in on-going communication between the parties involved. The situation will also be monitored with regard any future development to assess potential impacts in the future. Ref. 20.43, 20.50, 20.55, 20.62, 20.68, 20.72, 20.73, 20.74, 20.75, 20.77 (ES September 2012)	N/A OMP Annexes 1 (VMP), 4 (FMMS) and 5 (TTP)
Mitigation and monitoring			
Monitoring	Various	Ensure development of an appropriate monitoring programme, in order to review the effectiveness of proposed measures by way of mitigation, and to identify effects that differ significantly to those predicted and so enable an appropriate response to be considered. Ref. 22.7 (ES September 2012)	4.2 PEMP, OMP Annex 4 (FMMS)

Activity	Potential Impact	Environmental management, mitigation and monitoring measures ES/ES Addendum Reference	Mechanism for Implementation	
			CEMP ref.	Other document/plan ref.
Monitoring	Various	The approach to monitoring for 'an appropriate monitoring programme' will be developed in consultation with the regulatory authorities, consultees and stakeholders, as appropriate - with any monitoring arrangements/actions being compliant with relevant legislation, license requirements, and agreed with relevant statutory consultees and regulatory authorities (and/or other stakeholders) Ref. 22.8 (ES September 2012)	4.2	PEMP
Pre-decommissioning surveys	Potential loss of habitat to rare and important species	Surveying for Annex I habitat will be undertaken prior to decommissioning Ref. 22.19 (ES September 2012)	N/A	PEMP
Operational	Safety to fishing vessels	Dialogue between the fishing community and the Applicants will be ongoing throughout the operational phase. Ref. 22.29 (ES September 2012)	N/A	OMP Annex 4 (FMMS)