



# ***WEST OF ORKNEY WINDFARM***

## **Onshore EIA Report, Volume 3, Outline Management Plan 1: Outline Construction Environmental Management Plan**

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**Approved by S. Kerr**

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### Document Role

| Role     | Company | Name                                | Aconex Signature |
|----------|---------|-------------------------------------|------------------|
| Author   | Xodus   | Charlotte French<br>Ashleigh Fenton | N/A              |
| Checker  | OWPL    | Liz Foubister                       |                  |
| Acceptor | OWPL    | Stephen Kerr                        |                  |

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# 1. CEMP Overview

## 1.1 Introduction

This Outline Construction Environmental Management Plan (CEMP) covers the construction of the onshore infrastructure of the West of Orkney Windfarm, an offshore wind project being developed by Offshore Wind Power Limited (OWPL), hereafter referred to as 'the Developer'. The West of Orkney Windfarm includes both onshore and offshore elements required to generate and transmit electricity.

The onshore infrastructure, hereafter referred to as 'the onshore Project' comprises the onshore elements of the Project, located landward of the Mean Low Water Springs (MLWS). The key construction components of the onshore Project, applicable to this outline CEMP are:

- Offshore export cables – Horizontal Directional Drilling (HDD), pull in and jointing works for up to five cables between the offshore Project and the Transition Joint Bays (TJBs) at the landfall(s). The onshore Project only covers the export cables between the MLWS and the TJBs;
- Landfall – two options are proposed, one at Crosskirk and one at Greeny Geo. If either option is constrained, the TJBs may be split over the two landfalls (e.g., three TJBs at Crosskirk and two TJBs at Greeny Geo);
- Up to five Onshore export cable circuits including Cable Joint Bays (CJBs) within the cable corridor between the TJBs and the new onshore substation;
- Onshore substation;
- Temporary construction compounds and working corridors – covering the landfall, onshore export cables and onshore substation;
- Temporary access tracks for the landfall works, onshore export cable works, HDD crossings and onshore substation; and
- Up to seven permanent access tracks across the onshore Project area.

This Outline CEMP will form the basis of the final CEMP providing an overarching framework for the environmental management of the onshore Project. The CEMP will be finalised and adopted post consent, ahead of construction, and following approval by The Highland Council (THC).

The CEMP will form part of the mandatory induction for all employees, contractors and visitors attending the site. All employees and contractors will familiarise themselves with the content of the CEMP.

The Legislation and Guidance used to inform this outline CEMP has been detailed in Section 6.

## 1.2 Purpose

The main purpose of the CEMP is to provide an overarching framework for the environmental management during the construction of the onshore Project, detailing the environmental objectives of the onshore Project and any specific requirements of the relevant consent conditions. This will assist the Developer and Principal Contractor(s) in ensuring that they comply with the planning conditions and relevant legislation, policy and guidance. Following approval of the final CEMP, the CEMP will become a 'live document' and will be updated as required during the planning and construction process, such as addressing any updates in current legislation, incorporating findings from pre-construction site investigations and addressing conditions of the Planning Permission in Principle (PPP).

This outline CEMP sets out the minimum standards to be adopted when constructing the onshore Project and be in line with THC guidance note 'Construction Environmental Management Process for Large Scale Projects' (THC, 2010).

On confirmation of Principal Contractor(s), the CEMP will set the framework for individual Construction Method Statements (CMSs) and the document will be reviewed and agreed with the relevant stakeholders prior to the commencement of construction. The CEMP will therefore be subject to refinement, expansion and amendment as necessary.

### 1.3 Structure of the CEMP

This outline CEMP provides an overview of the purpose of the CEMP, the onshore Project description, key correspondence and communication requirements during construction, Project commitments, construction methods and environmental management measures.

To facilitate the commitments of the onshore Project, and to safeguard the environment, a number of management plans are to be finalised from the outline plans (submitted alongside the application for PPP), or developed post consent, in line with the Project commitments once the final design of the onshore Project has been established. All management plans should be read in conjunction with the final CEMP.

Several of the final management plans are to be appended within the final CEMP, whilst others will be standalone documents produced in accordance with the anticipated specific PPP conditions. For clarity, Figure 1-1 below highlights the proposed structure and contents of the final CEMP and shows the management plans which will be submitted separately from the final CEMP. The structure of the final CEMP may be subject to change based on consultation responses provided in respect of the PPP application.

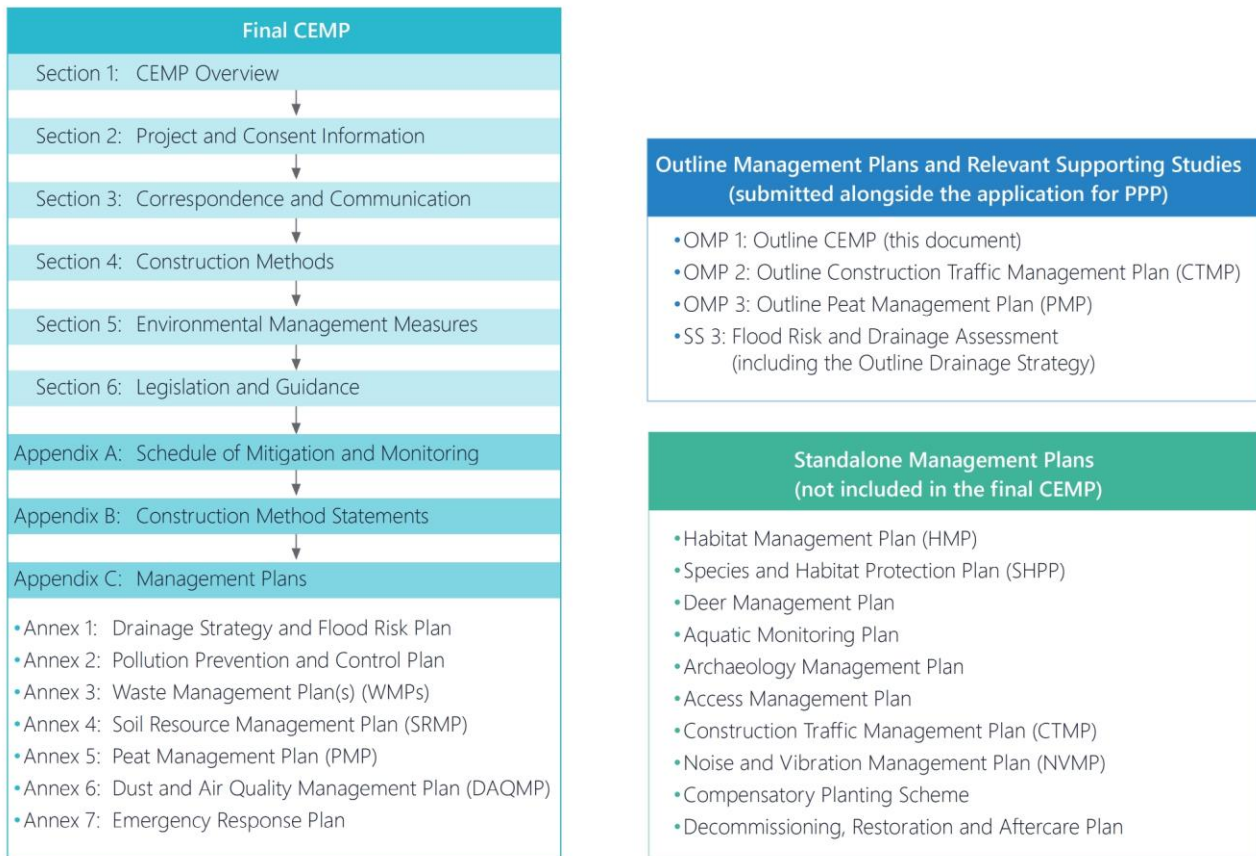


Figure 1-1 Structure of the final CEMP and management plans

## 1.4 Document control

The final CEMP is a 'live document' and will be subject to a number of periodic reviews and updates. The document is intended for use by the Developer and their contractors specifically involved in the construction of the onshore Project. A copy of this document and related files and documents will be kept in the site offices for the duration of the site works and will be made available for review at any time. When the document is amended the document revision record will be updated and the CEMP redistributed to those personnel specified in the distribution list (Table 1-1). The distribution list will be developed post consent.

**Table 1-1 Distribution list [to be completed post consent]**

| Organisation | Contact Name | Email | Telephone Number |
|--------------|--------------|-------|------------------|
|              |              |       |                  |
|              |              |       |                  |
|              |              |       |                  |

## 1.5 Roles and responsibilities

It is the responsibility of all personnel involved in the onshore Project to ensure the CEMP, and all environmental mitigations covered within the document, are implemented correctly. An organisational organogram will be provided within this section of the final CEMP post-consent.

Table 1-2 describes the key roles and responsibilities of the Developer and the Principal Contractor(s) which are relevant to the CEMP. Each Principal Contractor will have specific roles relevant to their scope of work (such as the landfall HDD and TJB installation, the onshore export cable installation, and the onshore substation construction) which will be reflected within the table when it is updated post consent on the appointment of the Principal Contractor(s) and the finalisation of the onshore Project design.

**Table 1-2 Key roles and responsibilities**

| Role  | Contact Details               | Responsibilities  |
|---|-------------------------------|---|
| <b>Developer Roles</b>                        |                               |   |
| <b>The Development Manager</b>                | [To be included post-consent] | The Development Manager will ensure the onshore Project is built in accordance with the PPP planning conditions and they will be the main point of communication for all regulatory and stakeholder engagement.   |
| <b>Consents and Environment Manager (CEM)</b> | [To be included post-consent] | The CEM will apply for the appropriate consents and will ensure the onshore Project is constructed in line with the PPP consent conditions and the mitigation measures presented within the final approved Schedule of Mitigation and Monitoring (Appendix A).  |
| <b>Ecological Clerk of Works (ECoW)</b>       | [To be included post-consent] | The ECoW(s) is an independent specialist who will monitor the implementation of the landscape and ecological mitigation measures, undertaking pre-construction checks and watching briefs as required by the relevant environmental management plans.   |
| <b>Archaeological Clerk of Works (ACoW)</b>   | [To be included post-consent] | The ACoW is an independent specialist, responsible for the implementation of the Archaeological management plan, and will monitor construction and watching briefs as required.   |
| <b>Community Liaison Officer (CLO)</b>        | [To be included post-consent] | The CLO will undertake the community engagement required for the onshore Project. The CLO will engage affected community councils and members of the public to ensure relevant Project updates are communicated and made publicly available. This includes dissemination of information e.g., local Project |

| <b>Role</b>  | <b>Contact Details</b>        | <b>Responsibilities</b>  |
|--|-------------------------------|--|
|  |                               | events. The CLO will also manage complaints received in accordance with the complaint procedure.   |
| <b>Contact for road safety</b>   | [To be included post-consent] | A nominated contact for road safety will be provided and will be the contact for any road safety issues. They will ensure measures for keeping the Community Council(s) informed and dealing with queries and any complaints regarding construction traffic.   |
| <b>Principal Contractor Roles – each principal contractor to be listed in final CEMP</b> |                               |  |
| <b>Principal Contractor(s)</b>   | [To be included post-consent] | The Contractor(s) appointed to undertake the construction works shall be responsible for ensuring that the CEMP is fully implemented as well as ensuring all personnel and sub-contractors adhere to and implement the final CEMP. The Contractor(s) is also responsible for obtaining all necessary consents, licences and permissions for their activities as required by current legislation governing the protection of the environment. |
| <b>Site Manager(s)</b>   | [To be included post-consent] | The Site Manager(s) is responsible for ensuring all site work is carried out in line with the construction method statements and any risks are identified, and relevant operatives briefed. They will also carry out site inspections and identify any environmental issues.   |
| <b>Site Environmental Representative(s)</b>  | [To be included post-consent] | The Site Environmental Representative(s) is responsible for the implementation and monitoring of the waste reduction strategy and ensuring compliance of the Waste Management Plans (WMPs) at an operational level. They will also be responsible for maintaining the Site Environmental Notice Boards (SENBs).  |
| <b>All construction staff</b>  | [To be included post-consent] | All construction staff will ensure they understand and adhere to the environmental sensitivities of the onshore Project and the requirements of the final CEMP. Further information on how the final CEMP will be communicated to construction teams is detailed in subsequent sections.   |
| <b>Subcontractors</b>  | [To be included post-consent] | The subcontractors are responsible for ensuring any work they carry out conforms with the relevant environmental legislation, final CEMP requirements and contractual environmental requirements.  |



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## 2. Project and Consent Information

### 2.1 Onshore Project area location

The onshore Project is within THC jurisdiction, with the landfall points located to the West of Thurso and the onshore substation to the south of Halkirk in Caithness. The onshore works involve three main work areas known as the development zones; the landfall(s) (including HDD works), the onshore export cable route and the onshore substation (including landscape screening).

The onshore export cable route is still being defined and will be dependent on the results of ongoing site investigations, engineering studies and the findings of the Onshore EIA Report, however, it will be contained within the onshore Project area as shown in Figure 2-1.

It should be noted that the onshore export cables will not utilise the whole of the onshore Project area but will be contained in a 100 metre (m) wide corridor. The maximum corridor length from the landfall to the onshore substation will be approximately 33 kilometres (km).

The onshore Project area is rural in nature, with a limited number of small settlements. The major land use is agriculture, including arable and grazing farmland. Other prominent features include main roads (such as the A9 and A836), minor roads and electrical overhead lines, with a mixture of wooden pole and larger lattice steel towers. The two largest rivers prominent in the onshore Project area are the River Thurso and Forss Water. Other land users include recreational features, such as core paths and Sibster Forest, the latter of which is owned and managed by Forestry and Land Scotland (FLS). In addition, there is a single-track Network Rail Scotland railway line that runs across the onshore Project area between Georgemas junction and Scots Calder and a single-track Network Rail Scotland railway line that runs adjacent to the onshore Project area from Thurso to Wick. These features are shown in Figure 2-1.

### 2.2 Onshore Project description

Full details of the onshore Project description, including installation methodologies and parameters of the onshore Project infrastructure, are provided in the Onshore EIA Report, chapter 5: Project description. The following provides an overview of the key onshore Project construction work packages, these being the landfall works, the onshore export cable works and the onshore substation works.

The landfall options located at Greeny Geo and/or Crosskirk, is the interface between the onshore and offshore Projects. The landfall(s) installation will be through HDD (which will be conducted onshore). The HDD works form part of the onshore Project works. Nonetheless, the TJBs at the landfall(s) which are required to house the interface joint between the offshore and onshore export cables will form part of the onshore Project scope. The TJBs will be constructed after the landfall(s) HDD works are completed. These works may be completed before the cables, are pulled in. It is expected that works on the landfall(s) HDD and TJBs will take less than six months.

The underground onshore export cables will require a variety of installation methods to be used due to varying ground conditions along the onshore export cable route. These installation methods may include rock breaking excavators to create trenches; battered-back or shored excavations in glacial tills, dewatering systems and shoring in wetter ground conditions. The onshore export cables will be buried using Open Cut Trenching (OCT) techniques over unobstructed ground. Crossing methods for linear features, such as watercourses, roads and railways, will range from open trenching (i.e. dry OCT will be the main methodology for minor watercourses or ditch crossings) to a range of trenchless crossings (e.g. cased auger boring, thrust boring, pipe jacking or HDD). The precise installation technique will be determined based on location specific requirements; however, HDD operations will only be used at major crossings including the River Thurso, Forss Water and the single-track Network Rail Scotland railway line.

The onshore export cables are to be constructed in sections and joined through CJBs due to the length of the onshore export cable route (approximately 33 km). At this time, it has not been established how many sections will be developed and over what distance they will be constructed. It is extremely unlikely that the entire onshore export cable route will be worked on at a single point in time. Careful planning of the onshore export cable installation will take place to minimise construction inconvenience to the public and the total duration of any works. Specific transport plans and arrangements will be made with defined access routes and entry / exit points to each of the sections. Excess material from trenching of the onshore export cable route is intended to be taken to the onshore substation to form the landscape screening bunds, subject to agreement of final landscaping plans. After the construction of respective sections of the onshore export cable route, the

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offshore export cables will be pulled in followed by final reinstatement of the respective onshore export cable route section back to its original use. The work for the installation of the onshore export cables will take approximately three years.

The onshore substation will be constructed on a circuit-by-circuit basis but in essence will be constructed as a single Project. Due to the lead times of equipment the construction of the onshore substation will take approximately four years. The onshore substation will have only one entrance / exit which is intended to utilise the existing road that leads off of the A9 junction to the existing SHET-L Spittal substation. It is intended that landscape bunds will be created and planted to screen the substation.

Works may take place at multiple locations, at any given time, within the onshore Project area e.g., at the landfall, onshore export cable route and at the onshore substation. Detailed design will be finalised post consent and the Project description will be updated in the final CEMP.

## 2.3 Onshore Project schedule

Core working hours for the construction of the onshore elements of the Project will be typical working hours which are taken to be 8:00 to 19:00 Monday to Friday and 8:00 to 13:00 pm on Saturdays. Any requirements for noisy works to take place outside of these hours will require approval from THC (e.g. HDD works may continue outside of these hours).

The construction of the onshore Project is projected to take four years to complete. An overview of the Scope of Work for the onshore Project is detailed below but will be updated, as required, post consent in the final CEMP:

- Site Establishment;
- Enabling Works;
- Landfall Works;
- Onshore Cable Routes;
- Substation Civil Works;
- Substation Mechanical and Electrical (M&E) works;
- Commissioning Works;
- Final Reinstatement Works; and
- Removal of Compounds.

An indicative construction programme is detailed in Figure 2-2. This will be updated post consent once the design has been finalised and the Principal Contractor(s) appointed.

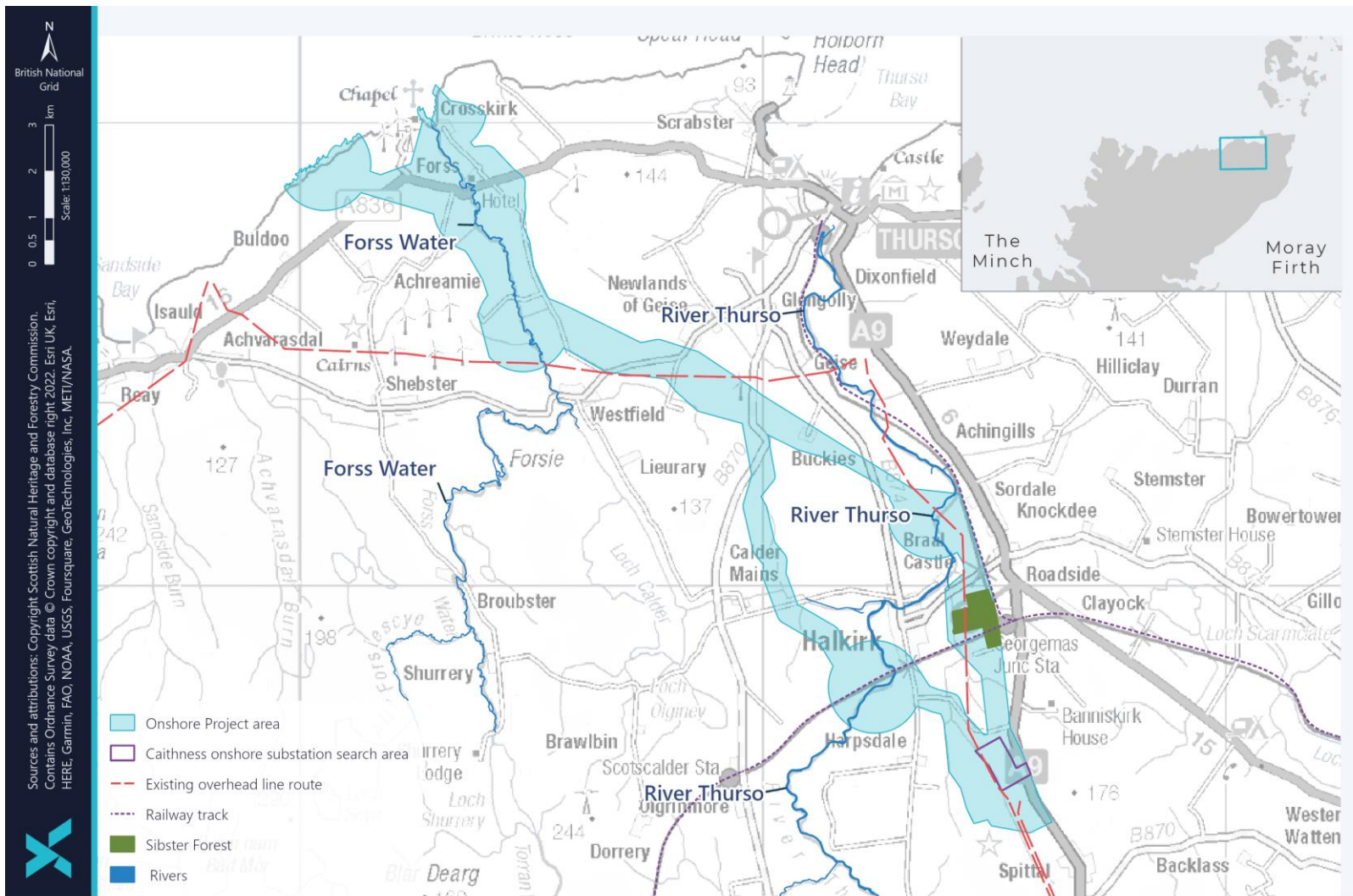


Figure 2-1 Onshore Project area

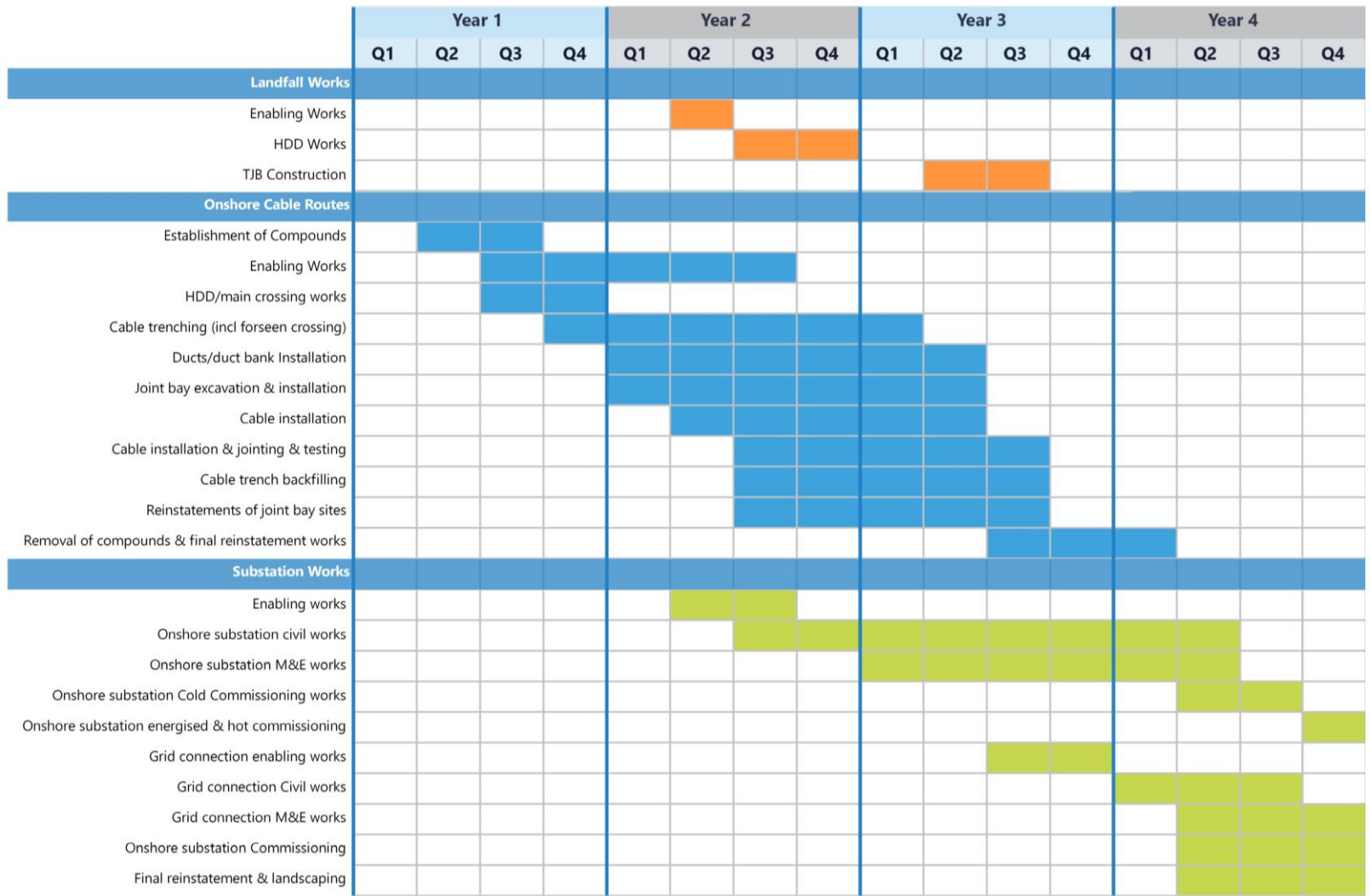


Figure 2-2 Outline Construction Programme

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## 2.4 Statutory consents, licences and permits

Any relevant consents, licences and permits will be applied for as required and copies of the application forms and consents will be kept within the onshore Project files and will be made available to the relevant personnel. The consents required / obtained will be listed in the table below, which will be completed in the final CEMP post consent. Such consents and licences anticipated include the PPP consent, Controlled Activities Regulations (CAR) Licence(s), and NatureScot Derogation Licences.

**Table 2-1 Environmental consents [to be completed post consent]**

| Environmental Consents | Required / obtained | Owner | Relevance |
|------------------------|---------------------|-------|-----------|
|                        |                     |       |           |
|                        |                     |       |           |
|                        |                     |       |           |

## 2.5 Onshore Project commitments

The final CEMP will provide a Schedule of Mitigation and Monitoring to secure how the onshore Project will ensure the suitable implementation and control of the mitigation and monitoring measures committed to by the onshore Project team. The Schedule of Mitigation and Monitoring will be in line with those mitigation and monitoring measures proposed within the Onshore EIA Report, within chapter 19: Summary of mitigation and monitoring. The Schedule of Mitigation and Monitoring will be finalised in line with the requirements of the PPP planning conditions, should consent be granted. The Schedule of Mitigation and Monitoring will be presented within Appendix A, of the final CEMP.

The Principal Contractor(s) will be required to adhere to the Schedule of Mitigation and Monitoring and ensure that all CMSs are aligned with these measures.

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## 3. Correspondence and Communication

### 3.1 Communication

Internal communications will be finalised post consent but are likely to include weekly meetings with the principal contractor (which will include environmental matters), environmental performance meetings and SENBs to display the environmental policy and any other relevant information.

The CEM, ECoW and ACoW will liaise with the relevant regulators and external stakeholders on matters relating to environmental management.

#### 3.1.1 Community Liaison Officer

A CLO will be employed by the Developer to lead on engagement with potentially affected Community Councils and residents. The CLO shall establish a community liaison group in consultation with THC and the affected local Community Council(s). The group shall act as a forum for the community to be kept informed of Project progress.

The CLO and community liaison group will operate under an approved framework for active engagement with local residents to learn of any concerns they may have with the programme of work in order to help minimise impacts of construction to local residents. Communication with the wider community will be undertaken through signage and letter drops as appropriate. Advance notice of works will be provided as required.

#### 3.1.2 Contact for road safety

A nominated contact for road safety will be employed by the Developer to ensure Community Council(s) and the public are aware of the traffic measures as depicted by the Construction Traffic Management Plan (CTMP) during construction. The contact for road safety will deal with all traffic related complaints and enquiries.

### 3.2 Risk assessments and Construction Method Statements

All activities undertaken on site shall be subject to a Risk Assessment and the implementation of Method Statements (RAMS), including a review of Health, Safety and Environment (HSE) risk and commitments.

Risk assessments will be undertaken by the Principal Contractor(s). All risk assessments and documentation will be carried out by trained staff following an approval procedure, which where necessary will include relevant specialists.

Risk Assessments will follow best practice and industry standards and will contain further details on Hazard impacts probability and HSE risks. All method statements provided by Principal Contractor(s) will be included in the CEMP Appendix B post consent.

### 3.3 Environmental training

All personnel, including Developer personnel and Contractors, will have the required skills, education and training to perform their tasks in accordance with the CEMP. Contractors and Subcontractors will ensure that they have adequate environmental management resources and procedures in place for the duration of the onshore Project scope of works that they are contracted to undertake. Environmental training and awareness sessions in relation to environmental management will be implemented throughout the onshore Project. Records of training and awareness sessions will be kept for monitoring and auditing purposes.

Some potential methods for environmental training and awareness are detailed in Table 3-1. The details will be finalised post consent.

**Table 3-1 Methods of environmental training**

| <b>Method</b>              | <b>Description</b>  |
|----------------------------|---|
| <b>Inductions</b>          | A compulsory requirement for all construction personnel and sub-contractors. It will cover a number of environmental topics and will evolve to reflect any changes in the CEMP as the onshore Project develops. |
| <b>Toolbox Talks (TBT)</b> | TBT will focus on specialised topics, highlight any issues of concern, distribute any new information or responsibilities and provide basic environmental training on specialised topics.                       |
| <b>Specialist Training</b> | Specialist training will be provided as required for specific members of the construction crews.  |

### **3.4 Inspections and audits**

Regular environmental inspections and audits will be carried out to record performance and identify any required corrective actions. It is expected that the Contractor undertakes a programme of environmental audits to satisfy conformance with the CEMP, this will include audits of sub-contractors.

Should any insufficiencies or opportunity for improvement be identified, actions and timelines will be agreed upon with the staff responsible. The actions implemented to correct any insufficiencies and the success of those actions will be reported to the Developer and any statutory bodies as required.

### **3.5 Environmental Standards**

All employees are expected to comply with the Environmental Policy requirements and the Environmental Management System (EMS).

All employees and support staff (contractors, subcontractors, suppliers etc.) will be expected to promote and deliver a strong environmental culture. To achieve this several initiatives will be devised and implemented from day one of construction. This will include the use of environmental inductions and TBT (see section 3.3).

### **3.6 Environmental incident and response**

#### **3.6.1 Environmental incidents and corrective actions**

All environmental incidents and near misses shall be reported, recorded and investigated by the relevant personnel via the response procedure to be developed in adherence to the Developer's and/or contractor's Health and Safety Plan. Where relevant the appropriate authorities and wider community will be informed immediately. Copies of incident investigation reports shall be supplied, and action taken to prevent recurrence.

All corrective action, incident and near miss report forms shall be held in a register onsite.

#### **3.6.2 Complaints procedure**

Contact details will be provided to which all written complaints will be sent. All complaints will be logged, recorded and collated and made available to the relevant personnel. Any complaints received will be acknowledged within a set time frame during hours when work is taking place. All complaints will be addressed via written response and any action deemed appropriate undertaken and reported back to the complainant. Records will be kept of all complaints received and any actions taken.

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## 4. Outline Construction Methods

### 4.1 Introduction

This section of the CEMP outlines the key construction methods which will be adhered to by all Developer and Contractor personnel throughout the construction of the onshore Project. These methods may be subject to change post consent in line with finalised management plans, planning conditions, and Project design refinements.

The Principal Contractor(s) will be required to submit CMS and associated Risk Assessments to the Developer for approval in accordance with these construction methods. These CMS will be written and approved for all work packages, such as those relating to: HDD, cable installation and the onshore substation construction.

All employees will be made aware of and will be required to adhere to the construction methods and approved CMS for their work packages throughout the construction works.

All approved CMS will be appended to the final CEMP post consent, within Appendix B.

### 4.2 Health, safety and environment (HSE)

All site-specific risk assessments will be carried out pre-construction in accordance with the Construction (Design and Management) (CDM) Regulations 2015 and any mitigation measures as a result will be implemented across the construction area. A Health and Safety Plan will be prepared prior to the start of construction and in accordance with The Health and Safety at Work Act 1974 and good practice. These include:

- Planning work so any risks involved are managed from start to finish;
- Using the right people for the right job at the right time;
- Have up to date information on any risks and how they are being managed;
- Ensure good lines of communication and ensure information is communicated effectively; and
- Engage and consult with workers about the risks and how they are being managed.

### 4.3 Construction hours

Core working hours for the construction of the onshore elements of the Project will be typical working hours which are taken to be 8:00 to 19:00 Monday to Friday and 8:00 to 13:00 pm on Saturdays. This will also apply to the movement of Heavy Good Vehicles (HGV). In certain circumstances, specific works may have to be undertaken outside the normal working hours (such as HDD operations). In these instances, working hours will be agreed in advance and any additional requirements under with THC's Environmental Health Department.

As per chapter 15: Noise and vibration of the Onshore EIA Report, an assessment of construction noise has been undertaken to provide THC with the required information to assess the need for any additional requirements on the onshore Project under Section 60 of the Control of Pollution Act 1974.

### 4.4 Construction compounds and welfare

In line with the CDM Regulations 2015, welfare cabins, toilets and drying facilities will be provided at appropriate locations within construction areas, for the use of site personnel. Pest and vermin infestation risks will be minimised through appropriate actions, and should portable generators be required industry best practice will be used to minimise any noise and pollution in line with the Pollution Prevention and Control Plan (which will be appended to the final CEMP, Appendix C; Annex 2).

### 4.5 Construction access

Due to the works taking place over multiple locations, as described in Section 2.2, and the results of an abnormal load assessment there will be the requirement for several temporary access roads, laydowns and construction compounds, although, where possible, existing roads, farm tracks and utility access roads will be used. Local road improvements, such as widening, stabilisation and the construction of laybys may be required in addition to the construction of permanent access



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roads for the operation and maintenance activities throughout the onshore Project area and will be based upon consultation with THC.

Construction access requirements are further outlined within the Design and Access Statement, submitted in support of the PPP application.

An Access Management Plan will be produced post consent and will be a standalone document, separate from the CEMP.

## **4.6 Construction traffic**

An outline CTMP is provided alongside the application for PPP (See OMP2: Outline CTMP). The CTMP provides an overview of the traffic management procedures for the onshore Project during construction.

Prior to construction the CTMP will be consulted on with relevant stakeholders and submitted for approval as a standalone document, separate from the CEMP.

## **4.7 Drainage and flood risk**

An outline Drainage Strategy and Flood Risk Assessment has been provided alongside the application for PPP (see Onshore EIA Report, Supporting Study (SS) 3: Flood Risk and Drainage Assessment). This document outlines the drainage measures to be put in place throughout construction (and operation). The document also highlights the key sensitive water resource areas and areas of flood risk within the onshore Project area.

Prior to construction a finalised Drainage Strategy and Flood Risk Plan will be included within the final CEMP within Appendix C; Annex 1.

## **4.8 Temporary lighting**

Temporary lighting within the construction compounds is likely to be required for security purposes and to ensure a safe working environment during times of reduced daylight (e.g. during winter months). In addition, temporary lighting could be required to ensure safe working conditions at infrastructure locations during construction. Temporary lighting may include downwards pointing Passive Infra-Red (PIR) activated lighting. It is anticipated that all lights would be switched off during daylight hours and outside of working hours.

## **4.9 Carbon**

As the design progresses, consideration of construction emissions and design enhancement measures (particularly related to embodied carbon within materials) should be used as a decision-making criterion, with the aim of minimising emissions where practicable.

## **4.10 Waste management**

A Waste Management Plan will be produced in order to ensure the appropriate management and disposal of waste during construction works. The Waste Management Plan will be provided prior to construction and included within Appendix C; Annex 3, within the CEMP.

## **4.11 Security**

A suitable system will be implemented, such as a permit to work system, to ensure only authorised construction workers are permitted within the construction sites and accurate records are available in case of emergencies. Construction sites will have dedicated entry and exit points which will be monitored for security and health and safety reasons.

A visitor protocol will be established and implemented across all construction sites and all working areas will be appropriately secured to prevent members of the public and animals straying onto working areas.

All employees will adhere to the security requirements during construction works.

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## 4.12 Landscaping and forestry

The final onshore substation design and landscaping plans (for planting and bunding around the onshore substation) will be finalised post consent in discussion with relevant stakeholders and agreement with THC.

In addition, the onshore Project may be subject to a Compensatory Planting Scheme should felling of forestry/woodland be required within the onshore Project area. Whilst every effort will be taken to avoid forestry and woodland areas through micro-routing, there are instances where woodland avoidance may not be possible within the onshore export cable route (at Sibster Forest and Hill of Howe woodland). The requirements for compensatory planting will be agreed with Scottish Forestry and Forestry and Land Scotland (FLS) (if appropriate). The Compensatory Planting Scheme, should it be required, will be a standalone document produced post- consent and provided separately from the CEMP.

## 4.13 Decommissioning and restoration

A Decommissioning, Restoration and Aftercare Plan will be developed to detail the mechanisms for decommissioning of plant and restoration of construction working areas to be adhered to throughout construction.

The Plan will be consulted on with relevant stakeholders and submitted for approval as a standalone document separate from the CEMP post consent.

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# 5. Environmental Management

## 5.1 Introduction

This section of the CEMP outlines the key environmental management methods and plans which will be adhered to by all Developer and Contractor personnel throughout the construction of the onshore Project.

These methods may be subject to change post consent in line with finalised management plans, planning conditions, and Project design refinements.

The Principal Contractor(s) will be required to submit CMS and associated Risk Assessments to the Developer for approval in accordance with these environmental management requirements.

All employees will be made aware of and will be required to adhere to the environmental management measures and plans throughout the construction works.

## 5.2 Construction noise

A Noise and Vibration Management Plan (NVMP) will be produced prior to construction to provide full details of the construction noise measures to be adhered to throughout construction.

The NVMP will be consulted on with relevant stakeholders and submitted for approval as a standalone document separate from the CEMP. The NVMP will also align with the CTMP.

## 5.3 Pollution prevention and control

A Pollution Prevention and Control Plan will be produced prior to construction to provide full details of the pollution prevention and control methods required to be adhered to throughout construction. The Plan will be provided in Appendix C; Annex 2 of the final CEMP.

## 5.4 Soil management

A Soil Resource Management Plan (SRMP) will be produced prior to construction to detail the mechanism for soil resource protection to be adhered to throughout construction. The Plan will be provided in Appendix C; Annex 4 of the final CEMP.

## 5.5 Peat management

An Outline Peat Management Plan (PMP) has been submitted alongside the application for PPP (see OMP3: Outline Peat Management Plan). Prior to construction this plan will be finalised. The plan will be provided in Appendix C; Annex 5 of the final CEMP.

## 5.6 Contaminated land management

Due to the proximity of potentially radioactive sites to the onshore Project area there is the possibility that radioactivity levels may be detected in the course of construction. Should any contaminated soils be detected or suspected during construction, operations will cease, and appropriate consultation will be undertaken.

Contamination may occur during the crossing of surfaced public and private roads and may also be encountered during HDD operations under the Network Rail Scotland railway line. Contaminated land management will be carried out in accordance with the Environmental Protection Act 1990 and alongside best practices in sediment and water management, waste separation and staff awareness.

Contaminated land can also occur from the incorrect disposal of waste peat that may be excavated from the site. As a result, the handling, storage, and disposal of peat will be in line with the Environment Protection Act 1990 and the Waste Management Licensing (Scotland) Regulations 2011. Further information will be included in the final CEMP.

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## 5.7 Species and habitat protection

A Species and Habitat Protection Plan (SHPP) will be produced prior to construction to detail the mechanism for species (including mammals, reptiles, bats, birds and fish) and habitat protection to be adhered to throughout construction. In accordance with these measures, a Habitats Management Plan (HMP) will also be produced to agree the monitoring of these receptors by the ECoW(s).

The SHPP and HMP will be consulted on with relevant stakeholders and submitted for approval as standalone documents separate from the CEMP.

## 5.8 Deer management

A Deer Management Plan will be produced prior to construction to detail the mechanism for deer management to be adhered to throughout construction.

The Deer Management Plan will be consulted on with relevant stakeholders and submitted for approval as a standalone document separate from the CEMP.

## 5.9 Aquatic monitoring

An Aquatic Monitoring Plan will be produced prior to construction to detail the mechanism for freshwater ecology monitoring procedures to be adhered to ahead of and throughout construction.

The Aquatic Monitoring Plan will be consulted on with relevant stakeholders and submitted for approval as a standalone document separate from the CEMP.

## 5.10 Archaeology protocols

An Archaeology Management Plan will be produced prior to construction to detail the mechanism for the protection of archaeology assets to be adhered to throughout construction.

The Archaeology Management Plan will be consulted on with relevant stakeholders and submitted for approval as a standalone document separate from the CEMP.

## 5.11 Construction dust and air quality

A Dust and Air Quality Management Plan (DAQMP) will be produced prior to construction to detail the mechanism for dust management and air quality protection to be adhered to throughout construction. The Plan will be provided in Appendix C; Annex 6 of the CEMP.

## 5.12 Environmental emergency response

An overarching Emergency Response Plan will be produced prior to construction to detail emergency response procedures to be adhered to should an environmental incident occur during construction works. The Plan will be provided in Appendix C, Annex 7 of the final CEMP.

All CMS should include emergency response measures in relation to specific work packages, for example, HDD break-out contingency plans will be required for all HDD CMS.

## 6. Legislation and Guidance

The legislation and guidance used to inform this outline CEMP, including its appendices, is detailed in the table below. This will be updated if necessary, ahead of the final CEMP post consent.

| Supporting Document   | Area of Relevance                                |
|---|--|
| <b>Environmental Legislation</b>  |  |
| The Construction (Design and Management) Regulations 2015 (UK Parliament, 2015)   | Construction Compounds and Welfare, HSE          |
| Section 34 of the Environmental Protection Act 1990 (UK Parliament, 1990) as amended by The Waste (Scotland) Regulations 2012 (Scottish Parliament, 2012)   | Waste Management                                 |
| The Environmental Protection Act 1990 (UK Parliament, 1990)   | Noise Management<br>Contaminated Land Management |
| Control of Pollution Act 1974 (UK Parliament, 1974)   | Noise Management                                 |
| Groundwater Protection Policy for Scotland (SEPA, 2009)   | Pollution Prevention and Control                 |
| Water Environment (Controlled Activities) (Scotland) Regulations 2011 (Scottish Parliament, 2011a)  | Pollution Prevention and Control                 |
| Waste Management Licensing (Scotland) Regulations 2011 (Scottish Parliament, 2011b)   | Contaminated Land Management                     |
| The Health and Safety at Work Act 1974 (UK Parliament, 1974)  | HSE  |
| <b>Environmental Guidance</b>   |  |
| SEPA's Guidance for Pollution Prevention (SEPA, 2023)   | Pollution Prevention and Control                 |
| SEPA's Pollution Prevention Guidelines (SEPA, 2023)   | Pollution Prevention and Control                 |
| Scottish Environment Protection Agency (SEPA) Guidance for Pollution Prevention (GPP): Understanding your environmental responsibilities – good environmental practices: GPP 1, June 2021 (SEPA, 2021)        | Pollution Prevention and Control                 |
| SEPA Position Statement (WAT-PS-10-01): Assigning Groundwater Assessment Criteria for Pollutant Inputs (SEPA, 2014).  | Pollution Prevention and Control                 |
| SEPA's Water Environment (Controlled Activities) (Scotland) Regulations 2011, Version 9.3 – A Practical Guide (SEPA, 2023c).  | Pollution Prevention and Control                 |
| SEPA's Land Use Planning System, SEPA Guidance Note 31: Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems (SEPA, 2017). | Pollution Prevention and Control                 |
| SEPA's Technical Flood Risk Guidance for Stakeholders (SEPA, 2022).   | Pollution Prevention and Control                 |
| SEPA Flood Risk Standing Advice for Planning Authorities and Developers (SEPA, 2020) and Land Use Planning System Flood Risk and Land Use Vulnerability Guidance (SEPA, 2018).                                | Pollution Prevention and Control                 |
| SEPA Position Statement (WAT-PS-10-01): Assigning Groundwater Assessment Criteria for Pollutant Inputs (SEPA, 2014).  | Pollution Prevention and Control                 |
| Flood Risk and Drainage Impact Assessment Supplementary Guidance (THC, 2013a).  | Drainage   |

| Supporting Document   | Area of Relevance         |
|---|---------------------------|
| THC Supplementary Guidance. Highland's Statutory Protected Species (THC, 2013b).  | Species Protection        |
| Highland Forest and Woodland Strategy (THC, 2018): The Highland Forest & Woodland Strategy (HFWS) is one of a series of Supplementary Guidance documents prepared by THC to support the Highland-wide Local Development Plan (HwLDP) (THC, 2012). | Species Protection        |
| Trees, Woodlands and Development (THC, 2013c); supplements Policy 51 of the HwLDP and ensures applicants seeking planning permission on development in areas of woodland effectively consider and manage existing woodland.                       | Species Protection        |
| Highland Historic Environment Strategy Supplementary Planning Guidance (THC, 2013d).  | Archaeological Management |

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## 7. References

- Scottish Environment Protection Agency (SEPA) (2013). Guidance for Pollution Prevention: Understanding your environmental responsibilities – good environmental practices: GPP 1. Version 1.2 June 2021. Available online at: <https://www.netregs.org.uk/media/1898/guidance-for-pollution-prevention-1-2022-update.pdf> [Accessed 20/09/2023].
- SEPA (2014). Position Statement (WAT-PS-10-01): Assigning Groundwater Assessment Criteria for Pollutant Inputs. Version 3.0 Aug 2014. Available online at: [https://www.sepa.org.uk/media/152662/wat\\_ps\\_10.pdf](https://www.sepa.org.uk/media/152662/wat_ps_10.pdf) [Accessed 20/09/2023].
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- SEPA (2018). Flood Risk and Land Use Vulnerability Guidance. Land Use Planning System SEPA Guidance. Version 4 July 2018. Available online at: <https://www.sepa.org.uk/media/143416/land-use-vulnerability-guidance.pdf> [Accessed 20/09/2023].
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- SEPA (2022). Technical Flood Risk Guidance for Stakeholders – SEPA requirements for undertaking a Flood Risk Assessment. Version 13 June 2022. Available online at: <https://www.sepa.org.uk/media/162602/ss-nfr-p-002-technical-flood-risk-guidance-for-stakeholders.pdf> [Accessed 20/09/2023].
- SEPA (2023a). Guidance for Pollution Prevention. Available online at: <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/>
- SEPA (2023b). Pollution Prevention Guidelines. Available online at: <https://www.sepa.org.uk/regulations/pollution-prevention-and-control/>
- SEPA (2023c). SEPA's Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended): A practical guide. Version 9.3, June 2023. Available online at: <https://www.sepa.org.uk/media/dw5de0kh/car-a-practical-guide.pdf> [Accessed 20/09/2023].
- Scottish Parliament (2011a). Water Environment (Controlled Activities) (Scotland) Regulations 2011. Available online at: <https://www.legislation.gov.uk/ssi/2011/209/contents/made>
- Scottish Parliament (2011b). Waste Management Licensing (Scotland) Regulations 2011. Available online at: <https://www.legislation.gov.uk/sdsi/2011/9780111012147/contents>
- Scottish Parliament (2012). The Waste (Scotland) Regulations 2012. Available online at: <https://www.legislation.gov.uk/ssi/2012/148>
- The Highland Council (THC) (2010). The Highland Council Guidance note: Construction Environmental Management Process for Large Scale Projects. Planning and Development Service. August 2010. Available online at: [https://www.highland.gov.uk/downloads/file/2644/construction\\_environmental\\_management\\_process\\_for\\_large\\_scale\\_projects](https://www.highland.gov.uk/downloads/file/2644/construction_environmental_management_process_for_large_scale_projects) [Accessed 20/09/2023].
- THC (2012). Highland-wide Local Development Plan (HwLDP). Available online at: [https://www.highland.gov.uk/info/178/development\\_plans/199/highland-wide\\_local\\_development\\_plan](https://www.highland.gov.uk/info/178/development_plans/199/highland-wide_local_development_plan) [Accessed 20/09/2023].
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THC (2013c). Trees, Woodlands and Development Supplementary Guidance. Available online at: [https://www.highland.gov.uk/downloads/file/354/trees\\_woodlands\\_and\\_development\\_supplementary\\_guidance](https://www.highland.gov.uk/downloads/file/354/trees_woodlands_and_development_supplementary_guidance) [Accessed 20/09/2023].

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UK Parliament (1990). Environmental Protection Act 1990. Available online at: <https://www.legislation.gov.uk/ukpga/1990/43/contents>

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UK Parliament (2015). The Construction (Design and Management) Regulations 2015. Available online at: <https://www.legislation.gov.uk/uksi/2015/51/contents/made>



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## 8. Abbreviations

|       |  |
|-------|--|
| ACoW  | Archaeological Clerk of Works              |
| BAT   | Best Available Techniques                  |
| CAR   | Controlled Activities Regulations          |
| CDM   | Construction (Design and Management)       |
| CEM   | Consents and Environment Manager           |
| CEMP  | Construction Environmental Management Plan |
| CJB   | Cable Joint Bay                            |
| CLO   | Community Liaison Officer                  |
| CMS   | Construction Method Statement              |
| COSHH | Control of Substances Hazardous to Health  |
| CTMP  | Construction Traffic Management Plan       |
| DAQMP | Dust and Air Quality Management Plan       |
| ECoW  | Ecological Clerk of Works                  |
| EIA   | Environmental Impact Assessment            |
| EMS   | Environmental Management System            |
| FLS   | Forestry and Land Scotland                 |
| HDD   | Horizontal Directional Drilling            |
| HFWS  | Highland Forest and Woodland Strategy      |
| HGV   | Heavy Good Vehicles                        |
| HMP   | Habitat Management Plan                    |
| HSE   | Health, Safety and Environment             |
| HwLDP | Highland-wide Local Development Plan       |

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|      |  |
|------|--|
| km   | Kilometre                              |
| m    | Metre                                  |
| M&E  | Mechanical and Electrical              |
| MLWS | Mean Low Water Springs                 |
| NVMP | Noise and Vibration Management Plan    |
| OMP  | Outline Management Plan                |
| OWPL | Offshore Wind Power Limited            |
| PIR  | Passive Infra-Red                      |
| PMP  | Peat Management Plan                   |
| PPG  | Pollution Prevention Guidelines        |
| PPP  | Planning Permission in Principle       |
| PWS  | Private Water Supplies                 |
| RAMS | Risk Assessment and Method Statement   |
| SENB | Site Environmental Notice Board        |
| SEPA | Scottish Environment Protection Agency |
| SHPP | Species and Habitat Protection Plan    |
| SRMP | Soil Resource Management Plan          |
| SS   | Supporting Study                       |
| SWMP | Site Waste Management Plan             |
| TBT  | Toolbox Talks                          |
| THC  | The Highland Council                   |
| TJB  | Transition Joint Bays                  |
| WMP  | Waste Management Plan                  |

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## 9. Glossary of Terms

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|  |   |
|--|---|
| Cable Joint Bays                             | Concrete structures which maintain the continuity of the onshore export cables over the distance of the onshore export cable route by joining sections of the onshore export cables and thus, enable the transmission of electricity. |
| Construction Compounds                       | A hub for construction workers working on the onshore Project where offices, welfare facilities, materials and equipment storage and a car park for workers is located.   |
| Designated Areas                             | Areas of the countryside and nature sites that have a protected area status due to their natural and/or cultural importance.  |
| Developer                                    | Offshore Wind Power Limited   |
| Onshore EIA Report                           | A report documenting the findings of the environmental impact assessment for the onshore Project in accordance with relevant regulations, including a summary of the findings of the EIA for the offshore Project.                    |
| Environmental Management System              | A framework made up of a collection of policies, processes, procedures and records that helps an organisation achieve its environmental goals.  |
| Groundwater Dependant Terrestrial Ecosystems | Wetlands which are fed by groundwater and sensitive to changes in hydrology and ecology caused by construction.   |
| Heritage Assets                              | Physical items that have tangible or intangible value due to their contribution to a nations culture, knowledge or society.   |
| Horizontal Directional Drilling              | A trenchless system for installing underground cable in a shallow arc along a prescribed bore path.   |
| Hydroseeding                                 | An erosion technique using a slurry of seed and mulch to speed up planting time.  |
| Landfall                                     | The interface between the offshore and onshore aspects of the Project.  |
| Laydowns                                     | Specified areas for the receipt, storage or partial assembly of equipment and materials near the construction site.   |
| Mean Low Water Springs                       | The average height of the lowest tides in a year.   |

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|   |   |
|---|---|
| Offshore Export Cables                              | A high voltage alternating current (HVAC) subsea power cable system, consisting of a three-core armoured submarine power cable with one (or more) fibre optic units embedded in the interstice, running from the OSPs to the TJB (up to the point of MHWS). The offshore export cables transmit the electricity generated from the OWF to the onshore export cables for transmission onwards to the onshore substation. |
| Onshore Export Cable                                | The buried electricity circuits <sup>1</sup> , each consisting of three power cables, an earth cable, and a fibre optic communications cable buried as one unit within a single trench running from the Transition Joint Bays (TJB) (landward of MLWS) to the onshore substation, connecting the Project to the grid.   |
| Onshore Project                                     | The entire onshore Project, which defines the RLB for the PPP application, including all onshore components landward of MLWS (underground cables, onshore substation, access, and all other associated infrastructure) and all Project stages from construction to decommissioning.   |
| Onshore Substation                                  | Contains the electrical components for transforming the power supplied from the Project via the offshore and onshore export cables to meet the export requirements.   |
| Peatland  | Wetland landscapes characterised by waterlogged organic soils comprising of dead and decaying plants.   |
| Preliminary Roost Assessment                        | A single day time inspection to identify evidence of bat presence and the suitability of the site to support roosting bats.   |
| Private Water Supplies                              | Water intended for human consumption that is not provided by Scottish Water.  |
| Radioactivity in Food and the Environment programme | An annual report produced by United Kingdom authorities that details the sampling and analysis of the levels of radioactive substances in food and the environment.   |
| Subcontractor                                       | Any Contractor / Supplier (individual or firm) providing services to the onshore Project, hired by the Contractors (not Offshore Wind Power Limited).   |
| Transition Joint Bays                               | Concrete structures within which offshore export cables and onshore export cables are spliced together.   |
| Working Corridors                                   | The area in which construction work related to the laying of the onshore export cable from the landfall to the inshore substation will be carried out.  |

<sup>1</sup> The onshore export cables will be laid in circuits (up to five circuits buried in five separate trenches) with each comprising a series of grouped cables as described. For ease of the reader, only the term 'onshore export cables' is retained.

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# Contacts

[To Be Completed Post Consent]

**Name:** [Name Surname]  
Title:  
Tel:  
Mobile:  
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**Name:** [Name Surname]  
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# Appendix A: Schedule of Mitigation and Monitoring

The proposed mitigation and monitoring measures committed to for the onshore Project have been developed through the Onshore EIA Report and are presented in chapter 19: Summary of mitigation and monitoring.

This appendix of the CEMP, once finalised, will include a full Schedule of Mitigation and Monitoring for the construction stage of the onshore Project, as updated, and finalised in accordance with the PPP planning conditions.

All CMS and finalised management plans will be aligned with the Schedule of Mitigation and Monitoring presented within this Appendix.

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# Appendix B: Construction Method Statements

All approved Principal Contactor(s) CMSs will be detailed within this section post consent, on the appointment of the Principal Contactor(s) and finalisation of the onshore Project design.

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# Appendix C: Environmental Management Plans

The section of the CEMP includes the environmental management plans to be adhered to throughout construction. These plans will be developed and finalised post consent, prior to the commencement of construction.

These environmental management plans must be adhered to by all employees throughout construction. All CMS and Risk Assessments prepared by the Principal Contractor(s) are to be in accordance with these plans.

The following Plans will be provided within this Appendix of the CEMP post consent, prior to construction. The plans include:

- Annex 1: Drainage Strategy and Flood Risk Plan;
- Annex 2: Pollution Prevention and Control Plan;
- Annex 3: Waste Management Plan(s);
- Annex 4: Soil Resource Management Plan;
- Annex 5: Peat Management Plan;
- Annex 6: Dust and Air Quality Management Plan; and
- Annex 7: Emergency Response Plan.

Additionally, other management plans will be developed as standalone documents. These plans will be submitted separately from the final CEMP, due to anticipated planning condition requirements. These plans will also be adhered to by all employees, contractors and subcontractors throughout construction. The management plans include:

- Habitat Management Plan;
- Species and Habitat Protection Plan;
- Deer Management Plan;
- Aquatic Monitoring Plan;
- Archaeology Management Plan;
- Access Management Plan;
- Construction Traffic Management Plan;
- Noise and Vibration Management Plan;
- Compensatory Planting Scheme; and
- Decommissioning, Restoration and Aftercare Plan.

The final list of management plans to be included for the onshore Project will be finalised post consent, in accordance with planning conditions and final design of the onshore Project.



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## Annex 1: Drainage Strategy and Flood Risk Plan

This section of the CEMP once finalised will include the Drainage Strategy and Flood Risk Plan to be adhered to throughout construction.

The proposed drainage methods and key areas of flood risk for the onshore Project are detailed within SS 3: Flood Risk and Drainage Assessment, which has been submitted alongside the application for PPP, separate from this Outline CEMP. These measures provide the basis for the Drainage Strategy and Flood Risk Plan and will be finalised post consent.

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## Annex 2: Pollution Prevention and Control Plan

This section of the CEMP once finalised will include the Pollution Prevention and Control Plan to be adhered to throughout construction.

Pollution Prevention and control measures will be implemented in accordance with the latest legislation and guidance from SEPA, THC and the Scottish Government and through discussion with the relevant stakeholders. Emissions to air, water and land, as well as other environmental effects will be considered together, and construction operations will apply the Best Available Techniques (BAT) and good environmental Practices at all times in order to prevent or minimise pollution. All Principal Contractors will ensure that any site-specific pollution prevention and control measures are provided within their own CEMPs, which will be produced once contracted, prior to the start of construction.

SEPA's Pollution Prevention Guidance (PPG) 1: Understanding your environmental responsibilities – good environmental practices (2013) outlines good environmental practices in relation to pollution prevention with the emphasis being on a proactive approach to preventing pollution rather than just responding to incidents that occur.

Some of the key pollution prevention measures that will be implemented during the construction of the onshore Project are detailed below. Additional site and consent specific measures will be included post consent once a final design is known.

Key pollution prevention measures include:

- All on site drainage will be mapped within a site drainage plan, including information on the direction of drainage, where it leaves the construction area and where it goes. Drains will be regularly monitored to ensure any problems are picked up and dealt with quickly. Anything other than clean rainwater will be treated accordingly before being discharged to the environment. Any sewage drains will be clearly marked and manhole covers colour coordinated to distinguish between sewer and surface water drains;
- A suitable drainage system will be implemented to treat lightly contaminated water runoff, for example for car parks;
- Water from washing and cleaning equipment and vehicles will not be permitted to enter surface water drains;
- Any products or materials highlighted as having an environmental pollution risk will be stored and handled appropriately. This includes measures such as not storing materials near open drains, watercourses, soak away or other sensitive areas or where there's a risk of flooding and ensuring they are stored on bunded impermeable surfaces, undercover and in a safe place away from vehicles. The same measures apply to the storage of waste;
- All material brought to site which is considered to be a substance hazardous to health in accordance with the Control of Substances Hazardous to Health (COSHH) Regulations 2002 will be accompanied by the required information and handled under the COSHH Regulations;
- All materials will be stored in suitable containers and labelled correctly, for example oil and fuels need specific storage. Storage containers will be checked regularly for cracks and leaks and any issues dealt with appropriately. All storage areas will be kept clean and secure;
- All storage areas will be bunded and where appropriate secondary containment will be implemented, such as bunded pallets. Oils are legally required to have 110% secondary containment;
- All personnel involved in working with materials that carry environmental risk will be provided with training on handling and storage. The location and instructions for using spill kits will also be communicated;
- Spill kits will be located in areas with high spill risk and will be regularly maintained and restocked;
- Any delivery of materials will be appropriately planned and supervised to minimise spillage risks and to ensure procedures are followed;
- Silty water generated due to construction activities will undergo settlement through silt traps before being released 10 - 50 m from the receiving watercourse;
- Refuelling and refuelling equipment will be located at least 50 m from watercourses with the use of drip trays. Drip trays will also be situated under any stationary construction vehicle;
- A soil bund will be installed downslope of any excavation works to capture and divert runoff away from Private Water Supplies (PWS) with at least two silt lines of silt fencing installed downslope of any soil bunds;
- Impermeable barriers (e.g. clay bunds) will be installed periodically within cable trenches to minimise in trench groundwater flow;

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- A pollution incident response plan will be created and implemented across the construction area and will include procedures to deal with problems and emergencies as well as containing a copy of the site drainage plan(s);
  - All staff will be regularly trained in pollution incident response and plans will be reviewed regularly to ensure they are fit for purpose and updated to reflect any changes in materials or processes;
  - A fire response plan will be drawn up with advice from the local Fire and Rescue Service; and
  - Any environmental incidents will be reported immediately to the incident hotline provided in Figure C 1. Incidents include spillages (e.g. from oils and chemicals), contaminated surface water runoff, flooding, riverbed disturbance, damage to underground services, damage to habitats and poor waste disposal and storage.

Other current SEPA pollution prevention legislation and guidance that will be applied to the finalised design of the onshore Project include:

- Groundwater Protection Policy for Scotland and SEPA's Position statement with Guidance notes provided in Assigning Groundwater Assessment Criteria for Pollutant Inputs (SEPA, 2014);
- Water Environment (Controlled Activities) (Scotland) Regulations 2011 and Guidance provided in SEPA's Water Environment (Controlled Activities) (Scotland) Regulations 2011 – A Practical Guide (SEPA, 2023);
- SEPA's Land Use Planning System, SEPA Guidance Note 31: Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems (SEPA, 2017); and
- SEPA Technical Flood Risk Guidance for Stakeholders (SEPA, 2022) and SEPA Flood Risk Standing Advice for Planning Authorities and Developers (SEPA, 2020).

The Pollution Prevention and Control Plan will be developed in line with SEPA GPPs & PPGs.



**Incident Hotline Numbers:**

**In Scotland, Northern Ireland and England call:**

**0800 80 70 60**

**(24 hour service)**

**Figure C 1 Scotland Environmental Incident Hotline Number**

For any incidents which may cause an effect on Scottish Water, such as those in relation to Drinking Water Protected Areas (DWPAs) (as described in detail in SS 3: Flood Risk and Drainage Assessment), Scottish Water should be notified immediately using the Customer Helpline number **0800 0778 778**.

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## Annex 3: Waste Management Plans

This section of the CEMP once finalised will include the Waste Management Plan(s) for the onshore Project.

The Waste Management Plan(s), once finalised, will help ensure any waste generated during construction will not impact the local or wider environment and will be in accordance with Section 34 of the Environmental Protection Act 1990 as amended by The Waste (Scotland) Regulations 2012.

Waste management measures within the Waste Management Plan(s) will include the implementation of the waste hierarchy, classification and segregation of waste, waste storage and waste documentation and transport. In order to help achieve this, waste management will be incorporated into the design process and a waste reduction strategy will be implemented across the onshore Project area in order to reduce the amount of waste to landfill. All waste will be stored in areas and containers designed to mitigate any potential pollution. The burning of waste will be strictly prohibited. Any contaminated waste materials produced will be disposed of accordingly.

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## Annex 4: Soil Resource Management Plan

This section of the CEMP once finalised will include the SRMP for the onshore Project.

In order to ensure proper soil and sediment handling throughout construction, in line with good practice, the following procedures will be incorporated and finalised within the SRMP:

- Topsoil removed and laid in storage bund, up to 2 m in height, on unstripped ground adjacent to working area a minimum of 50 m from adjacent watercourses, where possible;
- Turf layer retained vegetation-side up avoiding stacking where possible to avoid drying of soils;
- Subsoils removed and laid in storage bunds, up to 2 m in height, clearly separated from topsoil bund.
- Separate soil types stored in separate bunds to preserve soil quality and avoid cross contamination of different horizons;
- Bunds on sloping ground will have sediment control measures installed near the base, on the downslope side, to collect and retain any sediment mobilised by rainfall;
- Excavated soil will be used in site restoration and rehabilitation at the end of the construction period, to promote fast re-establishment of vegetation cover on worked areas and areas of bare soil that are not required for the operation and maintenance stage;
- Soils will be stored for as short a time as practicable, to minimise degradation through erosion and desiccation;
- Damping spray will be employed during dry weather to maintain surface moisture on soil bunds which helps maintain soil structure and vegetation growth in turves;
- Vegetation cover will be re-established as quickly as possible on long-term or permanent track and infrastructure verges and cut slopes, by re-laying of excavated soil turves, to improve slope stability and provide erosion protection. Hydroseeding and/or use of biodegradable geotextile, will be considered, if necessary, in specific areas;
- Only tracked or low ground pressure vehicles will be permitted access to unstripped ground;
- Water collecting within excavations will be pumped out prior to further work within the excavation. The water will likely require treatment to remove suspended solids prior to discharge to ground;
- Temporary or permanent vehicle bridge structures to allow crossing of watercourses during construction will have appropriate splash control measures as part of their design, to prevent silty water splashing into the watercourse from vehicle movements. Splash controls will be monitored regularly to ensure they remain effective and have not become damaged in any way; and
- If dust is generated from drilling or excavation, suitable dust masks will be supplied to all construction staff and dust suppression sprays for waste arisings may be required.

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## Annex 5: Peat Management Plan

This section of the CEMP once finalised will include the PMP to be adhered to throughout construction.

The proposed peat management measures for the onshore Project are detailed within OMP3: Outline Peat Management Plan, which has been submitted alongside the application for PPP, separate from this outline CEMP. These measures provide the basis for the Peat Management Plan and will be finalised post consent.

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## Annex 6: Dust and Air Quality Management Plan

This section of the CEMP, once finalised, will include the DAQMP.

The DAQMP will include measures such as the following:

- Ensure an adequate water supply on the site for effective dust / particulate matter suppression / mitigation, using non-potable water where possible and appropriate;
- Ensure appropriate site layouts are developed so that machinery and dust causing activities are located away from receptors, as far as reasonably possible;
- Equipment will be readily available on site to clean up any dry spillages;
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out;
- Remove materials that have a potential to produce dust from site as soon as possible;
- Soil erosion control measures;
- Speed limits to be put in place to ensure low vehicle speeds in areas;
- Cleaning of vehicles including provision of waterless wheel washing facilities prior to exiting site to public road network; and
- Site inspections will be carried out by the ECoW(s) to ensure the compliance with the CEMP. The frequency of these inspections should increase when activities with a high potential to produce dust are being carried out and during prolonged dry / windy conditions.

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## Annex 7: Emergency Response Plan

This section of the CEMP, once finalised, will include the Emergency Response Plan for the onshore Project during construction in the unlikely event that an environmental pollution incident should occur.



