Creag Dhubh to Inveraray 275kV Connection

Environmental Impact Assessment

Volume 4 | Appendix 2.2

Outline Construction Environmental Management Plan

June 2022

NOTE: This document provides a template only. It is the responsibility of the Appointed Contractor(s) to complete this document, identifying mitigation and control measures that will be applied during construction. The content of this document is agreed with ABC, as part of condition discharge, prior to Construction.

CONTENTS

List of Abbreviations

ABC	Argyll & Bute Council
ACoW	Archaeological Clerk of Works
CEM	Consents and Environment Manager
CIRIA	Control of Water Pollution from Linear Construction Projects C648
COSHH	Control of Substances Hazardous to Health
CNMP	Construction Noise Management Plan
CPHSP	Construction Phase Health and Safety Plan
CSL	Construction Site Licence
ECoW	Environmental Clerk of Works
EIA	Environmental Impact Assessment
EIA Report	Environmental Impact Assessment Report
GEMP	General Environmental Management Plan
GPP	Guidance for Pollution Prevention
GWDTE	Groundwater Dependent Terrestrial Ecosystems
IEFs	Important Ecological Features
INNS	Invasive Non-Native Species
KPI's	Key Performance Indicators
NSR	Noise Sensitive Receptors
NVC	National Vegetation Classification
OCEMP	Outline Construction Environmental Management Plan
OHL	Overhead Line
PLHRA	Peat Landslide Hazard Risk Assessment
PMO	Planning Monitoring Officer
PMP	Peat Management Plan
PPGs	Pollution Prevention Guidelines
PPP	Pollution Prevention Plan
PWS	Private Water Supplies
RAMS	Risk Assessments and Method Statements
SEPA	Scottish Environment Protection Agency
SNH	Scottish Natural Heritage
SPP	Species Protection Plans
SSEN	Scottish and Southern Electricity Networks Transmission
SWMP	Site Waste Management Plan

WoSAS	West of Scotland Archaeological Services
WSI	Written Scheme of Investigation

1 INTRODUCTION

1.1 The Proposals

1.1.1 This Outline Construction Environmental Management Plan (OCEMP) has been prepared by Ramboll UK Limited (Ramboll) on behalf of Scottish Hydro Electric Transmission plc (the Applicant) who, operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands. The Applicant is seeking consent from Argyll & Bute Council (ABC) to construct and operate a 275 kV overhead line (OHL) between a proposed substation at Creag Dhubh and a connection point on the recently constructed Inveraray – Crossaig circuit (the 'Proposed Development') comprising:

- An 8.9 km double circuit 275 kV OHL, supported by steel lattice towers between a proposed substation at Creag Dhubh (subject to a separate planning application) and the recently constructed Inveraray-Crossaig 275 kV capable OHL circuit;
- A connection involving the proposed OHL being connected to the recently constructed Inveraray-Crossaig OHL, via a new tower; and
    - vegetation management including tree felling to create a safe operational corridor for construction and operation;
    - temporary OHL diversions to reduce circuit outages during the works;
    - the formation of bellmouths at public road access points;
    - construction of new temporary and permanent construction (stone) access tracks and the upgrade of existing tracks;
    - tower working areas, crane pads and winching positions; and
    - road and other infrastructure (bridges, culverts etc.) alterations.

1.1.2 The location of the Proposed Development is shown in **Figure 1.1 (EIAR Volume 3a)**, with further details provided in **Chapter 2: Description of the Proposed Development (EIAR Volume 2)**.

1.2 Purpose of the Plan

1.2.1 It is the objective of the Appointed Contractor to deliver the works safely and with due care of the environment to meet (or exceed) national and industry standards, contractual requirements and with due regard to the local environment and interested and affected parties.

1.2.2 This OCEMP will be reviewed, by the Appointed Contractor prior to construction and will be the CEMP that will be used by the project team responsible for planning, organising and delivering the work. The CEMP will be owned and managed by the Appointed Contractor. It is the responsibility of the Contractor's Project Manager to ensure that control measures and best practice as detailed within this CEMP are implemented and carried out, if necessary, well in advance of the work on site.

1.2.3 This CEMP has been developed using the following sources of information gathered during the development and design stages of the project: (Contractor to populate)

- XXX
- XXX

1.2.4 Several key documents (see **Table 1.1**) will be produced as part of this project and, on compilation, may be read or referred to when reading this CEMP, namely:

Table 1.1: CEMP Reference Documents (to be completed by the Appointed Contractor)

Title of Document	Source and Description
Construction Phase Health and Safety Plan (CPHSP)	
Environmental Emergency Plan	
Site Waste Management Plan (SWMP)	
Risk Assessments and Method Statements (RAMS)	
Watercourse Crossing Assessment	
Tower Constraints Register	
SEPA Construction Sile Licence (CSL)	
Pollution Prevention Plan (PPP)	
Site Specific Pollution Prevention Plans	
Peat Management Plan (PMP)	
Peat Landslide Hazard Risk Assessment (PLHRA)	
Schedule of Mitigation	
SSEN Transmission General Environmental Management Plan (GEMP)	
SSEN Transmission Species Protection Plans (SPP)	

2 LEGISLATIVE REQUIREMENTS

2.1.1 The SSEN Transmission legal register has been developed to include all of the major environmental legislation directly applicable to the Appointed Contractor. In addition, some other pieces of environmental legislation have been included for general awareness and guidance purposes. The register is available to view at xxx.

2.1.2 The following list of legislation has been identified as being applicable to the proposed work:

- The Environmental Protection (Duty of Care) (Scotland) Regulations 2014
- Waste (Scotland) Regulations 2012
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017
- Town and Country Planning (General Permitted Development) (Scotland) Amendment Order 2020
- The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)
- The Waste Management Licensing (Scotland) Amendment Regulations 2016
- Air Quality Standards (Scotland) Amendment Regulations 2016
- The Environmental Liability (Scotland) Regulations 2009
- The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2019
- Environmental Noise (Scotland) Amendment Regulations 2018
- The Control of Substances Hazardous to Health Regulations 2004
- Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017
- Special Waste Amendment (Scotland) Regulations 2004
- The Conservation (Natural Habitats, &c.) Regulations 2017
- Control of Pollution (Registers) (Scotland) Regulations 1993
- Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991
- Landfill Tax (Scotland) Act 2014
- Wildlife and Natural Environment (Scotland) Act 2011
- Flood Risk Management (Scotland) Act 2009
- Nature Conservation (Scotland) Act 2004
- The Water and Environment Services (Scotland) Act 2003
- Town and Country Planning (Scotland) Act 1997
- The Environment Amendment Act 2018
- Protection of Badgers Act 1992
- Environmental Protection Amendment Act 2018
- Electricity Act 1989 (as amended)
- Control of Pollution (Amendment) Act 1989
- Wildlife & Countryside Act 1981
- Roads (Scotland) Act 1984
- Transport (Scotland) Act 2019
- Planning (Scotland) Act 2019

3 CONSENTS AND PERMISSIONS

3.1 Section 37 Consent (Electricity Act 1989)

3.1.1 XX

Table 3.1: Summary of Deemed Planning Permission (to be completed by the Appointed Contractor)

Summary of Section 37 Consent Conditions

3.2 Planning Permission (Town and Country Planning Act 1997)

3.2.1 XXX

Table 3.2: Summary of Deemed Planning Permission (to be completed by the Appointed Contractor)

Summary of Deemed Planning Permission

3.3 Controlled Activities Scotland (CAR) Registrations

3.3.1 As per the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), there will be several engineering activities that will require CAR Registration. CAR Registrations are required for small-scale activities that individually pose low environmental risk but, cumulatively, can result in greater environmental risk.

3.3.2 Typical examples include:

- Bridges with no construction on bed and ≤20m of total bank affected;
- Closed culverts used for footpaths, cycle route, single track roads or single-track railways in rivers ≤2 m wide; and
- Pipeline or cable crossings beneath bed by isolated open-cut or mole plough.

3.3.3 Applications for CAR Registrations are to be sent to the Scottish Environmental Protection Agency (SEPA) and have a standard 30-day determination period.

3.3.4 Please refer to The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) A Practical Guide Version 8.4 October 2019 for detailed information.

Table 3.3: List of CAR Registrations Granted by SEPA for the Development (to be completed by the Appointed Contractor)

Registration Number	Description and Applicable Conditions

3.4 Controlled Activities Scotland (CAR) Licences (Simple)

3.4.1 These allow for site-specific conditions to be set to protect the water environment from activities that pose a higher risk. Licences can cover linked activities on a number of sites over a wide area, as well as single or multiple activities on a single site.

3.4.2 A key feature of CAR licences, and registrations, is that they require the applicant to nominate a 'responsible person' to be held accountable for securing compliance with the terms of the licence.

3.4.3 Typical example includes:

- All diversions, realignment, flood by-pass channels and culverting for land gain on rivers ≤3 m wide.
- Surface water run-off from a construction site (including any constructed access tracks) which:
- Includes a single lane road / track (no wider than 4 m except at passing places etc) or pipe/ services infrastructure >5 km and 500 m and ≤10 km in length.
- Is an area of up to four hectares and contains an area of more than one hectare with a slope of more than 25 degrees.
- Includes a length >500 m and ≤ 10 km with a slope of more than 25 degrees slope.

3.4.4 Please refer to The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) A Practical Guide Version 8.4 October 2019 for detailed information.

3.5 Protected Species Licences

3.5.1 It is possible that Protected Species Licences (from NatureScot) will need to be obtained during the construction phase. Pre-construction ecological surveys will be undertaken by XXX starting XXX 2022. As a result, this section will be completed once the ecological surveys are complete and if a need for a protected species licences are identified.

Table 3.4: List of Protected Species Licences Required (to be completed by the Appointed Contractor)

License Number	Description and Conditions

3.6 WSI and SMC Consents

3.6.1 **Chapter 7: Cultural Heritage (EIAR Volume 2)** highlights the possibility of the Proposed Development impacting on cultural heritage assets.

3.6.2 A professionally qualified Archaeological Contractor would be appointed by the Principal Contractor to undertake the Written Scheme of Investigation (WSI) and this report will be submitted to West of Scotland Archaeological Services (WoSAS) at the start of XXX for approval.

3.6.3 All mitigation works would take place prior to, or, where appropriate, during, the construction of the Proposed Development. The scope of works would be detailed in one or more Written Scheme(s) of Investigation (WSI) developed in consultation with (and subject to the agreement of) WoSAS, acting on behalf of Argyll and Bute Council.

3.6.4 A professionally qualified Archaeological Contractor would be appointed to act as an Archaeological Clerk of Works (ACoW) for the duration of the construction phase. The role of the ACoW would be to provide advice to the appointed Construction Contractor regarding micro-siting of development components, where there is a possibility of intersecting with identified heritage assets, and to undertake archaeological monitoring of topsoil stripping operation in areas designated and approved by the Council's Archaeological Advisors (WoSAS). The activities of the ACoW would be carried out according to the scope of work and terms specified under the WSI approved by WoSAS.

3.6.5 Final tower positions and access track locations would be subject to micrositing within the horizontal LOD on the basis of detailed ground investigation. Consideration would be given to detailed local environmental sensitivities, including the proximity to heritage assets. Movement of infrastructure or proposed felling areas would be dependent upon identified constraints in the micrositing area and subject to advice from an Ecological Clerk of Works (ECoW). No micrositing of infrastructure or proposed felling areas would be undertaken where this could potentially affect cultural heritage interests without consultation with an appointed ACoW, who would advise on the acceptability of any proposed realignments, and consultation with the Council Archaeologist to agree appropriate mitigation where there are potential impacts as a result.

4 PROJECT ENVIRONMENTAL MANAGEMENT

4.1 Project Personnel

4.1.1 The project personnel for the Appointed Contractor and SSEN Transmission team are set out in **Table 4.1** and **Table 4.2**.

Table 4.1: Appointed Contractor Team Directory (to be completed by the Appointed Contractor)

Role	Name	Phone Number/Email
Project Director		
Project Manager		
Site Manager		
Site Engineer		
Planning Manager		
Wayleaves Officer		
Quantity Surveyor		
Project Design Manager		
Design Engineer		
Ecological Clerk of Works (EcoW)		
Archaeological Clerk of Works (ACOW)		
Head of Environment and Sustainability		
Environmental Advisor		
Health & Safety Advisor		
Foundation Engineer		

Table 4.2: SSEN Transmission Team Directory (to be completed by the Appointed Contractor)

Scottish and Southern Electricity Networks (SSEN) Transmission	Name	Phone Number/Email
Lead Project Manager		
Project Manager		

Scottish and Southern Electricity Networks (SSEN) Transmission	Name	Phone Number/Email
Construction Manager		
Consents and Environment Manager (CEM)		
Wayleaves Officer		
Forestry Manager		
SSEN Emergency Number		

4.2 Roles and Responsibilities

4.2.1 The project specific environmental responsibilities for the Appointed Contractor Project Managers are to:

- Manage and communicate the overall environmental performance on the contract.
- Ensure all relevant persons in a position of responsibility are suitably trained and competent in environmental matters to implement the requirements of the Client and the Appointed Contractor.
- Manage the effectiveness of environmental management support to Operations.

4.2.2 The Construction Managers and Site Engineers for the Appointed Contractor are responsible for:

- Implementing the company Management Systems and relevant procedures.
- Ensuring the sites under their control meet the environmental standards set by the company.
- Implementing site specific management plans, requirements and method statements.
- Ensuring adequate environmental instruction is given to those employees and contractors under their control.
- Requesting advice and support from the Appointee Contractor Project Manager and Environment Advisor.
- Communicating environmental performance to the Appointed Contractor Project Manager and Environmental Advisor.

4.2.3 Construction Foremen and Supervisors or similar are responsible for:

- Communicating the site-specific environmental requirements to their teams.
- Ensuring site specific controls are implemented.
- Ensuring that sites under their control do not cause pollution, comply with the ecological restrictions, as well as the other site controls required for waste, water, air and noise.
- Communicating the environmental site briefings, toolbox talks and other environmental / community requirements to operatives, subcontractors and delivery drivers.
- Raising environmental observations or concerns to the environmental team or their manager.

4.2.4 The Project Environmental Advisor is responsible for:

- Ensuring the Project Manager is aware of the project specific environmental constraints.

- Providing environmental support to the project team and deliver environmental training and ensure induction material includes project specific environmental issues.
- Managing the contract specific environmental systems.
- Liaising with the Client and regulators on project level environmental management issues.
- Attending any environmental stakeholder meetings where required to do so.
- Managing the progress of environmental projects, tasks and actions in conjunction with the project.
- Writing, issuing and updating environmental documentation, including Environmental Plans.
- Preparing environmental documentation for Operations during the planning of the work.
- Providing support and advice on environmental issues to Operations on site and manage specialist environmental Subcontractors and service providers.
- Liaising with the Client, regulators and Operations to actively find solutions to environmental issues on site.
- Implementing a programme of and performing environmental inspections on site, investigating incidents, issuing corrective actions and monitoring their close out.
- Ensuring the operations on site follow this environmental management plan, procedures and all legal, company or Client requirements.
- Seek ways, where practical to do so, to reduce waste generation, improving opportunities to recycle material whilst identifying opportunities to use recycled materials where possible.

4.2.5 The Head of Environment and Sustainability is responsible for:

- Providing support to the Project Environmental Advisor including (but not limited to) liaising with the Client and regulators on project level environmental management and sustainability issues.
- Ensuring the Environmental Advisors are organised to deliver effective environmental support to Operations.
- Setting the priorities and objectives of the Environmental Advisors, including performance improvements and initiatives.
- Managing the reporting of environmental and sustainability performance.
- Providing support in attending any environmental stakeholder meetings where required to do so.
- Organising training and supporting auditing programs.

4.2.6 Technical environmental support can be provided by specialist consultants, either employed by SSEN Transmission or the Appointed Contractor.

5 ENVIRONMENTAL POLICIES AND PROCEDURES

5.1 Standard Forms and Procedures

5.1.1 To be completed by the Appointed Contractor following consent.

5.2 Certification and Policies

5.2.1 To be completed by the Appointed Contractor following consent.

6 COMMUNICATIONS AND TRAINING PLAN

6.1.1 These sections should be updated and completed by the Appointed Contractor.

6.2 Environmental Communications

6.3 Environmental Training

6.4 Environmental Reporting

6.5 Key Performance Indicators (KPI's)

7 ENVIRONMENTAL AUDITING AND MONITORING PLAN

7.1.1 These sections should be updated and completed by the Appointed Contractor.

7.2 Environmental Management System Requirements

7.3 Project Environmental Auditing and Monitoring Requirements

Internal Audits

Client Audits (SSEN)

Monthly Joint Site Inspections

Weekly Environmental Inspections

Regular Site Visits

Ecological Clerk of Works (ECoW)

Archaeological Clerk of Works (ACoW)

Planning Monitoring Officer (PMO)

8 POLLUTION PREVENTION

8.1 Construction Site Licence (CSL)

8.1.1 The CSL, introduced by the Scottish Environment Protection Agency (SEPA) in 2018, came into being to ensure responsibility for, and management of, discharges of water run-off from a site to the water environment so as not to cause a pollution event (i.e., pollutant linkage via the source - pathway - receptor model). The SEPA guidance dictates that authorisation is to be applied for with due regard to the Water Environment (Controlled Activities) (Scotland) Regulations 2011 where a site:

1. Exceeds 4 Ha in area;
2. Contains a road or track length in excess of 5 km; or
3. Includes any area of more than 1Ha or any length in excess of 500 m on the ground with a slope in excess of 25º.

8.1.2 The Appointed Contractor will apply for a CSL prior to the commencement of construction works commencing on-site. The CSL will contain a list of conditions which aims to limit pollution associated with the development.

8.2 Pollution Prevention Guidelines

8.2.1 The general Pollution Prevention Guidelines (PPGs) and Guidance for Pollution Prevention (GPPs) relevant to the works are shown below.

Table 8.1: Pollution Prevention Guidelines (to be completed by the Appointed Contractor)

Document	Title	Comment (guidance related to)

Other Guidance

8.2.2 The following best practice and guidance should be used to plan methodologies and assist design decisions for the works:

- Engineering in the Water Environment;
- Good Practice Guide (River Crossings); and
- Control of Water Pollution from Linear Construction Projects C648 (CIRIA).

8.3 Spill Kits and Contingency

8.4 Plant Nappies

8.5 Major Spill Response

8.6 Control of Substances Hazardous to Health (COSHH) Onsite

8.6.1 COSHH materials will be used onsite throughout the project. These will be kept in a lockable compliant COSHH storage box. Materials can be stored on plant nappies when in use at work locations.

8.6.2 The main yard will have a large COSHH storage container where larger quantities of COSHH materials can be stored. This will be compliant with the COSHH Regulations 2002.

8.7 Emergency Response Trailer

8.8 Silt Fencing

8.8.1 Silt fences are often the first line of defence and will be used as an entrenched interceptor fence to control pollution caused by silt laden construction runoff. Silt fences should be constructed with wooden posts and suitable geotextile material; this should be trenched and keyed in appropriately.

9 FUEL STORAGE

9.1 Baseline Best Practice

9.1.1 All bulk fuel stored in the XXXXXX compound will be stored to comply with The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).

Please also refer to SEPA oil storage in Scotland guidance available at: https://www.sepa.org.uk/regulations/water/pollution-control/oil-storage-in-scotland/

9.1.2 Where deemed necessary for logistical / practical reasons, portable fuel bowers / fuel cells will be used at work site locations. All fuel storage:

- Will not be stored within known flood risk areas.
- Will not be within 30 m of a watercourse.
- Will not be within 50 m of a borehole.
- Will not be within 30 m of drainage ditches.

9.1.3 Storage areas:

- Where on-site storage of oil and fuels is required, the volumes to be stored should be minimised as far as practical through efficient management of resource.
- Clearly defined areas for the storage of oil and fuel to be identified as part of the site establishment process and included on Site Specific Pollution Prevention Plans.
- Storage areas should have an impermeable base in areas of groundwater risk (where necessary, discuss with the Environmental Advisor and SEPA).
- Where storage on an impermeable base is not possible, fuel containers will be stored within raised impermeable bunds capable of containing >110% container capacity.
- Have control measures in place and have adequate spill kits easily accessible.
- Spill kits will be located and maintained at all oil storage and refuelling locations.
- Be secured against damage / theft / vandalism.

9.1.4 Storage containers:

- Valves and couplings connected to oil storage tanks to be located within the bund.
- Hoses to be fitted with trigger-type handles suspended back within the bund after use.
- Valves and trigger filler handles to be kept padlocked when not in use.
- Mobile fuel tanks (including those for generators) should be double skinned and locked when not in use · Be of appropriate type and capacity for the contents.
- Drips trays and plant nappies to be used and be emptied regularly to prevent overflow. In the case of drip trays, an insert from a plant nappy may be used to soak up any spillage.

9.1.5 The following should be considered when identifying a site for storage:

- Suitability of ground conditions e.g., can the area be protected against flood / damage / inundation / subsidence.
- Proximity to sensitive environmental receptors such as surface waters, surface water drainage systems; (see storage proximity criteria above).
- Ease of access to proposed storage area for deliveries / refuelling.
- Ability to secure proposed oil storage areas (to prevent theft / vandalism).

- Ensure no fuel stores are sited where they could be hit by moving vehicles and plant · Ensure all site staff are aware of designated fuelling areas and also those areas where fuelling is not permitted.
- A drainage plan will be developed of the temporary site yard. The location of any fuel storage areas will be displayed on this plan.

9.2 Refuelling

- Vehicles and plant should be refuelled, where possible, at designated refuelling bays on an impermeable base (where possible).
- Where this is not possible for operational reasons, refuelling should not be undertaken within 30 m of surface waters. Should this not be possible, any alternative refuelling location must be agreed in advance with the SSEN Transmission CEM.
- Spill kits should be easily accessible and fit for purpose i.e., grab bag spill kits with all mobile plant and project vehicles, each working will have one or more wheelie bin spill kits, Oil Spill Response Trailers will be strategically located across the project, and there will be adequate volume, sizes and types of spill booms.
- Oil, oil powered pumps, generators, winches, generators, etc. to be positioned on an impervious drip trays or plant nappies and located at least 30m from any watercourse.
- Plant nappies to be used for all items of mobile plant and for refuelling operations.

9.2.1 For any spillages the response will be:

- **STOP** the spill.
- **CONTAIN** it from spreading.
- **NOTIFY** the Site Manager, Construction Supervisor, SSEN Transmission CEM, and the SSEN Emergency number within 30 minutes of the spillage occurring, where safe and practical to do so (See **Section 3** for contact details).
- **REMOVE** all contaminated material from site and dispose material within the designated hazardous waste containers provided at satellite yards and other to be agreed key locations along the project.
- **Construction team** personnel are trained to be aware that clean up and further deployment of spill sorbents is part of clean-up best-practice.

10 EMERGENCY RESPONSE

10.1 Examples of Typical Environmental Emergencies

10.1.1 For plant/equipment leaks or in the event of:

- Any uncontrolled release of concrete and/or cement products to the environment.
- Any uncontrolled spills and/or pollution incidents.
- Any uncontrolled sediment release to the environment.
- Any uncontrolled release or loss of drill fluids to the environment.
- Discovery of suspected contaminated land.
- Discovery of protected animals.
- Discovery of previously undocumented archaeological features.
- Silt migration into a watercourse.
- Near misses – where events could have led to a 'minor incident.
- Complaints from third parties e.g., noise and dust.
- Archaeological disturbance.
- Exposed soils and subsoils: runoff or silt pollution type risk.
- Ground conditions: topography, side slopes and interaction with habitat and wet areas.
- Fuel Storage: risk of fuel spillage from dedicated storage and refuelling.
- Materials Storage: risk of an incident involving plant, materials or chemicals on site.
- Concrete washout: risk of excessive concrete washout / highly alkali water escaping from the working area.
- Pumping out: based on site information to date this is not anticipated to be a major issue – silt pollution risk.
- Wheel wash & Road sweeping risk of oily water runoff from the site if not managed correctly
- Biosecurity: currently biosecurity risk/issues from walkovers and project data have not been identified.
- However, risk such as invasive species (Himalayan Balsam, Japanese knotweed) will be checked for over the duration of the project.

10.2 Emergency Spill Response Procedure

- **STOP** the source of the spill or leak if possible;
- **CONTAIN** the spill using spill kits, sand or soil;
- **DIVERT** the spill away from drains and watercourses;
- **REPORT** the spill to the Site Manager, Construction Supervisor, SSEN Transmission CEM and Construction Manager, and the SSEN Emergency Number within 30 minutes of the spillage occurring, where safe and practical to do so (See **Section 3** for contact details); and
- **REMOVE** all used spill kit materials and contaminated soil in a waste bag and dispose of as hazardous waste.

10.2.1 All environmental incidents will be reported to the **XXXX** Helpline **XXXXX**. To be completed by Appointed Contractor. SEPA (**0800 80 70 60**) will be notified within 24hrs in the event of a notifiable incident or breach of CAR licence.

10.2.2 This will be managed by SSEN Transmission CEM and Construction Manager and the Appointed Contractor with roles and responsibilities allocated dependent on the nature and severity of the incident. Please also refer to the SHEQS Project Emergency Response Plan for additional information.

10.2.3 Dependent on the incident, significant stakeholders will be informed. This will be undertaken by the project environmental advisor using the following contact details below

Table 10.1: Emergency Contacts (Appointed Contractor to verify and update contacts)

Organisation	Address	Phone Number	Opening Hours
SEPA	Incident Hotline General Enquiries Flood Warning Line	0800 80 70 60 03000 99 66 99 0345 988 1188	24 hours per day, 7 days per week
SEPA Local Office	Kilbrandon House/Manse Brae, Lochgilphead PA31 8QX	01546 602876	Monday to Friday 08.00 16.00
NatureScot	1 Kilmory Industrial Estate, Kilmory, Lochgilphead PA31 8RR	01546 603611	Monday to Friday 08.00 16.00
Local Authority Argyll & Bute Council	Headquarters, Kilmory, Lochgilphead, PA31 8RT	01546 602127	24 hours per day, 7 days per week
Water	Scottish Water Catchment Liaison Officers Morag Maclaurin Malcom Walker	0800 0778 778 07443 876 392 07443 876 393	24 hours per day, 7 days per week
XXXX Helpline	XXXX		
SSEN Helpline	SSEN	0800 1073207 0800 0966210	8:00 – 18:00 18:00 – 8:00

10.3 Serious Incident Reporting

10.3.1 Procedures to be completed by Appointed Contractor.

10.4 Testing

10.4.1 A test of the environmental emergency response procedure will be undertaken every six months (as a minimum) to ensure that operatives can respond to environmental incidents. This will be recorded on an Environmental Emergency Response Test form. Findings, further training and areas for improvement will be carried forward by the Appointed Contractor and SSEN Transmission.

11 WASTE MANGEMENT

11.1.1 All waste will be segregated into appropriate skips and removed by an approved carrier. Waste management will follow the waste hierarchy of:

- Prevention of waste production.
- Reuse of waste materials produced.
- Recycling of waste.
- Landfill of waste.

11.1.2 All waste storage areas will be inspected on a regular basis for correct segregation, security, tidiness. All waste must have a waste transfer note, or a consignment note, whenever passed to another party.

11.2 Waste Management Plan

11.2.1 To be completed by Appointed Contractor.

12 WATER MANAGEMENT

12.1 Watercourse Crossings

12.1.1 Desk based assessment and field surveying has identified that access tracks required to construct the Proposed Development would cross a total of 60 watercourses, of which 14 are existing crossings. **Technical Appendix (TA) 11.1: Watercourse Crossing Assessment (EIAR Volume 4)** details the locations of proposed crossings and provides site specific assessment of watercourse conditions, the anticipated crossing type at each location, likely levels of CAR authorisation that would be required and best practice measures that would be implemented in the construction of watercourse crossings.

12.1.2 During the construction of watercourse crossings there is potential for activities to negatively impact both water quality and the natural morphology. SEPA good practice guidance[1] identifies that where proper care is not taken during the construction phase disturbance of river bed and banks can lead to the direct loss of aquatic flora and fauna and the release of fine sediments and other pollutants resulting in the smothering of plants, animals or the habitats they depend on.

12.1.3 Crossings (and culverts) will be designed to ensure protection of the existing fluvial morphology and aquatic flora and fauna, based on the implementation of best practice measures as detailed in **Technical Appendix (TA) 11.1: Watercourse Crossing Assessment (EIAR Volume 4)**.

12.2 Pumping Out of Excavations

12.2.1 XXX

12.3 Surface Water Runoff Mitigation

12.3.1 XXX

12.4 Relevant Legislation and Guidance

- The Water Environment (Controlled Activities) (Scotland) Regulations 2011, as amended
- Water Environment and Water Services (Scotland) Act 2003
- SEPA Pollution Prevention Guidance Notes;
- GPP5: Works and maintenance in or near water
- PPG6 – Working at Construction and Demolition Sites;
- CIRIA Report C502: Environmental Good Practice on Site;
- CIRIA Report C532: Control of Water Pollution from Construction Sites;
- BS6031: 1981 Code of Practice for Earth Works;
- Engineering in the Water Environment: Best practice Guide, Construction of Watercourse Crossings;
- Forests and Water Guidelines (Forestry Commission, 2003);
- Local and Regional Land Drainage Byelaws; and
- SEPA Report WAT-SG-29: Good Practice Guide – Temporary Construction Methods.

[1] Engineering in the water environment: River crossings (Natural Scotland and SEPA, 2010)

13 SOIL MANGEMENT

13.1 General Management and Construction Methods

13.1.1 Construction of new and temporary access roads and working areas will require the import of significant volumes of stone.

13.1.2 Best practice construction methods will be applied including, development of pollution prevention plans, installation of water management, micrositing of access tracks to avoid naturally wet areas, silt mitigation and working in a controlled manner.

13.2 Access Track Construction Methods

13.2.1 There are predominantly three types of access track construction that will be utilised: (a) upgrade of existing tracks (b) floating road construction and (c) cut-and-fill road construction.

- Upgrade of Existing Tracks.
- Floating Road Construction.
- Cut/Fill and Cap Construction Method.

13.3 Soil and Vegetation Mitigation Measures to be Implemented

14 PEAT MANAGEMENT

14.1 Peat Management Plan

14.1.1 Preliminary peat depth data were obtained and are presented within the Outline PMP (**Technical Appendix 10.2: Outline PMP, EIAR Volume 4**). Two peat depth surveys were undertaken at the Site, with a combined total of 2,183 peat probes taken.

14.1.2 Survey results indicate that the peat depth is variable and most of the Site has either no peat or has a shallow depth of peat present (approximately 84 % of peat probes recorded <0.5 m in depth).

14.1.3 The peat thickness along the Proposed Development was found to be mostly shallow with some pockets of deep peat located east and south of Tower 1 and between Towers 2 and 3.

14.1.4 Excavated peat and other soils will be reused on site, subject to the conditions and methods of reinstatement described in the PMP.

14.1.5 The PMP will be updated throughout the construction process and will take into consideration any changes to tower location and changes to the access tracks as the micrositing process develops.

14.2 General Peat Management and Mitigation

14.2.1 The purpose of peat management is to manage, mitigate and subsequently reinstate peat along the OHL corridor effectively thereby reducing the lasting impacts that are often associated with projects of this scale.

Avoiding Peat

Removing Peat

Storing Peat

Reusing Peat

15 CONTAMINATED LAND

15.1.1 No land across the OHL project corridor has been identified that has the potential to be contaminated. If unexpected, contaminated land is found works will be stopped and the Head of Environment and Sustainability, Health and Safety Advisor and SSEN Transmission will be notified to further assess the situation. This Appointed Contractor will follow standard procedure outlined in the Contaminated Land GEMP to deal with any contaminated land identified. This procedure explains in detail the process of assessment and continued work.

16 ARCHAEOLOGY AND CULTURAL HERITAGE

16.1.1 Key archaeological and cultural heritage features have been identified and detailed in the EIA Report (**Chapter 7: Cultural Heritage and Archaeology (EIAR Volume 2)** and **Figures 7.1** and **7.2** (**EIAR Volume 3a).**

16.1.2 XXXX has employed XXXX as the ACoW for the duration of the project.

- An ACoW will be appointed for the duration of the construction programme and will: Develop the Archaeological Written Scheme of Investigation (WSI) for submission to the Planning Authority as per Condition XX of the Deemed Planning Permission (Issued under Section 57(2) of the Town and Country Planning (Scotland) Act 1997).
- Submit the WSI to the WoSAS and obtain written approval for the proposed WSI. Conduct further walkover surveys, where required.
- Clearly mark any historical assets, while including a buffer area the area, prior to any works starting on site.
- Provide advice on how to minimise the impacts on linear structures where they might be impacted.
- Evaluate features where impacts cannot be avoided while providing advice to the Appointed Contractor on how such impacts can be minimised.
- Monitor all works undertaken near sensitive sites (providing Watching Briefs).
- Provide post-examination studies and reporting, as necessary.
- Compile and submit a report on features impacted during the development to the Appointed Contactor for distribution to all interested and affected parties.

16.2 Key Features Identified:

16.2.1 Features requiring Watching Brief

- Floating roads where no excavation work is undertaken, or roads made from temporary laid panels do not require a Watching Brief.
- Areas to be specifically targeted through the watching brief are listed in the WSI (Appendix TBC).

Pre-felling/Preconstruction Survey – Demarcate and Avoid.

16.2.2 Locations to be added on completion.

16.3 Undiscovered and Unknown Archaeological and Cultural Remains

16.3.1 Archaeological and cultural heritage disturbance / destruction, of unknown or previously undiscovered archaeology through construction activities or operations, may be encountered.

16.3.2 Stop work and inform your team leader / site manager if you think you have discovered archaeological features. Protect the site by fencing it off. The Environmental Advisor must be notified immediately. Further advice will then be sought from the Project Archaeologist.

16.4 Standard Archaeological Mitigations

- Undertake WSI for the project area in accordance with best practice, to meet client specification, and to meet requirement of planning conditions from Argyll and Bute Council.
- Project team to discuss project ‘lookahead’ with archaeological guidance from Environmental Advisors and specialist advice to be provided by ACoW.

- Archaeological sites requiring Watching Brief will be monitored by a competent archaeologist to avoid accidental damage (ACoW having been given at least 48hrs notice for on-site ACoW support).
- Significant identified archaeological sites within proximity of the overhead line, and associated working areas, will be identified and clearly marked within exclusion zones during all groundworks, particularly those sites which are not clearly visible.
- Operational teams will be notified of any areas of archaeological sensitivity and requirements for protection or monitoring. This information shall be passed to all site personnel during daily briefings, toolbox talks, and signed off by site teams.
- Employees will be briefed of the potential archaeological issues on site and be briefed on any controls and conditions put in place prior to the commencement of works. Such controls may include demarcation of archaeological assets or the attendance on site of an archaeological Watching Brief.
- Ensure required consents are in place before working in, or near, designated monuments. Protect any known archaeological features in accordance with contract and planning conditions. All mitigation /consultation and consent must be in place prior to any works taking place.
- Stop work and inform your team leader / site manager if you think you have discovered archaeological features. Protect the site by fencing it off. The Environmental Advisor must be notified immediately. Further advice will then be sought from the Project Archaeologist.

17 ECOLOGICAL MANAGEMENT

17.1.1 Best environmental practice with respect to ecology is a key requirement and XXXXX works to ensure all ecological constraints are reviewed and mitigated accordingly taking cognisance of all findings in the EIAR as part of planning and mitigation of environmental risk. Details are located in **Chapter 8: Ecology** and **Chapter 9: Ornithology (EIAR Volume 2).**

17.2 Ecological Clerk of Works

17.2.1 An ECoW will be appointed for the duration of the construction works and will oversee vegetation clearance works, as required. Where it is not possible to undertake vegetation clearance outside peak ecological periods (i.e., breeding bird season), the ECoW would carry out nesting bird checks, watching brief and protection measures for protected species through the construction stage, as set out in SSEN Transmissions SPPs **(Technical Appendix 2.4: SSEN Transmission Species Protection Plans (SPP), EIAR Volume 4).**

17.3 Ecological Surveys

17.3.1 The field survey area was surveyed in 2022 to provide baseline information on habitats and faunal species. Surveys included a Phase 1 habitat and NVC surveys.

17.3.2 Preconstruction ecological surveys will be undertaken by the Appointed Contractor to update the baseline data compiled for the project EIA.

17.3.3 The results of these surveys will inform and update the baseline EIA data ahead of the pre-construction phase and allow further development of mitigation to manage environmental risk for the project.

17.3.4 During the construction phase of the project the Environmental Advisor will complete field surveys and validate previous survey findings. If protected species are identified, detailed Method Statements for translocation and / or other suitable mitigation measures (if needed) will be identified and implemented by the Environmental Advisor, with support from the specialist ecological consultant (where necessary), and in consultation with NatureScot. All significant findings will be incorporated into an Environmental Constraint Map which will be a working document and issued to all sites as new revisions become available.

17.3.5 Given the presence of Important Ecological Features (IEFs), all on-site staff will receive appropriate toolbox talks, as part of their site induction and as required on site. The individual toolbox talks will be given by a member of the site management team and/or the Environmental Advisor.

17.4 General Mitigation

17.4.1 The following ecological mitigation measures will be implemented where necessary:

- Establishment of buffer zones, markers and notices for limits around watercourses, exclusion zones and other areas with protected species or habitats
- Required information on ecological issues will be added to Environmental Constraint Maps, communicated to the site team and be included in the project induction.
- Pre-construction surveys will be conducted ahead of works to identify potential changes in the distribution of protected species.
- Implementation of SPP (Please refer to **(Technical Appendix 2.4: SSEN Transmission Species Protection Plans (SPP), EIAR Volume 4).**
- Cover trenches / pits or provide escape ramps. Cap pipelines to prevent animals entering. Keep night-time lighting to a minimum.
- Micro-siting of works and / or access route (where possible) to avoid ecological buffers

- If a protected species is discovered, work will be stopped and the Environmental Advisor contacted for any further guidance.
- Relevant Toolbox Talks will be given to operational teams prior to the commencement of any work where the presence of protected species is expected.

17.4.2 A regular meeting will be scheduled between the Appointed Contractor and SSEN Transmission to review the effectiveness of ecological / environmental mitigation, review project progress in relation to environmental matters, to provide a 2 week look-ahead of works, and to agree on actions arising.

17.5 Protected Mammals Considered Species Protection Plans

17.5.1 All species mentioned below are afforded a high protection level in Scotland with most being listed under Schedule 5 of the Wildlife and Countryside Act 1981, as amended. SPPs have been developed to provide mitigation against any negative impacts upon the species during the construction and operation of the Proposed Development. SSEN SPPs would be followed for all species present and disturbance licenses obtained where appropriate.

17.5.2 The ECoW will carry out ongoing monitoring and protection measures for protected species through the construction stage and during the felling works.

17.5.3 Should there be any other protected species be found during update surveys (undertaken to account for passing of time), detailed Method Statements for translocation and / or other suitable mitigation measures (if needed) will be identified and implemented by the ECoW, with support from the specialist ecological consultant (where necessary), and in agreement with the relevant statutory organisation.

17.5.4 All significant findings will be incorporated into the Environmental Constraint Maps which will be issued to the construction team as new revisions become available.

17.5.5 Mitigation includes the creation of protection zones. The protection zones must be maintained until works are completed and all works personnel, machinery, vehicles and storage of materials must be restricted from entering the protection zone.

17.5.6 Further details on mitigation for each species is detailed in the SPP's **(Technical Appendix 2.4: SSEN Transmission Species Protection Plans (SPP), EIAR Volume 4).**

17.6 Pine Marten

17.6.1 Following the dramatic reduction in numbers of pine martens in the 19th century they are currently undergoing resurgence due in part to the legal protection they are afforded under the Wildlife and Countryside Act 198

17.6.2 Field surveys for the Proposed Development were undertaken in 2022 which identified the habitats and protected species (including birds) present within the Proposed Development.

17.6.3 No pine marten dens were recorded in the field survey area, with a single scat recorded.

17.7 Water Vole

17.7.1 Water vole is listed in Schedule 5 of the Wildlife and Countryside Act 1981, as amended, by the Wildlife and Natural Environment [Scotland] Act 2011. This legislation makes it an offence to:

- Damage or destroy or obstruct access to, any structure or place which any water vole uses for shelter or protection.
- Disturb a water vole while it is occupying a structure or place which it uses for shelter or protection.

17.7.2 Signs of water vole were recorded during a survey visit by ERM consultants carried out in June 2022 in advance of GI works. ERM recorded evidence of water vole on two burns between towers 17/18 and Tower 20 near Tullich. All records occur outwith 70 m from tower locations. These signs included:

- Burrow entrances;
- Latrines (dung piles to mark territories); and
- Feeding stations (chewed vegetation).

17.8 Ornithology / Nesting Birds

General Mitigation Measures

17.8.1 Embedded mitigation includes measures within the GEMPs and SPPs (**TAs 2.3 and 2.4, EIAR Volume 4).**

17.8.2 It is assumed the protocols detailed within the GEMPs and SPPs will be implemented successfully.

- XXXX will arrange for breeding bird surveys to be undertaken throughout the duration of the project between March and August.
- A minimum of one week prior to earthworks and throughout the construction phase, the ECoW (or competent ornithologist) will check for occupied bird nests within 30 m of all work areas. · In the event of an active nesting site being located, the ECoW/ornithologist will advise on the most appropriate mitigation measures.
- SSEN Transmission Bird SPP which was developed in conjunction with NatureScot), will be implemented for the project.
- If protected species and / or active nests are found within near working areas, the operations will stop, and site staff will contact their supervisor and Environmental Advisor for guidance and support.
- Regular presence in the working corridor is encouraged to deter nesting birds.
- Relevant Tool Box Talks, environmental briefings, and on-site guidance will be delivered to all site personnel and information added to access hazard plans and associated site-specific environmental information. The sensitivities of certain species will also be considered when advising project teams of ecological issues.

Golden Eagle

17.8.3 The Proposed Development runs between three golden eagle territories, one with an active nest location approximately 1.3 km to the west, one with an active territory approximately 3 km to the south west and another with an active nest location approximately 5.5 km to the east (the only of the three territories which lies within the Glen Etive and Glen Fyne SPA) of the Proposed Development. All three of these territories have potential connectivity with the Proposed Development, although disturbance impacts on each territory are not predicted.

17.8.4 The level of golden eagle flight activity recorded during the two VP survey programmes within the Ornithology Field Survey Area is considered to be low. While many flights were recorded at higher altitudes and at CRH in locations away from the Proposed Development, the number of flights recorded crossing the Proposed Development at CRH (three flights, totalling five individuals over two years' of survey) is considered low.

White-tailed Eagle

17.8.5 A white-tailed eagle territory was identified 4.5 km from the Proposed Development. This has the potential to be impacted by the Proposed Development.

17.8.6 The level of white-tailed eagle flight activity recorded during the two VP survey programmes within the Ornithology Field Survey Area is considered to be low. While many flights were recorded at higher altitudes, the number of flights recorded crossing the Proposed Development at CRH (two flights of four individuals over two years' of survey) is considered low.

Black Grouse

17.8.7 One black grouse lek was identified during surveys for the Proposed Development, approximately 1.7 km from a Proposed Tower location. There is not considered to be potential for this lek to be disturbed by the Proposed Development.

17.8.8 The level of black grouse flight activity recorded during the two VP survey programmes within the Ornithology Field Survey Area is considered to be low.

Hen Harrier

17.8.9 One hen harrier territory was identified in the Ornithology Field Survey Area 1.4 km from the Proposed Development. This territory is not considered to have potential to be impacted by the Proposed Development. Another historical territory was potentially identified approximately 140 m from the Proposed Development, although this was not in use in 2022.

17.8.10 The level of hen harrier flight activity recorded during the two VP survey programmes within the Ornithology Field Survey Area is considered to be low.

Goshawk

17.8.11 A potential goshawk territory was identified 645 m from the Proposed Development. This territory is not considered to have potential to be impacted by the Proposed Development.

17.8.12 No goshawk flights were recorded during the VP surveys, so goshawk flight activity is considered low.

Barn Owl

17.8.13 Two potential barn owl territories were identified during field surveys, one 650 m from the Proposed Development and one 90 m. The closest territory is close enough to be impacts by the Proposed Development.

17.8.14 No barn owl flights were recorded during the VP surveys, so barn owl flight activity is considered low.

Merlin

17.8.15 A merlin territory was identified 3.4 km from the Proposed Development. This territory is not considered to have potential to be impacted by the Proposed Development.

17.8.16 The level of merlin flight activity recorded during the two VP survey programmes within the Ornithology Field Survey Area is considered to be low.

Common Buzzard

17.8.17 A common buzzard territory was identified 210 m from the Proposed Development. This territory has potential to be impacted by the Proposed Development.

17.8.18 Common buzzard flights were not recorded during the two VP survey programmes as the species is not considered to be of more than local importance.

17.9 Groundwater Dependent Terrestrial Ecosystems (GWDTEs)

17.9.1 Two potential moderate GWDTEs and two potential highly GWDTEs were recorded. One area of moderate GWDTEs is associated with a spring within the field survey area, north of North Tullich.

17.9.2 Mitigation in GWDTEs will follow the following methodologies:

- Avoidance of GWDTEs where possible (e.g., by micro-siting), particularly in, or near, high-dependency GWDTEs such as bryophyte flushes. Consult with Environmental Advisor prior to works commencing.
- Minimise vehicle movements in all GWDTEs.
- The use of multiple parallel access routes across GWDTEs should be avoided, where possible, as this will cause damage over a wider area leading to further habitat damage
- If access is required across GWDTEs, it should be taken by the use of temporary track mats and by avoiding access across the whole of the habitat i.e., through only going in from one side.
- Where impact to GWDTEs is unavoidable, it should be restored to its original condition post-development.

17.9.3 In addition to the above, the following publications will be used to inform work in, or in proximity to, GWDTEs:

- SNH/SEPA Good Practice during Wind Farm Construction (Second Edition, 2013).
- FCE SNH Floating Roads on Peat, 2010.

17.10 Invasive Non-Native Species (INNS)

17.10.1 No invasive non-native plant species were recorded during field surveys.

17.10.2 Should any INNS be found during site clearance activities, a method statement should be produced to detail the prevention of spread and subsequent control of these species.

17.10.3 The method statement should include measures for avoidance of disturbance, control, and any required treatment removal and disposal.

17.10.4 If INNS are identified during pre-construction surveys, as an immediate action, these species should be clearly demarcated using protective fences, exclusion barriers and warning signs so to prevent accidental spread. This is to make any site users aware of the presence of invasive species and restrict the access of persons to such areas.

17.10.5 No clearance, excavations, development or soil movement should be carried out within the vicinity of non-native invasive plant species without prior consultation with the ECoW.

17.10.6 In addition, several key measures will be taken to reduce the likelihood of INNS issues during Phase 2. These measures include:

- Review forestry working footprints and accesses where there is an interface with the Appointed Contractor footprint for INNS legacy potential;
- Maintain control over access and security to prevent fly-tipping. This is a common pathway for INNS species;
- Ensure that project plant, machinery or vehicles are accessing the site are clean prior to entering a working area. When working within an identified INNS risk site, equipment to be power-washed with an emphasis on tyres, wheels, tracks, undercarriage, excavator buckets and drilling/boring devices;

- Use of topsoil and other materials that are assured to be as free from contamination / INNS risk as far as reasonably practical;
- Routine environmental site inspections and on-going survey work will make observations regarding INNS risk. Project ecologists will also raise any concern on invasive species (e.g., monitor the initial stages of vegetation growth on track bunds and on landscaped areas; and
- Good communication with site operatives to ensure site personnel are aware of the above by adhering to good biosecurity measures, toolbox talks, site specific guidance and ongoing day-to-day liaison between the environmental team site activities.

17.11 Designated Sites

17.11.1 No statutory designated nature conservation sites for ecological features were found within the field survey area.

18 PRIVATE WATER SUPPLIES (PWS)

18.1 Key Information

18.1.1 Information regarding private water supplies has been provided in the preconstruction information (**Technical Appendix 10.6, EIAR Volume 4**).

18.1.2 SEPA guidance notes that all groundwater abstractions within the following distances of development need to be identified, in order to assess potential risk:

- within 100 m radius of all excavations less than 1 m in depth;
- within 250 m of all excavations deeper than 1 m.

18.1.3 According to the council's register, there are nine PWS locations recorded within 250 m of the Proposed Development, including proposed access tracks and tower locations.

18.1.4 It is important to note that the project could still pose a risk to PWS's that are either not registered or located more than 250 m away, especially if they rely on surface water feeds.

18.1.5 It is therefore important that all PWS indicated on the attached map be investigated further by the Appointed Contractor. The risks associated with construction works in proximity to PWS include:

- Pollution of catchment area;
- Pollution of a watercourse feeding a water supply intake;
- Disruption/damage of private water supplies/infrastructure; and
- Prosecution from SEPA.

18.2 Mitigation

18.2.1 To mitigate the potential for damaging, disrupting or contaminating a PWS, the following measures shall be taken ahead of works:

- Review of existing PWS data.
- Consultation with landowners / land agents / tenants / farmers to identify the presence, type, and route, of potential underground pipes and other infrastructure.
- Understand the catchment area for a PWS and the interface with project operations that will take place in that area.
- If such infrastructure is identified, this should be clearly identified and demarcated on the ground and design drawings, and communicated to site teams.
- Avoidance of known PWS infrastructure during works by means of micrositing access, or amending compound footprints.
- Installation of a robust and proven extent of mitigation in the vicinity to mitigate silt risk, and to minimise oil pollution risk.

18.2.2 Construction works in proximity to PWS will receive a comprehensive risk assessment. All construction activity will adhere to 'best' construction practice at all times, with particular awareness of the Guidance for Pollution Prevention and the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).

18.2.3 No storage or refuelling will be undertaken within 30 m of a surface water PWS and not within 100 m from a groundwater PWS. Plant nappies and drip trays will be used, spill kits (grab bags and wheelie bins) are to be available where fuels are stored / used. This will include appraisal for larger spill contingency, for example, oil spill response trailer. Fuel tanks, valves and hoses will be regularly inspected for leaks and will be regularly maintained. In addition to spill kits, plant nappies will be in use for mobile plant and equipment.

18.2.4 Site compounds, equipment and vehicles will be appropriately secured to minimise the potential for vandalism and the uncontrolled release of contaminants to the environment.

18.2.5 Access and working areas will manage site drainage by soakaway into the surrounding vegetation with appropriate level of silt fencing measures. Drainage ditches and channels are to be maintained and kept clear of debris. Booms, bales, check dams; silt fencing is measures to control sediment / contaminants from being released into watercourses.

18.2.6 Excavated spoil can release sediment and fines into water courses / water bodies and must be stored away from drains and areas where it could migrate to channels feeding private water supplies. Topsoil and subsoil will be segregated and stockpiled at least 30 m from a watercourse / water body or associated tributaries and PWS infrastructure.

18.2.7 Plant and vehicles should be stored greater than 30 m away from water courses / water bodies and PWS infrastructure when unattended. Where plant and vehicles are to be used in proximity to water courses, it must be clean, well maintained and will be inspected daily for obvious leaks or damage or deterioration which may result in an uncontrolled release (e.g., hoses, seals, sumps plugs, tanks etc.). A spill kit will be at the site and any releases cleaned up immediately.

18.2.8 Dewatering from excavations will be discharged into areas of vegetation to filter out silt; this will be assisted by installation of appropriate silt fencing / sumps. Dewatering will not be undertaken within a water body or PWS infrastructure. If no suitable vegetation is available, the use of settling tanks will be considered.

19 CONSTRUCTION NOISE MANAGEMENT

19.1 Introduction

19.1.1 Potential noise issues can arise from the construction and operation of the Proposed Development and have been identified and detailed in the EIA Report **Chapter 12: Noise (EIAR Volume 2)**. These stages have been assessed with a BS5228 and BS4142 assessment respectively for nearby Noise Sensitive Receptors (NSRs), defined as residential properties and other sensitive buildings in the vicinity of the Proposed Development

19.1.2 The impact of construction noise at receptors has been assessed to be below noise limits, and therefore rated as minor and not significant. Whilst no additional mitigation is required, a Construction Noise Management Plan (CNMP) will be prepared by the Principal Contractor prior to construction works starting on-site, which would set out best practice measures to be implemented during the construction stage, an outline CNMP has been submitted as part of the application (**TA 13.1 EIAR Volume 4)**

19.2 General Mitigation

19.2.1 This section defines the measures to control and limit noise emissions and vibration levels for potential sensitive receptors in the vicinity of the proposed OHL project. Best practicable means of noise control will be applied during construction works to minimise noise (including vibration) at neighbouring properties and other sensitive receptors such as wildlife. The general principles of noise management are given below:

19.2.2 The recommendations set out in BS Code of Practice for Noise and Vibration Control on Construction and Open Sites (BS5228:2009 Part 1 1997 (as amended 2014) shall be complied with and, in particular, with the following requirements:

- Careful selection of construction methods to minimise noise emissions.
- Avoidance of vehicles waiting or queuing, particularly on public highways or in residential areas with their engines running.
- Scheduling of deliveries to arrive during daytime hours only. Care should be taken to minimise noise while unloading delivery vehicles. Delivery vehicles should follow routes that minimise use of residential roads.
- Ensuring plant and equipment are regularly and properly maintained. All plant should be situated to sufficiently minimise noise impact at nearby properties.
- Fitting and maintaining silencers to plant, machinery, and vehicles where appropriate and necessary.
- Operating plant and equipment in modes of operation that minimise noise, and power down plant when not in use.
- Using electrically powered plant rather than diesel or petrol driven, where this is practicable.
- Avoiding undertaking noisy activities at the weekends or outside of daytime defined hours as necessary. In setting working hours, consideration is given to the fact that the level of noise through the normal working day is more easily tolerated than during the evening and night-time. Working that continues into the evenings must adhere to the threshold noise levels in Category A.

19.2.3 Additionally, the construction noise will be controlled with a CNMP and in addition to the procedures listed above, the following procedures will be included:

- Minimising the noise as much as is reasonably practicable at source.
- Attenuation of noise propagation.

- Carrying out identified high noise level activities at a time when they are least likely to cause a nuisance to residents.
- Providing advance notice of unavoidable periods of high noise levels to residents.

20 AIR QUALITY AND DUST SUPRESSION

20.1 Introduction

20.1.1 There are numerous activities on civil construction projects that can give rise to elevated levels of dust and air pollution. This can be caused by common construction processes, such as the movement and placing of granular materials, poor stockpile management, site traffic movements on forest access roads and similar such activities. Air quality can be impacted from activities by either particulates (smoke, fumes, dust and grit) or odours.

20.1.2 Activities that can impact air quality and generate dust need to be identified and control measures implemented to reduce their impact. Dust and emissions have the potential to cause nuisance to the local community - poorly controlled emissions from plant or works may give rise to valid complaints and could cause health risks.

20.1.3 Dispersal of dust to the surrounding area has the potential to have two types of effects on trees and vegetation: physical and chemical. Direct physical effects on vegetation may include reduced photosynthesis, respiration on transpiration through smothering. Chemical changes to the surrounding watercourses and soils may lead to loss of plants or animals via changes in acidity. These changes are likely to occur only as a result of long-term demolition and/or construction works adjacent to a particularly sensitive habitat.

20.2 Dust Mitigation Measures

20.2.1 The following dust mitigation measures will be considered when construction methods are being assessed:

- At the start of the drier weather (May – July) the Environmental Advisor will identify a number of surface water abstraction points along the length of the OHL route corridor. These points will to be communicated to the local SEPA office. Any authorisations will be obtained prior to the drier weather starts.
- Dust suppression will be used on activities producing a residue extending beyond the boundary of the work area where this may cause a nuisance or an impact on the environment.
- All access routes (public highways, existing forest roads, temporary constructed access) will be monitored for risk of dust pollution in dry weather and dust suppression techniques will be implemented when required.
- Vehicles carrying bulk materials will be sheeted.
- Public roads will be kept clean and water bowsed if required.
- Vehicle speeds will be limited along dusty access tracks.
- Do not use drills that are powered by compressed air unless appropriate control measures are in place.
- Suppress dust from soil stockpiles, access tracks, stripped working corridors and material storage areas, by bowsing with water, where required.
- Wind conditions should be monitored throughout the works, and suppression increased according if required.
- Store materials away from the site boundary.
- Plan activities to ensure that, as far as practical, particularly dusty activities are not carried out in unsuitable weather conditions (i.e., very dry / windy) unless suppression is in place.
- Follow-up any complaints immediately and take action to avoid a repeat complaint.

- Dust suppression will be deployed during dry weather, or when dust is noticed leaving the works area.

20.2.2 Activities and Control Measures to consider

Table 20.1: Activities and Control Measures to Consider (to be completed by the Appointed Contractor)

Activity	Control Measure
Depots	Where possible ensure that depots and compounds are on hard standing Where required due to dry weather, use a towable water bowser to damp down any dust
Generators	Do not leave petrol- or diesel-powered generators running when not required Ensure serviced regularly
Plant and Equipment	Do not leave plant and equipment running when not in use. Ensure serviced regularly
Vehicles	Do not leave vehicles idling when not required Ensure vehicles are serviced regularly
Local exhaust ventilation	All LEVs should be regularly serviced to ensure filters are effective
Stockpiling spoil	Position stockpiles as far from residential areas as possible
Stone Roads	Damp down where practical and necessary

21 OUTDOOR ACCESS PLAN

21.1 Introduction

21.2 Potential Impacts

21.3 General Mitigation

Public Access to the Construction Areas

Increased Traffic Movements

Potential Construction Stage Impacts

21.4 Access Management

21.5 Opportunities

22 SUSTAINABILITY

22.1 Appointed Contractor's Project Sustainability Measures

23 REINSTATEMENT

23.1 Access Track Reinstatement


Scottish & Southern
Electricity Networks