



Nadara Limited

Millennium East Wind Farm

An extension to Millennium Wind Farm

Technical Appendix 2.1: Outline Construction Environmental
Management Plan

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RSK



RSK GENERAL NOTES

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Author	Lewis Gourlay
Date:	27/03/2025

Technical reviewer	Andy Mitchell
Date:	27/03/2025

Project manager	Spyridonas Angeli
Date:	27/03/2025

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Nadara Limited

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ABBREVIATIONS

BS	British Standard
CAR	Controlled Activities Regulations
CEMP	Construction Environmental Management Plan
CMS	Construction Management System
COSHH	Control of Substances Hazardous to Health
CTMP	Construction Traffic Management Plan
ECoW	Environmental Clerk of Works
EIA	Environmental Impact Assessment
EMS	Environmental Management System
ILP	Institute of Lighting Professionals
ISO	International Organisation for Standardisation
NGR	National Grid Reference
PPE	Personal Protective Equipment
RAMS	Risk Assessment and Methods Statements
s36	Section 36
SHE	Safety, Health and Environmental
SWMP	Site Waste Management Plan

1 INTRODUCTION

- 1.1.1 This Outline Construction Environmental Management Plan (CEMP) has been prepared on behalf of Nadara Limited (hereafter referred to as ‘the Applicant’), to supplement information within the Millennium East Wind Farm (hereafter referred to as ‘the Proposed Development’) Environmental Impact Assessment (EIA) Report as a technical appendix.
- 1.1.2 This document sets out the Applicant’s minimum requirements for inclusion within a CEMP, to be prepared in advance of construction, and sets out guidance and best practice for adoption at the construction site.
- 1.1.3 The Principal Contractor is likely to have its own management system requirements and CEMP templates. Therefore, the final Site CEMP (referred to as “the Site CEMP” in this document) may vary from what is set out within this document. Site-specific sensitivities and requirements of any consent, along with updates in legal requirements and construction best practice, will also require to be considered in the development of the Site CEMP.
- 1.1.4 The specific mitigation measures identified in the EIA Report are collated and included in **Technical Appendix 2.2: Schedule of Environmental Commitments**.

1.2 Aim

- 1.2.1 The aim of this Outline CEMP is to ensure there are measures in place to prevent unacceptable environmental impacts from construction activities. In particular, this Outline CEMP provides:
 - a mechanism for ensuring that measures to mitigate potentially adverse environmental impacts are implemented;
 - assurance to third parties that their requirements with respect to environmental performance will be met; and
 - a framework for compliance auditing and inspection to enable the Project to be assured that its aims with respect to environmental performance are being met.

1.3 Objectives

- 1.3.1 The main objective of this Outline CEMP is to set out the Applicant’s minimum requirements for how construction works will be managed to avoid or mitigate adverse environmental impacts.
- 1.3.2 This Outline CEMP contains the site-specific control measures that will be applied by the Principal Contractor, and where relevant its sub-contractors, during the construction stage(s). In preparing this Outline CEMP, the requirements of the Proposed Development’s EIA Report have been considered.
- 1.3.3 A copy of the Site CEMP will be provided to each Contractor working on behalf of the Applicant. The Principal Contractor is required to maintain a copy of the Site CEMP at the

worksite office for reference by the entire workforce. It must be accessible to all site personnel and representatives of the relevant enforcement authority, and all sub-contractors.

1.4 Statutory Compliance, Guidance and Best Practices

- 1.4.1 All Site works shall be undertaken in compliance with the Site CEMP and with all applicable legal and regulatory requirements. It is the full responsibility of the Principal Contractors and each sub-contractor to ensure that its works do not contravene legal requirements, and adherence to the Site CEMP alone cannot be a full defence regarding legal action against the Contractor. The relevant environmental legislation, regulations, best practice, standards and other environmental requirements decided upon by the Applicant applicable to the construction activities will be detailed in the Site CEMP.

Environmental Management System

- 1.4.2 This document has been produced in accordance with principles outlined in International Organisation for Standardisation (ISO) 14001:2015. The Principal Contractor is required to adhere to these environmental values and standards whilst undertaking all construction works, including the promotion of environmental awareness among their staff, sub-contractors and suppliers engaged on the construction works.
- 1.4.3 The Principal Contractor appointed to the Proposed Development will be expected to demonstrate the same level of commitment to the principles of ISO 14001:2015, and to have an Environmental Management System (EMS) certified to the standard.

1.5 Context and Relationship with Other Documents

- 1.5.1 The Site CEMP will form one of a suite of documents that will be prepared after consent (should it be granted) and before the Proposed Development's construction phases. These are anticipated to include:
- Construction method statement;
 - Biodiversity Enhancement and Habitat Management Plan;
 - Construction Traffic Management Plan;
 - Abnormal Load Transport Management Plan;
 - Peat Management Plan;
 - Water Quality Monitoring Plan;
 - Drainage Management Plan;
 - Pollution Prevention Plan;
 - Site Waste Management Plan;
 - Aquatic Monitoring Plan;
 - Species Protection Plans; and
 - Site Restoration Plan.

- 1.5.2 The other documents and plans required for the Proposed Development will be confirmed in due course, informed by the conditions of consent (should consent be granted) and best practice guidance applicable.

2 THE PROPOSED DEVELOPMENT

- 2.1.1 The main details of the Proposed Development are summarised in this section; the description is limited to an overview of the main elements/approaches sufficient to providing an understanding of the approach to the planned works, and the roles of those main parties responsible for undertaking each part of the works.

2.2 Project Description

- 2.2.1 The Proposed Development would involve the construction and operation of eight wind turbines (three with tip heights of up to 200 m, and five with tip heights of up to 180 m) and associated infrastructure. Each turbine is likely to generate approximately 6.2 Megawatts (MW) of electricity. The total installed capacity of the Proposed Development is expected to be up to 50 MW. Further details in relation to the Proposed Development is contained within **Chapter 2: Proposed Development, Volume 1**, of the EIA Report.

2.3 Site Location and Plan

- 2.3.1 The Proposed Development is located entirely within the administrative area of the Highland Council (hereafter referred to as 'the Council') local authority. The Site¹ is located to the east of the existing Millennium Wind Farm, approximately 7.5 km west of Fort Augustus, 8 km north of Invergarry and 14 km south-west of Invermoriston, as shown in **Figure 1.1, Volume 2a**, of the EIA Report.

2.4 General Site Arrangements

Site Set Up and Compounds

- 2.4.1 During the construction period, temporary construction and mobilisation compounds would be erected to facilitate construction works. These would be located adjacent to the existing wind farm track, on an existing hardstanding east of Turbine 2, as shown in **Figure 2.2, Volume 2a**, of the EIA Report. Two additional smaller temporary construction compounds are proposed on existing infrastructure; one within the first and northern existing borrow pit at National Grid Reference (NGR) E336476, N810467, and the second on the existing turbine hardstanding of an operational Millennium Wind Farm turbine, located at NGR E228635, N808348.
- 2.4.2 The temporary compounds would likely include temporary cabins, to be used for the site offices, the monitoring of incoming vehicles and welfare facilities for site staff; including toilets; parking for construction staff visitors and construction vehicles; and temporary security fencing around the compound. The compounds would also include laydown areas for storage of various components, including fuels and materials required for construction.

¹ Refers to everything within the Site Boundary, which describes the red-line boundary.

- 2.4.3 During the construction phase, the Proposed Development would be accessed directly along existing access tracks from the A837. All vehicles would access and egress the Site through this access. Following construction, this access junction would remain in place during the operational phase of the Proposed Development.

Fencing and Site Security

- 2.4.4 Site security and access during the construction period would be governed under Health and Safety at Work Act (1974) and associated legislation. The Land Reform (Scotland) Act (2003) establishes statutory rights of responsible access on and over most land. The legislation offers a general framework of responsible conduct for both those exercising rights of access and for landowners. However, during construction, some restrictions on the use of the paths running through the Site and along the Site access may be required for public safety in accordance with the Construction (Design and Management) (Regulations) (2015).
- 2.4.5 Only authorised personnel will be permitted onto the Site compound. All visitors shall be required to enter through the main Site access and report to the Construction Manager/Site Manager. All visitors will be required to sign in and out to ensure that Site management is aware of the people on Site in the event of an emergency.
- 2.4.6 Visitors and the Site team will be required to undergo induction training, wear the necessary personal protective equipment (PPE) and be accompanied by a representative on Site at all times.
- 2.4.7 Security fencing will be around the temporary compounds during construction, and around the substation during operation. The compounds shall be checked on a regular basis to ensure that it is maintained in good condition and is secure. The Principal Contractor shall provide further information.

Site Lighting

- 2.4.8 Site lighting shall be established in accordance with the Applicant's Safety, Health and Environmental (SHE) Policy, environmental management requirements established through environmental assessments and surveys, and conditions of consent issued by the Scottish Ministers.
- 2.4.9 Section 35 of the Construction (Design and Management) (Regulations) (2015) states the Site must be provided with suitable and sufficient lighting, which must be, so far as is reasonably practicable, by natural light. This relates to both the Site itself as well as the approach and traffic route to the Site.
- 2.4.10 Site lighting will be at the minimum luminosity necessary to enable the safety and security of the construction Site. In determining temporary construction lighting arrangements for the Site, consideration will be given by the Principal Contractor to sensitive receptors that may experience a nuisance by the light, including wildlife. Any lighting would therefore be directional in accordance with Institute of Lighting Professionals (ILP) 'Guidance Note 1 for the reduction of obtrusive light' (2021) and mounted on the individual portacabins.
- 2.4.11 General control measures for the use of lighting on Site are outlined below:
- as far as is practical, lighting must be directed away from residential properties; and

- lighting should always be positioned to avoid glare.

Working Hours

- 2.4.12 The normal hours of working (including access and egress) on any part of the development during the construction period will be:
- 07:00 hours to 19:00 hours Monday to Fridays; and
 - 07:00 hours to 13:00 hours on Saturdays.
- 2.4.13 Normal hours of work set out above do not apply to emergency works nor to equipment that is required to operate continuously.
- 2.4.14 In addition, whilst the delivery of materials would generally take place during construction hours, the delivery of abnormal loads may be delivered outwith these hours, when the road network is at its quietest to reduce traffic disturbance. Delivery of, including but not limited to; the nacelles, towers, and blades to the Proposed Development, would require the use of abnormal sized and slow-moving trucks. These trucks would require a police escort, and the timing of these deliveries may be dictated by the police. The timing of the delivery of abnormal loads (i.e. wind turbine blades) will be agreed with the relevant authorities after detailed investigation. More details can be found in **Volume 1, Chapter 10: Traffic and Transport** and **Volume 3, Technical Appendix 10.1: Abnormal Load Route Assessment**.

2.5 Project Programme and Key Dates

- 2.5.1 Construction of the Proposed Development is anticipated to take approximately 17 months from mobilisation to completion. An indicative programme is provided in **Volume 1, Chapter 2, Table 2.2**. All reinstatement will be undertaken as soon as practicable after each stage of the Proposed Development is completed.

3 ENVIRONMENTAL ASPECTS

- 3.1.1 This section of the Outline CEMP sets out information or links to information about environmental sensitivities such as residents and local communities, landscape and visual, noise and vibration, ecology and ornithology, hydrology and soils, traffic and transport, and other issues.
- 3.1.2 Detail on the current understanding of the environmental baseline, and the potential for environmental impacts on identified features, is presented in the EIA Report. Detail of the environmental commitments made to mitigate environmental impacts predicted is presented in **Volume 3, Technical Appendix 2.2**.
- 3.1.3 It is expected that as part of the EMS, the Principal Contractor will have their own tool to identify environmental aspects, impacts, risks and any potential opportunities.

3.2 Environmental Management Procedures

- 3.2.1 Environmental management measures would be developed to avoid or reduce environmental impacts associated with the construction works.
- 3.2.2 The measures identified in this section present general good practice for construction sites in the United Kingdom based on current published guidance. Prior to construction commencing, the measures to be included in the Site CEMP will be updated based on the published guidance applicable at that time, in addition to:
 - Schedule of Environmental Commitments;
 - Additional management plans and committed measures finalised after submission of the Section 36 (s36) application for consent, such as those mentioned in Section 1; and
 - Any secondary consents and licenses (e.g. protected species licensing, Controlled Activities Regulations (CAR) licensing).
- 3.2.3 Environmental management measures shall be incorporated into the Risk Assessment and Methods Statements (RAMS) and will be communicated to the workforce by the Site Manager.

3.3 Fuel Storage and Refuelling

- 3.3.1 Fuel storage and refuelling will be managed as follows during construction:

Fuel Storage

- fuel levels shall be monitored and recorded regularly (sudden changes may be a sign of leaks);
- fuel tanks, secondary containers and storage compounds shall be inspected regularly for damage, corrosion, leaks, faults and vandalism. Repair defects/faults immediately and retain records;

- the secondary containment system must have sufficient storage for at least 110 % of the largest tank, or 25 % of the total storage capacity, whichever is greater and ensure that any valves, fitters, sight gauges, vent pipes or other ancillary equipment are also situated within the secondary containment system and arranged so that any discharges would be contained;
- fully lockable and labelled 'Fuel Safe Static Tank' will be deployed;
- sufficient spill kits shall be provided. Note: for sites close to water courses and drains, enhanced spill kits must be provided;
- spill kit supplies to be monitored regularly to ensure adequate stock remains full;
- all drains located adjacent or near to refuelling points shall be covered by Gully Guards before commencing transfer. All fuel transfers to be supervised;
- drums can only be used for fuel volumes less than 300 gallons and must be stored in a secure interceptor drum store within the designated refuelling area;
- oil spill and oil impacted water must be collected in a fuel safe container with fuel tag and fuel spills must be contained using the spill kits provided. Spills should be reported to the contractor's Site Manager immediately;
- records must be maintained of all environmental incidents, mitigation works, clean up method and validation; and
- a suitable container for hazardous wastes must be provided within the waste compound.

Refuelling

- where possible, refuelling should only be carried out in a designated area, which will be secured/locked out of hours;
- the refuelling area shall be located away from drains and watercourses (greater than 10 m from a watercourse and greater than 50 m from a spring, well or borehole);
- areas of permanent waste oil/fuel/chemical storage will be located 50 m away from watercourses or drainage paths. Where this is not possible, advice will be sought from the Environmental Clerk of Works (ECoW) and a minimum distance will be agreed with the Applicant;
- no fuel storage or refuelling activities should be placed/carried out on or near permeable pavement. The Site Manager must be informed before refuelling mobile plant and a drip tray must be used;
- refuelling compound will be secured/locked out of hours; and
- mobile plant must be refuelled away from surface waters, drains, permeable pavements and open excavations. A fuel drip tray must be used.

Use and Storage of Hazardous Materials/Substances

3.3.2 The use and storage of solvents, cements, adhesives, grout and concrete shall be managed as follows during construction:

- concrete wash-out on Site shall only be permitted when the Contractor has provided a designated, suitably prepared wash-out area with signage identifying the area as suitable for wagon wash-out;
- concrete wash-out may be dried and crushed to be re-used on Site or disposed of in accordance with a Site Waste Management Plan (SWMP);

- surplus dry concrete, cement and grout is to be collected and reused where possible e.g. as inert rubble; reuse of dried materials may require environmental permits or exemptions;
- areas of permeable pavements are not to be used for the temporary storage of cement bags. If unavoidable ensure adequate protection measures are in place to prevent the pavement from becoming blocked;
- the Contractor is responsible for carrying out a risk assessment of each substance and ensuring that all appropriate storage, protective equipment and if necessary, emergency procedures are put in place on Site;
- all hazardous materials shall be labelled, sealed and stored with their Control of Substances Hazardous to Health (COSHH) assessment in a bunded and lockable container away from drains and watercourses when not in use;
- COSHH datasheet will be read and understood before using any hazardous materials;
- any spent (contaminated) spill kits, absorbent granules, sheets or fibres must be disposed of in accordance with COSHH regulations and Site Waste Management Plan requirements;
- hazardous liquids shall be transferred using a funnel and drip tray and sealed and returned to the container immediately after use. Damaged containers shall be reported to the Site Manager;
- all usages shall comply with its requirements;
- hazardous liquids must be re-sealed after use. Empty containers are to be disposed of to the designated container within the waste compound; and
- construction workers are required to wear PPE such as gloves and face masks (where appropriate) to prevent dermal contact and inhalation or ingestion.

Use of Plant and Equipment

- mains electricity shall be used where possible. If not, generators are to be used and must be sized for the required output, if it is diesel they must be set up by the supplier;
- all plant shall be suitably maintained, and noise screens shall be used where required. Use generators having a sound power level rating below 65 dB(A) canopied and silenced. Position exhausts away from Site boundaries and occupied areas when in use;
- to assist with noise attenuation, where possible, generator will be located away from adjacent residents, also taking account of prevailing wind conditions;
- siting of portable generators must consider proximity to sensitive receptors (e.g. greater than 10 m from a watercourse and greater than 50 m from a spring, well or borehole) and must be fitted with a drip tray;
- turn off all plant overnight;
- all equipment shall be inspected before use and any defects/faults reported to the Site Manager;
- vehicle/plant refuelling in designated compound/areas; and
- sufficient spill kits shall be provided and replenished as required.

3.4 Site Set up, Groundworks and Construction

3.4.1 Groundwork and construction will be managed as follows during construction:

- minimise the use of builders skips and inspect lifting and locking points, doors and door locks and general condition weekly as a minimum;
- ordered materials shall be adequately managed to avoid spoilage or over-ordering and surplus materials shall be minimised;
- provide a suitable and sufficiently sized materials storage compound that is lockable and provides an above-ground covered area, protected from wind and rain;
- encourage the reuse of cut-offs and arrange for suppliers to take back unused surplus materials and packaging;
- surplus materials are to be reused on Site where possible. All reuse and recycling to be carried out in accordance with the terms of a valid waste exemption or voluntary codes of practice/protocols;
- excavated material surplus shall be minimised so far as practicable; details of all inert material reuse on Site including composition and disposal location must be mapped and records retained; and
- if necessary temporary bunding and/or settlement ponds will be installed to allow for isolation and onsite treatment of any sediment laden or contaminated water prior to discharge to the drainage system.

3.5 Pollution Control/Nuisance and Disturbance

3.5.1 Mud, dust, noise, light, litter, and water pollution have the potential to cause nuisance and in some cases complaints and statutory nuisance and therefore must be minimised. The following processes and procedures shall be implemented to manage potential nuisance issues.

Noise

3.5.2 Good practice is to be followed as listed below:

- all work will be carried out where possible in accordance with British Standard (BS) 5228-1:2014 - Code of practice for noise and vibration control on construction and open sites (2014);
- plant shall be selected with noise levels in mind, and it is important that quiet plant is used. If possible, electrically powered plant should be used;
- careful selection of plant, construction methods and programming. Only plant conforming with relevant national or international standards, directives and recommendations on noise and vibration emissions should be used;
- construction activities should be confined to times of the day when they are least likely to be disturbing;
- use of acoustic screens or covers where required;
- noisy works and deliveries to and from the Site shall be conducted within the core working hours. Where necessary, deliveries outside of these core hours would be agreed in advance with the Local Authority;

- if operations involving high noise levels have to take place, consideration should be given to the people in the immediate vicinity and such works should be limited to the times which will have least impact on the neighbourhood;
- there will be no-idling on Site with equipment being shut down when not in use. Static machines, if not in use will be sited as far away from inhabited buildings or other noise sensitive locations;
- care will also be taken when loading and unloading to minimise noise;
- static and semi-static plant/equipment (e.g. compressors and generators) should be fitted with suitable enclosures where practicable;
- personnel will be instructed on best practice to reduce noise and vibration as part of their induction training and as required prior to specific work activities;
- methods of work and vehicular routes will be selected with regard to minimising noise and vibration impact; and
- toolbox talks will be delivered to ensure everyone on Site is aware on environmental responsibilities and sensitive receptors.

Lighting

- lighting shall be switched off when not in use unless specifically needed for construction activities or for security and/or health and safety requirements;
- glare (and the potential for complaints) caused by poorly directed security and floodlighting shall be minimised by ensuring that light fittings are horizontally mounted and directed inwards on Site;
- temporary lighting fixtures are to be installed and designed to provide full cut-off or should be directionally shielded to ensure that artificial light is controlled and substantially confined to the defined area intended to be illuminated;
- post-installation checks and monitoring of the lighting installations shall be undertaken to ensure that correct tilting angles and appropriate direction of lighting is achieved. This will allow adjustments to be made, where practicable, should undue light spill or glare be identified;
- wherever possible, lighting shall be located and directed so that it does not cause unnecessary intrusion to adjacent buildings;
- the construction areas close to walkways or roadways shall be lit in an appropriate way to minimise glare and shall be clearly defined at all times to ensure the safety of motorists, cyclists, pedestrians. This will also assist in defining the limits of the construction area for motorists, cyclists and pedestrians;
- temporary walkways, roads or parking areas shall be illuminated in accordance with current guidance stipulated in the current ILP Guidance Notes;
- care should be taken to avoid casting shadows from hoarding on the surrounding and adjacent footpaths and roads; and
- light spillage shall be reduced by directing any construction lighting below the horizontal plane, at an angle of less than 70 degrees away from features that offer suitable bat roosting potential.

Dust and Mud

- 3.5.3 The Proposed Development is unlikely to have significant effects on air quality. There could be some localised and temporary construction-related air quality effects associated with dust

(foundation construction, passage of vehicles along access tracks), and construction plant and traffic exhaust emissions. However, the construction activities would be relatively short term, intermittent and controllable through the application of good construction practice and also at sufficient distance from sensitive receptors to be considered negligible impact. The potential for nuisance effects on residential or recreational amenity would be limited.

3.5.4 Good practice is to be followed as listed below:

- where foreseeable and significant dust is to be generated during an operation, dust fencing and/or barriers must be provided to minimise impact;
- timing of earthworks and material movements shall be planned to reduce double handling and minimise traffic movements and therefore associated dust and mud;
- stripping and stockpiling of soil shall be minimised where possible;
- Site roads shall be kept clear of soil as much as possible;
- all vehicles carrying soil off-site must be sheeted;
- all contractor vehicles and private cars are to be parked in the designated area within the site compound and to be removed from Site when not in use;
- if dust levels remain excessively high when adequate control measures are in place and operating effectively, then reduce or postpone works during such times (e.g. during dry or windy periods);
- water can be sprayed onto material to dampen down any potential contaminated dust and prevent it from becoming airborne;
- construction vehicles shall be regularly maintained to ensure mud-flaps etc. are effective;
- activities associated with the use of construction vehicles (such as washdown facilities) shall be appropriately managed to contain contaminants and regulate the release of water back into the natural environment;
- Site layout shall be planned so that machinery and dust causing activities are located away from receptors, as far as is possible;
- where feasible the Site or specific operations shall be fully enclosed where there is a high potential for dust production and the Site is active for an extensive period;
- the Site shall be set up with hoarding to reduce the liberation of dust from the Site. The contractor shall consider the use of a 'green'/ vegetated hoarding to reduce particles;
- haul routes shall be hard surfaced and/or effectively damped down;
- all vehicle engines will be switched off when not in use to reduce particulate emissions;
- wash facilities in the form of a manned jet wash for vehicular use located close to the Site entrance shall be connected to an offline gully and trap system located within the Site boundary;
- exhaust systems will be fitted with particulate filters and catalytic converters as necessary;
- stockpiles shall be covered, seeded or fenced (as appropriate) to prevent wind whipping;
- excavated materials undergoing treatment shall be covered to reduce the release of odours and vapours;

- mechanical road sweepers shall be employed to clean roads of any dust and debris if it is generated within the vicinity of the Site entrance; and
- all loads entering/leaving the Site shall be covered.

Water Pollution

- surface water and drains must be protected from silt run-off: use gully guards to protect drains and use straw bales, gravel traps or silt fencing to protect surface waters. All silt protection measures must be inspected frequently and maintained throughout the works;
- stockpiles of contaminated material must be situated on an impermeable surface at least 10 m from any surface waters or drains, and run-off collected within a bund;
- tracking or washing out next to drains/surface waters must be avoided;
- when dewatering, any pump shall be switched off before removing the last portion of water and suspended solids will be allowed to settle out before discharging;
- all drains located adjacent or near to generators to be covered with gully guards;
- potentially contaminated water must be tested before dewatering. Contaminated water must be treated or discharged off Site;
- road sweepers shall be utilised where necessary;
- silty water and associated run-off to surface water and drains must be avoided: minimise any areas of soil stripping and stockpiling, control water volumes used to suppress dust, batter/sheet stockpiles where required; and
- if a discharge consent is required, then all conditions within the consent must be understood before commencement of dewatering.

3.6 Good Housekeeping

- maintain good housekeeping and site working practices to control litter, insects, or vermin. For example, dispose of food into appropriate receptacles;
- the Site entrance gate will be secured via padlock;
- all Site gates shall be kept locked/closed out of working hours and kept closed and/or manned during working hours; and
- all skips and other waste storage containers will be covered.

3.7 Ecology and Ornithology

- 3.7.1 Mitigation is included in **Volume 3, Technical Appendix 2.2**, which will form the basis of the mitigation to be delivered during the construction phase of the Proposed Development within the Site CEMP.

3.8 Flood Risk Management

- 3.8.1 Generally, the Site is considered to be at low risk from all sources of flooding. Impermeable areas of the Proposed Development could increase the runoff rates from the Site and drainage management is required to attenuate runoff. This would be included within the Drainage Management Plan.

3.9 Traffic Management

- 3.9.1 The Principal Contractor shall provide for the safe and secure management and control of pedestrian and vehicular movements, both on and off site, to ensure the safety of all members of the general public and workforce at all times throughout the construction work period in accordance with all requisite Acts and Regulations, including, but not limited to the:
- Health and Safety at Work etc Act (1974);
 - The Management of Health and Safety at Work Regulations (1999);
 - Construction (Design and Management) Regulations (2015);
 - Supply of Machinery (Safety) Regulations (1992); and
 - Provision and Use of Work Equipment Regulations (1998).
- 3.9.2 The Principal Contractor shall be responsible for:
- promotion, management and control of such general provisions and measures for traffic management and control to be implemented by all contractors and sub-contractors throughout the extent and duration of the construction;
 - on-site provision for Site access roads and pedestrian footways, with controlled access from the public domain for pedestrians and vehicles, on-site parking provisions, standing, lay-down, and unloading facilities for delivery vehicles, and on-Site compound, welfare facilities and material holding areas for use by all contractors and sub-contractors; and
 - ensuring that the on-site provisions are controlled, managed and shall be safe at all times through the provision of planned and informed procedures and segregation between vehicular and pedestrian traffic.
- 3.9.3 Mitigation is included in **Volume 3, Technical Appendix 2.2**, which will form the basis of the mitigation to be delivered during the construction phase of the Proposed Development within the Site CEMP.

3.10 Waste Management

- 3.10.1 The Principal Contractor shall apply the principles of the waste hierarchy (eliminate, reduce, reuse, recycle, and dispose) to waste management of the Site.
- 3.10.2 Waste would likely comprise building and construction waste, excavated soil, waste materials from deliveries, waste from plant and vehicles, and human waste from the Site compounds. Waste will be removed off-Site for safe disposal at a suitably licensed waste management facility in accordance with current waste management regulations. Wherever possible, excavated clean stone or soils will be re-used on Site, primarily for the restoration of disturbed ground.
- 3.10.3 The development shall seek to promote the re-use of excavated materials through optimization of cut and fill operations in order to improve the sustainable and cost-effective development of land, as per the Definition of Waste: Development Industry Code of Practice (2011). In many instances the Definition of Waste: Development Industry Code of Practice can provide an alternative to Environmental Permits or Waste Exemptions when seeking to reuse excavated materials.

3.10.4 The contractor shall prepare a SWMP. The measures to avoid waste issues will likely include:

- a waste collection area shall be set up before site works start. This area shall be as close to the Site compounds as possible with adequate hardstanding for the waste containers and unobstructed access for telehandler and waste removal vehicles;
- skips shall be provided to segregate wastes including plasterboard, timber and metal. A designated area shall be provided for inert wastes, for example bricks, clay pipes and roof tiles. A designated container[s] shall be provided for hazardous wastes, which must be clearly labelled;
- wastes shall be collected by a licensed waste carrier. A copy of all Waste 'Duty of Care' documentation shall be held on Site;
- Duty of Care documentation must be completed for all waste transfers and copies provided to the Applicant every week. Waste transfer notes or hazardous waste consignment notes and Duty of Care procedures are to be audited regularly (monthly as a minimum);
- the SWMP shall be made available on Site and its requirements understood by all contractors and operatives before starting work on Site;
- road sweepers shall be deployed as necessary. All road sweepings must be removed from Site accompanied with a completed waste transfer note from the driver. If road sweepings are inadvertently discharged on Site, these should be disposed of appropriately;
- all waste incidents shall be reported immediately to the Site Manager and Environmental Advisor;
- soil and recycled aggregate transfers shall be carried out in accordance with an approved Materials Management Plan (or Remediation Strategy in Scotland) and all transfer tickets must be retained on Site; and
- monthly updates on the amount of waste successfully recycled will be made available to the Site Manager and displayed in the Site office and can also be issued to the Local Authority upon request.
- Wherever possible, the following waste streams will be diverted from landfill:
 - the site works shall be designed to retain as much soil on Site as possible whilst maintaining protection of human health and the environment;
 - all timber is to be segregated on Site and sent to a local charity (or similar outlet) for recycling;
 - all metal is to be segregated on Site and sent for recycling;
 - all inert waste (e.g. bricks, blocks, concrete) will be segregated on Site and used under roads as appropriate;
 - all mixed waste removed from Site shall be taken to a material recycling facility for further segregation to maximise recycling and recovery;
 - all hazardous waste shall be segregated from all other wastes and clearly labelled; and
 - all other site waste shall be segregated on Site.

3.10.5 Subsoil not required for reinstatement purposes will be collected at the end of the construction phase and disposed of according to best practice and existing waste legislation. Waste oils and diesel will be removed from the Site and disposed of by an approved waste contractor in accordance with provisions of the Special Waste Regulations (1996).

- 3.10.6 Details of waste management will be included in **Volume 3, Technical Appendix 2.2**, which will form the basis of the mitigation to be delivered during the construction phase of the Proposed Development within an expanded full Site CEMP.

4 EMERGENCY PREPAREDNESS AND RESPONSE

- 4.1.1 The emergency preparedness and response measures detailed in this section are based on general good practice for construction sites in the United Kingdom, based on current published guidance. Prior to construction commencing, the emergency preparedness and response measures to be included in the Site CEMP will be updated based on the published guidance applicable at that time, in addition to the further documentation identified in **Section 3**.

4.2 Emergency Preparedness

Spill Kits

- 4.2.1 Spill kits capable of dealing with hydrocarbon and chemical spills shall be available at all worksites. Each storage location shall be clearly visible to the workforce, for instance by deploying clear signage.
- 4.2.2 If a construction compound, fuel storage points or COSHH store is provided then additional spill kits will need to be available at each separate location.
- 4.2.3 The spill kit contents shall include absorbent pads, absorbent booms, absorbent granules and hazardous waste disposal sacks as a minimum. Regular checks of the spill kits shall be completed to ensure they remain adequately stocked to deal with environmental incidents.
- 4.2.4 Spill drills shall be performed periodically to confirm that the workforce can effectively contain and clear up potentially polluting spillages. All drills will be documented and details kept on record for the duration of the works.

Fire Prevention

- 4.2.5 Means to raise the alarm in the event of a fire shall be available at the points of work. An assembly point shall be designated a safe distance from the active work locations and will be communicated to all members of the workforce before works commence. The workforce shall assemble at the point for a roll-call and to receive further instructions. All individuals at the worksite, including visitors, will be obliged to immediately sign in on arrival and participate in a Site induction prior to starting work on the Site.

Extreme Weather

- 4.2.6 The Principal Contractor's Site Manager shall register to receive weather warnings. All warnings with the potential to impact upon the works shall be communicated by the Site Manager to the workforce in a timely manner so that measures can be implemented where necessary.

4.3 Incident Reporting and Investigation

Reporting

- 4.3.1 All incidents, including near misses, shall be classified according to the categories outlined in **Table 4.1**. All categories of environmental incident shall be reported by the Principal Contractor to the Applicant as outlined below.

Table 4.1: Incident Classification

Incident Classification	Definition
Near Miss	An event, controlled through implementation of an effective incident control measure (e.g. drip tray used, effective use of noise barrier).
Minor Environmental Incident	An incidents that has caused minor harm or damage to the environment e.g.: • A minor fuel spill below 20 litres onto ground which is immediately cleared; • A minor spill of a chemical not classified as presenting an ecotoxic risk; • Temporary exceedance of noise levels; • Silt runoff from Site which does not enter into a surface water feature; or • Excess dust emissions.
Major Environmental Incident	An incident that has caused or may cause significant harm or damage to the environment e.g.: • A minor fuel spill which impacts a sensitive land feature, a water, or drains; • A major fuel spillage or 20 litres; • Any spillage of a chemical which is classified as presenting an ecotoxic risk; • Silt runoff from Site which enters a water feature; or • Receipt of a nuisance complaint.

- 4.3.2 Minor incidents and near misses must be reported to the Applicant within 24 hours. Major incidents must be reported to the Applicant as soon as reasonably practicable.
- 4.3.3 The Principal Contractor, after informing the Applicant, shall report all environmental incidents that are required to be reported to the Scottish Environment Protection Agency (SEPA) and/or to any other relevant statutory or regulatory bodies. Emergency contact details are outlined in **Table 4.2** for all contacts relevant to the works.

Investigation

- 4.3.4 Reporting of an incident to the Applicant shall, where necessary, commence the incident investigation which shall be jointly conducted between the Applicant and its Contractor[s].

- 4.3.5 The Principal Contractor shall prepare an investigation report for all environmental incidents. The report is to include:
- summary of the environmental incident, describing the:
 - nature of the incident;
 - details of any pollutant released including the type and quantity of pollutant released; and
 - location for the incident (e.g. grid reference);
 - receptors that were or could have been impacted;
 - an analysis of what led to the incident occurring;
 - summary of immediate actions taken to mitigate the incident;
 - summary of any remedial action required; and
 - lessons learned and future measures or actions to be implemented.
- 4.3.6 The Applicant will verify the incident investigation and agree with its contractors any further actions which are to be implemented to prevent a reoccurrence of comparable incidents. A timeline for the implementation of all actions shall be established and the contractors shall provide details of when they have been implemented.
- 4.3.7 An incident investigation shall be complete when all details have been recorded on file.

Emergency Contacts

- 4.3.8 In the event of an emergency occurrence at the Site, the Applicant and its contractors shall determine the relevant statutory and regulatory bodies that must be notified. Notification shall be in accordance with the measures outlined above.

Table 4.2: List of Emergency Contacts

Emergency Contacts	
Contact	Contact Details
[Applicant PM Name and Job Title]	[TBC]
[Principal Contractor Site Manager - Name]	[TBC]
[SHE Environmental Manager – Name]	[TBC]
Scottish Environment Protection Agency Emergency Number	0800 807060
NatureScot	01463 725000
Health and Safety Executive (HSE Construction)	0300 003 1647
Local Authority – The Highland Council	[TBC]
Major Spill Emergency Response – [e.g. Company Name]	[TBC]
Fire	999 / 112
Police	999 / 112

4.4 Incident Response

- 4.4.1 All pollution incidents should be managed through the **STOP – CONTAIN – NOTIFY** concept.
- 4.4.2 As soon as incident is identified, the first action should be **STOP** and prevent further discharge to drainage/river/ground.
- 4.4.3 **Contain** may constitute control of discharge in the event of a spill, or cessation of works if it is works that are resulting in the incident, e.g. halting excavations until silt runoff is contained. It is recognised that due to personal health and safety risks it may not always be safe to stop the source of the spill, for instance if a significant volume of an unidentified substance has been released.
- 4.4.4 **NOTIFICATION** should take place as soon as practicable and frequently can take place while further release is being stopped or while a spill is being contained. The emergency contact numbers outlined in **Table 4.2** should be used.
- 4.4.5 Standard incident response procedures, intended to provide guidance for the contaminant and limitation of adverse effects is stated below.

Oil, Fuel or Chemical Spill to Ground

- 4.4.6 Wearing protective clothing, prevent further release at source (e.g. switch off tap/valve, correct leaking drum and make the area safe).
- 4.4.7 If the spill is migrating, creating a temporary bund to prevent further spread by using spill kit materials/sandbags.
- 4.4.8 If drains or field ditches are located nearby, install drain seals/deploy additional spill kit materials to prevent the spill discharging to the drain or ditch.
- 4.4.9 Apply absorbent granules or pads (available from spill kit) to the affected area.
- 4.4.10 The Contractor will notify SEPA regarding the nature and scale of incident. The following information should be included in the notification:
 - time of discharge;
 - type/quantity of material discharged;
 - location of discharge; and
 - Site contact details.
- 4.4.11 The Contractor will notify the Applicant of the incident and communicate the information provided to SEPA.
- 4.4.12 The Applicant will notify the Local Authority regarding the nature and scale of the incident.
- 4.4.13 Containment measures should remain in place until the nature and extent of the contamination can be assessed, and a remediation strategy must be prepared.
- 4.4.14 All impacted materials shall be disposed of in accordance with relevant legislative and regulatory requirements and the Duty of Care requirements.

Oil, Fuel or Chemical to Surface Water Feature

- 4.4.15 Wearing protective clothing, prevent further release at source (e.g. switch off tap/valve, correct leaking drum and make the area safe).
- 4.4.16 If the source is not readily identifiable, contain first (see below) then identify and prevent further release at source.
- 4.4.17 Immediately deploy appropriately sized boom from nearest spill kit across affected surface water feature. Use stakes to attach it to the sides of the surface water feature. Tie booms together to increase length if required.
- 4.4.18 Supplement with additional booms across the surface water feature, as required, to contain any migration of the spill not halted by the first installation.
- 4.4.19 The Contractor shall notify SEPA regarding the nature and scale of incident. The following information should be included in the notification:
 - time of discharge;
 - type/quantity of material discharge to surface water feature;
 - location of discharge; and
 - Site contact details.
- 4.4.20 The Contractor shall notify the Applicant of the incident and communicate the information provided to SEPA.
- 4.4.21 All impacted materials will be disposed of in accordance with relevant legislative and regulatory requirements and relevant Duty of Care requirements.

Oil, Fuel or Chemical Spill to Drainage System

- 4.4.22 Wearing protective clothing, prevent further release at source (e.g. switch off tap/valve, correct leaking drum and make the area safe).
- 4.4.23 If source is not readily identifiable, contain the visible pollutant first, then identify and prevent further release at source.
- 4.4.24 Immediately deploy appropriate drain cover(s) to affected gullies.
- 4.4.25 Supplement with booms around the gully to contain any migration of spill.
- 4.4.26 The Contractor shall notify SEPA and the relevant water company regarding the nature and scale of incident. The following information should be included in the notification:
 - time of discharge;
 - type/quantity of material discharged to the drain;
 - location of discharge, specifically which drain; and
 - Site contact details.
- 4.4.27 The Contractor shall notify the Applicant of the incident and communicate the information provided to SEPA.
- 4.4.28 All impacted materials shall be disposed of in accordance with relevant legislative and regulatory requirements and relevant Duty of Care requirements.

Discovery of Unexpected Contamination

- 4.4.29 On the discovery of unexpected contamination, the Contractor will immediately halt works in the area.
- 4.4.30 If impacted materials have already been removed, they shall be returned to the excavation or placed on to a membrane, (e.g. terram, to prevent migration of the contaminant to another area).
- 4.4.31 Contractor to report the situation to the Applicant.
- 4.4.32 Arrangements will be made between the Contractors and the Applicant for samples of the contamination to be collected and tested on fast turnaround.
- 4.4.33 Contractor to only continue with works in the area once the test results have confirmed the contaminant and a safe means of working has been established.
- 4.4.34 The Contractor shall be free to continue works in areas unaffected by the contamination, but the Contractor will not speculatively continue to excavate material to find the extent of the contamination without supervision from a geo-environmental engineer.
- 4.4.35 All impacted materials will be disposed of in accordance with relevant legislative and regulatory requirements and relevant Duty of Care requirements.

Explosion/Fire Procedure

- 4.4.36 Explosion/fire incidents should also be dealt with through health and safety procedures. In the event that a fire is detected, or an explosion occurs:
 - notify the emergency services and evacuate the area.
 - attempt to tackle the fire with Site equipment only which it is safe to do so.
 - ensure that pollution of nearby water bodies including surface water drainage from fire control water or other substances is minimised. Where possible and safe to do so, any Site drainage systems should be protected through the deployment of drain seals/ spill kit materials to ensure any firefighting waters are captured and can be disposed of appropriately.
 - at a time when it is acceptable to do so, SEPA shall be notified regarding the nature and scale of incident. The following information should be included in the notification:
 - nature of the incident;
 - time and date of the incident;
 - quantity of fire control water discharged to surface water feature/drainage, where relevant;
 - location of discharge; and
 - Site contact details.

Silt

- 4.4.37 In the event of an unexpected discharge of silty water, then:
 - prevent further release at source (e.g. cease dewatering the excavations);
 - contain silt and protect sensitive receptors from further discharge:

- if a drain is located nearby, install drain seals or deploy spill kit materials to prevent discharge;
- if silt flow is in the direction of surface water features deploy hay bales around the surface feature; and
- if silt is being generated by runoff from stockpiles deploy spill kit materials, silt fencing or move soil to form a bund at the base to prevent further silt laden runoff from the stockpile.

4.4.38 If silt is discharged without prior approval SEPA shall be notified. If the silt discharge enters the drainage system, the relevant water company shall also be notified regarding the nature and scale of incident. The following information should be included in all notifications:

- time of discharge;
- type/quantity of material discharged;
- location of discharge, (e.g. which drain or surface water feature); and
- Site contact details.

Complaint over a Nuisance

4.4.39 This procedure should be followed for all nuisance complaints include noise, dust and light:

- immediately stop the activity leading to the complaint; or where not possible to entirely stop the activity reduce it to the lowest possible level (e.g. shut off all non-essential plant);
- remain polite and courteous. If able to resolve the issue through discussion with the complainant, then determine what action is needed and put it into practice;
- record the details of the complainant including their name, contact details and address. Contractors shall report the details of the complaint and the complainant to the Applicant;
- the Contractor and the Applicant will register the complaint on a Complaints Log; and
- the Applicant will act on the complaint and remedial actions shall be put in place within 24 hours.

Contamination of or by Waste Materials

- assess whether the area needs to be evacuated, such as if fumes are being given off;
- assess whether the damage can be undone through segregation;
- complete a risk assessment for the task including consideration of any COSHH risks;
- if it is safe to do so, segregate the waste. If it is not safe to do so, then the full waste quantity is to be consigned as hazardous waste;
- the Contractor is to report the incident to the Applicant; and
- waste is to be collected from Site in accordance with normal practice.

Discovery of Archaeological Artefact or Heritage Feature

- immediately stop works in the area of the artefact or feature;
- ensure the area is isolated from interference by erecting fencing around the discovery. Prevent vehicles from navigating through this area;

- provide a safe means for pedestrians; and if possible, vehicles, to move around the isolated area;
- the Contractor shall report the finding to the Applicant;
- the Applicant is to arrange for the finding to be assessed by a qualified heritage or archaeological specialist. The Contractor is to prevent tampering with the find until it has been assessed; and
- works to proceed in accordance with the recommendations given by the heritage or archaeological specialist.

Ecological Discovery or Damage

- immediately stop works in the area;
- contractor to immediately report the incident to the Applicant;
- applicant to arrange for a qualified ecologist to assess the discovery or damage caused; and
- works to proceed in accordance with the advice received from the ecologist.

Vandalism/Theft Procedure

4.4.40 Acts of theft and vandalism present the risk that damage may be caused to equipment containing hazardous substances that could cause pollution, or damage may be caused to measures which have been installed to prevent the release of pollution. On identifying an act of vandalism or theft:

- the Contractor shall notify the Police of the incident;
- inspect all fuel storage tanks/drums and equipment to ensure there has been no release of the fuel or other hazardous substances, (e.g. hydraulic fluid);
- if a spill is identified follow the procedures for oil, fuel or chemical spills in Section 4 above;
- inspect pollution protection measures (e.g. drainage or silt protection) to ensure it has not been interfered with. Where it is possible, correct any issues identified without causing further release; and
- inspect site boundaries to identify the access point if not immediately clear and secure the Site.

5 GENERAL ENVIRONMENTAL REQUIREMENTS

5.1 Roles, Responsibility and Authority

- 5.1.1 The Applicant shall have responsibility for the construction work. The Applicant may employ a Principal Contractor, and sub-contractors either directly or indirectly as required, to carry out the works onsite. The roles and responsibilities of the main parties on the Proposed Development are summarised below.

5.2 Project Roles

- 5.2.1 The Applicant's team and all appointed Contractors will be responsible for ensuring that the potential risks to the environment are adequately avoided or controlled by the application of measures as documented within the Site CEMP, which shall be compiled throughout construction. The main organisations and persons involved in the construction stage works are set out in **Table 5.1**.

Principal Contractor

- 5.2.2 The Principal Contractor shall make available sufficient time and resources for the effective management of environmental risks that could arise during construction work. This includes appointing adequately qualified personnel with knowledge and capability in the environmental management of construction site works. Persons have responsibility for environmental site management, and in particular any persons required to undertake and oversee response to any incidents with potential environmental consequences, shall be empowered to make decisions and take appropriate action necessary to avoid or mitigate adverse environmental effects, even when this may lead to delay and/or additional cost to the Principal Contractor.

Project Manager

- 5.2.3 The Applicant shall take overall responsibility for compliance with all environmental issues on the Proposed Development and will nominate an experienced Project Manager for the Proposed Development whose responsibilities will include overall environmental management of the Proposed Development and any landowners. The Project Manager will be responsible for ensuring that all measures contained in the Site CEMP, are appropriately implemented and that all staff and contractors adhere to the practices set out within.

Site Manager

- 5.2.4 The Principal Contractor will be responsible for the construction of the laydown areas, tracks, turbine bases and substation. The Principal Contractor will formally appoint a Site Manager prior to construction. The Site Manager will be responsible for the day-to-day management of the Proposed Development, including environmental responsibilities, and will report to the

Project Manager. The Site Manager will understand the requirements of the Construction Management System (CMS) and ensure that all staff and contractors are aware of its contents.

Environmental Clerk of Works

- 5.2.5 A suitably qualified EnvCoW will be employed to monitor and report on the Principal Contractor compliance to the environmental mitigation measures discussed in the Site CEMP.
- 5.2.6 The EnvCoW will be named and approved in advance by third parties (e.g. the Local Authority) in accordance with any applicable conditions of consent. The EnvCoW will adhere to the terms of appointment included in any conditions of consent, should the Proposed Development be approved.
- 5.2.7 The EnvCoW will liaise and support the Principal Contractor's Environmental Representative as and when required to deliver the requirements of the CMS and Site CEMP.

Table 5.1: Project Roles and Environmental Responsibilities

RACIM DETAILS – R - Responsible: The individual(s) who perform an activity responsible for action/implementation- although usually only one, Rs can be shared A - Accountable: the individual who is ultimately accountable including yes/no decision and power of veto – only one (A) can be assigned C - Consulted: the individual (s) to be consulted prior to a final decision being made or action taken – two way communication I – Informed: the individual (s) who need to be informed after a decision is made or action is taken – one-way communication M – monitor the delivery of the proposed development on behalf of third parties and report on compliance	Key Control Activity	EnvCoW	PMO	Applicant	Project Manager	Site Manager / Sub-contractor or Manager	Snr Foreman	SHE Manager	All Site Staff/ Contractors
	Process Task								
	Developing and maintaining the Site CEMP.	M	C	C	A	C	I	R	I
	Monitor environmental aspects through review of construction method statement, identify and control issues.	M	C			A	C	R	I
	Monitoring construction works to ensure any necessary environmental issues and control measures are in place; ensuring they are effectively communicated and appropriate and implemented on Site.	M	M			A	R	C	I
	Ensuring the work is performed by training and qualified staff; and providing training where necessary.	M	M		A	R	C	I	I
	Ensuring that adequate resources are allocated for environmental management.	M	C	I	A	R	C	C	I
	Ensuring that all relevant environmental documentation and information (including permissions, consents, permits and assessments) is communicated.	M	M	I	A	C	I	R	I
	Ensuring that environmental incidents and complaints are investigated, recorded and reported following the correct procedures and taking preventative action.	M	M	C	C	A	C	R	I
	Regular Site inspections and maintaining a record of environmental performance; and reporting performance and monitoring environmental performance.	M	M	I	I	A	C	R	I
	Following good practice and minimising impact of activities on the environment.	M	I	C	C	A	R	C	I
	Understanding project environmental obligations and mitigation measures.	M	M	C	A	R	C	R	I
	Liaison with local authority, other statutory bodies, members of the public, press and the media.	M	M	R	C	A	C	R	I
	Supporting all Site staff with environmental management including reviewing and commenting on method statements and risk assessments.	M	I		R	A	C	R	I
	Ensuring that the environmental policy of the Applicant is delivered.	M	I		R	A	I	C	I
	Providing information on waste management/reduction procedures to relevant staff.	M	I			A	C	R	I
	Providing toolbox talks regularly to Site staff. The topic will be dependent on the work being carried out, the local environment and the time of year.	M	C			C	I	R	I

5.3 Competence, Training and Awareness

- 5.3.1 The Principal Contractor shall ensure that appropriate awareness and training is delivered to all Site operatives and only appropriately qualified sub-contractors are appointed.
- 5.3.2 Every member of the workforce shall be required to participate in a Site induction prior to starting to work onsite. The level of induction training will depend upon the position and duties the person is to perform. The Site induction will include:
- a brief overview of the works to be undertaken and any potential environmental aspects associated with the construction activities;
 - a summary of the sensitive environmental receptors near the Site;
 - an overview of the applicable environmental mitigation and pollution control measures; and
 - an overview of the health and safety management measures in particular emergency response procedures required at the Site.
- 5.3.3 The Applicant will require its Contractors to provide continued training and awareness of the workforce. This can be delivered in the form of Toolbox Talks tailored to the specific environmental mitigation measures required dependent on the work activities being undertaken and to raise awareness on environmental best practice.
- 5.3.4 Records of all inductions and Toolbox Talk deliveries shall be maintained at the Site office. Copies shall be made available to the Applicant on request.

Internal Communication

- 5.3.5 The Principal Contractor's Site Manager, SHE Manager, and other relevant team members shall meet on a regular basis to review the status of environmental aspects including but not limited to:
- works activities underway and planned;
 - mitigation measures required to be implemented;
 - results of weekly inspections and any audit results/feedback;
 - any corrective and preventative actions required to be implemented;
 - identification of areas for continual improvement;
 - status of staff competence and training needs; and
 - status of CEMP and of any required consent and approvals and the need for review and updating.
- 5.3.6 The Applicant shall be informed of the outcome of all such meetings.
- 5.3.7 Additional and ongoing communication of environmental performance and requirements is to be determined by the SHE Manager and provided as appropriate.
- 5.3.8 Site notice boards will display the Environmental Policy of the Applicant, the emergency contacts list, any relevant statutory and non-statutory advice and guidance; and any other relevant information. These environmental noticed boards will be situated in prominent positions including the main reception area of the Site office.

Toolbox Talks

- 5.3.9 Toolbox talks will regularly be delivered to Site staff by the SHE Manager. The topic will be dependent on the work being carried out, the local environment and the time of year.
- 5.3.10 A record of Toolbox Talks will be kept on Site, starting date, description of non-conformance, potential implications, proposed corrective actions, individual responsible and target data. Toolbox Talks shall include, but will not be limited to, instances where:
- There is a change to existing legislation, which requires an operation change;
 - Site inspections or audits have identified corrective actions which require communicating; and
 - There are significant changes in environmental conditions (i.e. heavy rainfall).
- 5.3.11 The frequency and topics of the Toolbox Talks shall depend upon the phase of construction and will be provided as often as necessary to address site-specific environmental requirements.

External Communication

- 5.3.12 External communication protocols will be established between the Applicant and the Principal Contractor, the details of which will form part of the Site CEMP.
- 5.3.13 It is anticipated that the details will include:
- advanced notification of the works to those most affected, including the delivery of abnormal loads in line with the agreed Construction Traffic Management Plan (CTMP) and site works outside of normal hours;
 - how communications received by the Principal Contractor that are relevant to these works, including enquiries and complaints, shall be recorded and passed to the Applicant's Project Team;
 - how complaints will be reported and addressed; and
 - information in the induction process on how construction site operatives should handle approaches by members of the public.

5.4 Documentation

- 5.4.1 The Site Manager and/or SHE Manager shall be responsible for documenting and retaining safe all suitable records relating to environmental issues at the Site and/or arising from site operations. Documents shall be stored in a suitable manner and backups created to safeguard the records. The Site CEMP shall be a controlled document and authorised latest version shall be signed and dated by the responsible person[s]. Other site data records and environmental management documentation would include, but not necessarily be limited to the following:
- copies of relevant consents, permissions, or other approvals/ authorisations;
 - environmental data records including waste transfer notes/ records of waste collection and treatment/disposal;
 - records of any environmental incidents including actions taken and resolution;
 - records of complaints including actions taken and resolution;

- records of all plant / equipment entering/leaving Site together with any relevant compliance documentation (for instance in respect of noise or air pollutant emissions class);
- copies of any enforcement notices or instructions issued by the Local Authority or any statutory regulatory body;
- record of any prosecutions pending or resolved, and any penalties enforced;
- records of environmental monitoring;
- records of regular site inspections;
- records of audits and minutes of environmental team briefings; and
- records of staff training including site inductions and Toolbox Talks.

5.5 Monitoring, Inspections and Audits

- 5.5.1 The Principal Contractor shall be responsible for managing environmental performance during all site works. This will be supported with a programme of monitoring, inspections and audits.

Inspections and Audits

- 5.5.2 Inspections and audits will be carried out on a frequent basis to determine whether activities comply with the planned arrangements.

Monitoring

- 5.5.3 Monitoring will be undertaken by the Principal Contractor and the ECoW as and when necessary to ensure compliance with all environmental commitments.

5.6 Review and Updates to the CEMP

- 5.6.1 The Site CEMP will be reviewed on a periodic basis, or following any significant change to the work activities, Applicant requirements, or legislation and updated as required. Therefore, the Site CEMP should be treated as a live document and will be continuously updated as required.

6 REFERENCES

British Standards Institution (2014), 'Code of practice for noise and vibration control on construction and open sites - Part 1: Noise'.

CL: AIRE (2011), 'Definition of Waste: Development Industry Code of Practice'.

Health and Safety Executive (2015), 'Construction (Design and Management) Regulations 2015'.

Health and Safety Executive (1974), 'Health and Safety at Work etc Act 1974'.

Institute of Lighting Professionals (2021), 'Guidance Note 1 for the reduction of obtrusive light 2021'.

Scottish Government (2003), 'Land Reform (Scotland) Act 2003'.

Scottish Government (1996), 'Special Waste Regulations 1996'.

UK Government (1999), 'The Management of Health and Safety at Work Regulations 1999'.

UK Government (1998), 'Provision and Use of Work Equipment Regulations 1998'.

UK Government (1992), 'The Supply of Machinery (Safety) Regulations 1992'.