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APPENDIX 4-6

DECOMMISSIONING PLAN



Decommissioning Plan

Clonberne Wind Farm, Co. Galway





DOCUMENT DETAILS



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Project Title:

Project Number:

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Prepared By:

Clonberne Wind Farm, Co. Galway

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Decommissioning Plan

Clonberne Windfarm Ltd

Decommissioning Plan F - 2024.06.20 - 180740

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1.

INTRODUCTION

This Decommissioning Plan (DP) has been prepared by MKO on behalf of Clonberne Wind Farm Ltd., to accompany an application for planning permission applications to An Bord Pleanála for the Proposed Project. The Proposed Project comprises the Proposed Wind Farm (subject of a Section 37E planning application) and the Proposed Grid Connection (subject to a Section 182A planning application).

This document is being prepared alongside an Environmental Impact Assessment Report (EIAR) and the Natura Impact Statement ('NIS') which accompany this planning application for the Proposed Wind Farm to An Bord Pleanála.

For the purposes of the EIAR:

- The 'Proposed Wind Farm' refers to the 11 no. turbines and supporting infrastructure which is the subject of this Section 37E application.
- The 'Proposed Grid Connection' refers to the 220kV substation and supporting infrastructure which will be the subject of a separate Section 182A application.
- The 'Proposed Project' comprises the Proposed Wind Farm and the Proposed Grid Connection, all of which are located within the EIAR Site Boundary (the 'Site') and assessed together within this EIAR.

Please see section 1.1.1 of this EIAR for further details. A detailed description of the Proposed Wind Farm and the Proposed Grid Connection are provided in Chapter 4 of this EIAR.

Decommissioning of the Proposed Project will be scheduled to take place after the 35- year lifespan of the Proposed Project.

As noted in the Scottish Natural Heritage report (SNH) *Research and Guidance on Restoration and Decommissioning of Onshore Wind Farms* (SNH, 2013) reinstatement proposals for a wind farm are made approximately 30 years in advance, so within the lifespan of the wind farm, technological advances and preferred approaches to reinstatement are likely to change. According to the SNH guidance, it is therefore:

"best practice not to limit options too far in advance of actual decommissioning but to maintain informed flexibility until close to the end-of-life of the wind farm".

In this regard, this DP will be reviewed and updated prior to commencement of decommissioning works to take account of the relevant conditions of the planning permission and current health and safety standards at the time of decommissioning. The DP will be agreed in writing with the Planning Authority prior to the commencement of the decommissioning phase.

This report provides the environmental management framework to be adhered to during the decommissioning phase of the Proposed Project and it incorporates the mitigating principles to ensure that the work is carried out in a way that minimises the potential for any environmental impacts to occur.

Scope of the Decommissioning Plan

This report is presented as a guidance document for the decommissioning of the Proposed Project. The Decommissioning Plan clearly outlines the mitigation measures and monitoring proposals that are required to be adhered to in order to complete the works in an appropriate manner.

The report is divided into eight sections, as outlined below:



Section 1 provides a brief introduction as to the scope of the report.

Section 2 outlines the Site and Project details, detailing the targets and objectives of this plan along with providing an overview of works methodologies that will be adopted throughout decommissioning.

Section 3 sets out details of the environmental controls to be implemented on site including the mechanisms for implementation. A waste management plan is also included in this section.

Section 4 outlines the Emergency Response Procedure to be adopted in the event of an emergency in terms of site health and safety and environmental protection.

Section 5 sets out a programme for the timing of the works.

Section 6 consists of a summary table of all mitigation measures to be adhered to during the decommissioning-phase.

Section 7 consists of a summary table of all monitoring requirements for the operational and decommissioning-phases.

Section 8 outlines the proposals for reviewing compliance with the provisions of this report.

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2. SITE AND PROJECT DETAILS

2.1 Site Location and Description

The core of the Proposed Project site is located approximately 1.3 kilometres (km) west of the village of Clonbern, Co. Galway.

The Proposed Project will consist of 11 no. wind turbines with a maximum overall ground to blade tip height of 180 metres and maximum export capacity (MEC) in excess of 79.2MW. The approximate location of the centre of the site is X554464, Y756549 in Irish Transverse Mercator (ITM). It is proposed to access the Proposed Project site via a new access roadway off the R328 Regional Road to the north of the Proposed Project site. The Proposed Project site is served by a number of existing agricultural roads and tracks.

The Proposed Grid Connection for the Proposed Project comprises connecting the Proposed Wind Farm to the National Grid. Underground electrical cables will transmit the power from each wind turbine to the proposed on-site substation which will be configured for a 220kV connection. The Proposed Grid Connection will connect the Proposed Project into the National Grid via connecting into the existing 220kV Cashla – Flagford Overhead Line at Laughil, measuring approximately 2.8km in length. The underground cabling route will be located along the public road corridor and new access tracks. Once operational, the substation will be accessed via the new operational access track and public road to the east.

2.2 **Description of the Proposed Wind Farm**

The proposed development comprises:

- *i.* 11 no. wind turbines with an overall turbine tip height of 180 metres; a rotor blade diameter of 162 metres; and hub height of 99 metres, and associated foundations, hard-standing and assembly areas;
- ii. Underground electrical cabling (33kV) and communications cabling;
- iii. Provision for the undergrounding of a section of proposed 38kV overhead electrical cabling and the provision of 2 no. 38kV Line to Cable Interface End Masts to facilitate the undergrounding of the proposed 38kV cabling.
- *iv.* Upgrade of existing tracks/roads and provision of new site access roads, junctions and hardstand areas;
- v. Construction of 1 no. new gated site entrance off the R328 Regional Road to facilitate the delivery of the construction materials and turbine components to site;
- vi. Construction of 2 no. temporary construction compounds and associated ancillary infrastructure including temporary site offices, staff facilities and car-parking areas for staff and visitors, all to be removed at end of construction phase;
- vii. Development of 1 no. borrow pit;
- viii. Provision of 3 no. passing bays adjacent to the L22321 Local Road and an existing access track to facilitate the transport of stone material to the site;
- *ix.* Peat and spoil management including the provision of 4 no. peat repository areas and 1 no. spoil repository area;
- x. Junction accommodation works including temporary accommodation areas adjacent to the N83 National Secondary Road, R328 Regional Road and L6466 Local Road to facilitate the delivery of turbine components to site;
- xi. Site Drainage;
- xii. Peatland Enhancement Area;
- *xiii. Biodiversity Enhancement Measures (including the planting of woodland, linear habitat, grassland management and invasive species removal);*



xiv. Tree felling and hedgerow removal to facilitate construction and operation of the proposed development;
xv. Operational stage site signage; and
xvi. All ancillary works and apparatus.

A thirty five-year operational life from the date of full commissioning of the entire wind farm is being sought and the subsequent decommissioning.

The application is seeking a ten-year planning permission. A concurrent planning application in relation to a proposed substation which will comprise of a 220kV Gas Insulated Switchgear (GIS) building, an Independent Power Producer (IPP) compound, a Battery Energy Storage System (BESS) compound, underground grid connection and associated cabling to connect the proposed Clonberne Wind Farm to the national grid via the existing Flagford to Cashla 220kV overhead line in the townland of Laughil is also being lodged to An Bord Pleanála.

Description of the Proposed Grid Connection

The proposed development comprises:

- i. Construction of a permanent substation which will comprise of a 220kV Gas Insulated Switchgear (GIS) building, an Independent Power Producer (IPP) compound, a Battery Energy Storage System (BESS) compound, including 4 no. 18-metre high Lightning Monopoles, welfare facilities, car parking, wastewater holding tank, 36-metre-high Telecommunications Mast, 2.6-metre high palisade fencing, external lighting, underground cabling, and all associated infrastructure and apparatus;
- *ii.* All works associated with the connection of the proposed Clonberne Wind Farm to the national electricity grid, including the provision of underground electrical cabling (220kV) to the existing Flagford to Cashla 220kV overhead line, in the townland of Laughil;
- iii. The provision of 2 no. loop-in towers, 2 no. gantries within 2 no. cable compounds to facilitate the connection of the proposed substation to the existing Flagford to Cashla 220kV overhead line;
- *iv.* Construction of 2 no. gated permanent site entrances off the L6501 Local Road to facilitate access to the proposed development and the proposed Clonberne Wind Farm;
- v. Provision of 4 no. joint bays, communication chambers and earth sheath links along the underground electrical cabling route and temporary accommodation areas to facilitate underground cabling works;
- *vi.* Provision of a cable access track to facilitate the installation and maintenance of cabling and provide access to the proposed substation;
- *vii.* Reinstatement of the road or track surface above the proposed cabling trench along existing roads and tracks;
- viii. Operational access road to the proposed development and the proposed Clonberne Wind Farm;
- ix. Site Drainage;
- *x.* Tree felling and hedgerow removal to facilitate construction and operation of the proposed development;
- xi. Operational stage site signage; and
- xii. All ancillary works and apparatus.

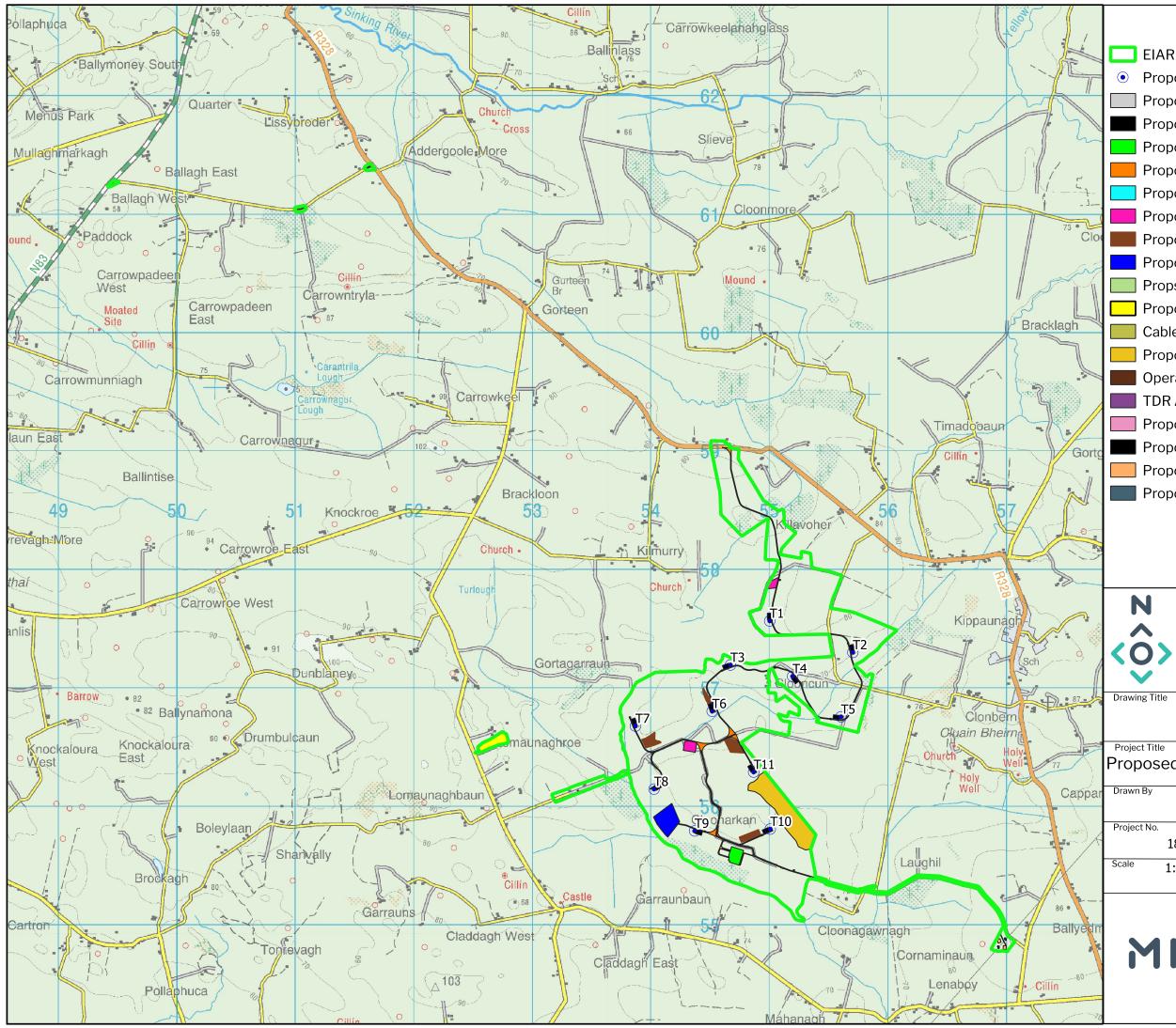
The application is seeking a ten-year planning permission. The development subject of this application will facilitate the connection of the proposed 11 no. wind turbine Clonberne Wind Farm to the national



electricity grid. A concurrent application in relation to proposed Clonberne Wind Farm is also being lodged to An Bord Pleanála.

2.4 **Proposed Project**

All elements of the Proposed Project i.e., the Proposed Wind Farm and the Proposed Grid Connection, have been assessed in this EIAR and are described in detail in Chapter 4 of the EIAR. The site layout showing existing individual infrastructure of the Proposed Project is shown in Figure 2-1 and Figure 2-2.



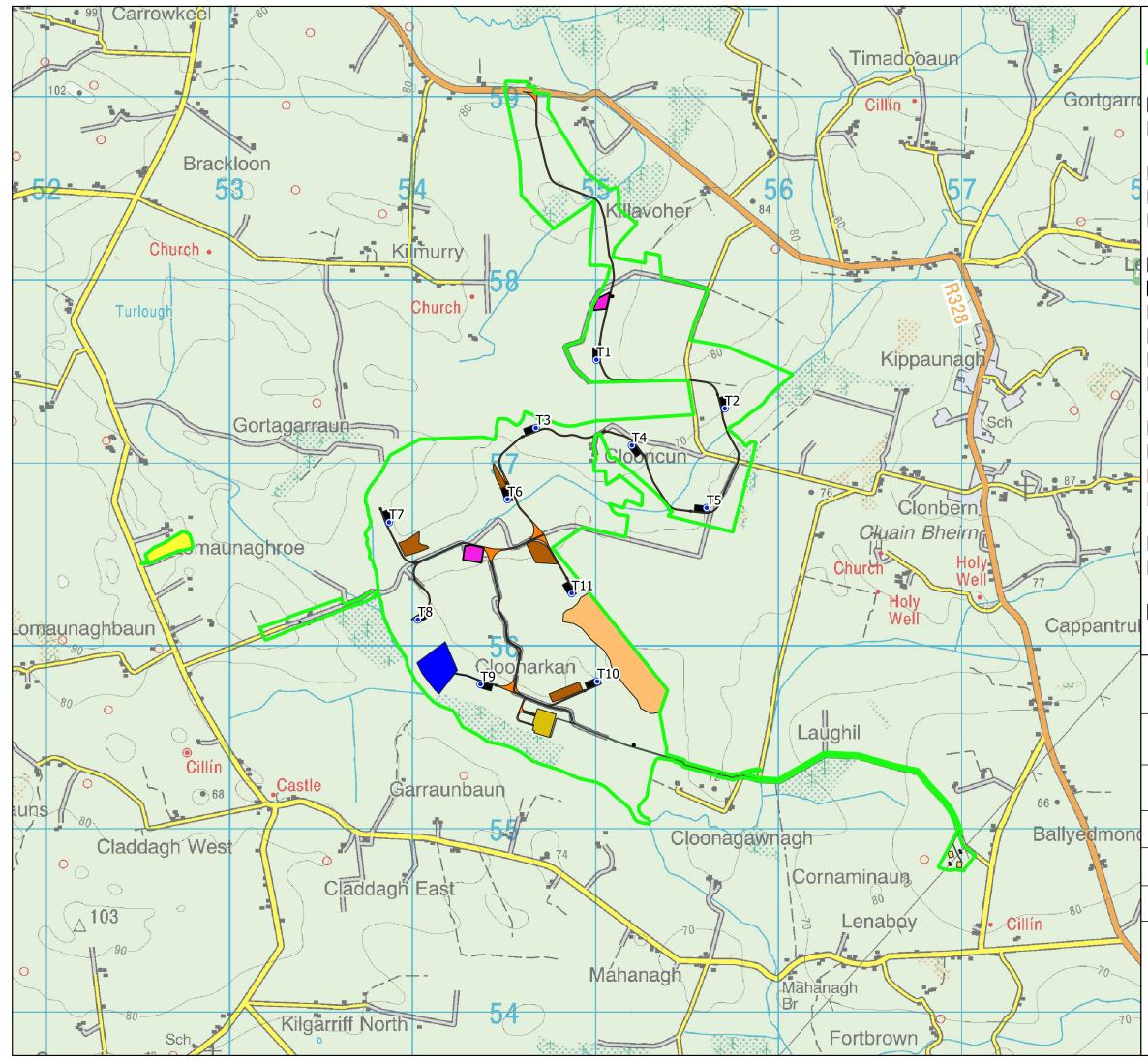
Map Legend

EIAR Site Boundary
Proposed Turbine Layout
Proposed Turbine Foundations
Proposed Crane Platform Hardstanding
Proposed Substation
Proposed New Roads
Proposed Existing Roads to be Upgraded
Proposed Construction Compound
Proposed Peat Repository Areas
Proposed Spoil Storage Area
Propsoed Cable Route and Cable Access Tracks
Proposed Borrow Pit
Cable in the Public Road
Proposed Peatland Enhancement Area
Operational Access Road
TDR Accommodation Areas
Proposed Passing Bays
Proposed Grid Connection Masts
Proposed Grid Connection Compounds
Proposed 38kV End Masts

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Proposed Site Layout

Project Title				
Proposed Clonberne Wind Farm Development				
Drawn By	Checked By			
EC	JF/OC			
Project No.	Drawing No.			
-				
180740	Fig. 2-1			
Scale 1:30,000	Date			
	2024-06-26			
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Map Legend

EIAR Site Boundary			
Proposed Turbine Layout			
Proposed Turbine Foundations			
Proposed Crane Platform			
Hardstanding			
Proposed Substa	ation		
Proposed New R	oads		
Proposed Existin	g Roads to be		
Upgraded			
Proposed Constr	ruction Compound		
Proposed Borrov	v Pit		
Proposed Passin	g Bays		
Proposed Peat R	epository Areas		
Proposed Spoil S	torage Area		
	nd Enhancement		
Area			
Proposed TDR A	ccommodation Areas		
Proposed Cable	in the Public Road		
•	tional Access Road		
Proposed Cable			
Access Track			
Proposed Grid Connection Masts			
Proposed Grid Connection			
Compounds			
Proposed 38kV I	_ine to Cable		
Interface End Ma	asts		
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Proposed Pr	oject Layout		
Project Title Clonbe	rne WF		
Drawn By	Checked By		
JF OC			
Project No. 180740	Drawing No. Fig. 2-2		
Scale 1:20,000	Date 2024-06-26		
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2.5 **Targets and Objectives**

The decommissioning phase works will be completed to the approved standards at the time of decommissioning, which include specified materials, standards, specifications and codes of practice. This Decommissioning Plan has considered environmental issues and this is enhanced by the works proposals as part of decommissioning.

The key site targets are as follows;

- Ensure decommissioning works and activities are completed in accordance with mitigation and best practice approach presented in the accompanying Environmental Impact Assessment Report (EIAR) and associated planning documentation;
- Ensure decommissioning works and activities have minimal impact/disturbance to local landowners and the local community;
- Ensure decommissioning works and activities have minimal impact on the natural environment;
- Adopt a sustainable approach to decommissioning; and,
- > Provide adequate environmental training and awareness for all project personnel.

The key site objectives are as follows;

- > Using recycled materials if possible, e.g. soil and overburden material for backfilling and reinstatement;
- Ensure sustainable sources for materials supply where possible;
- Avoidance of any pollution incident or near miss as a result of working around or close to existing watercourses and having emergency measures in place;
- Avoidance of vandalism;
- > Keeping all watercourses free from obstruction and debris;
- Correct implementation of the sustainable drainage system (SuDS) drainage design principles;
- Keep impact of decommissioning works to a minimum on the local environment, watercourses, and wildlife;
- Correct fuel storage and refuelling procedures to be followed;
- Good waste management and house-keeping to be implemented;
- Air and noise pollution prevention to be implemented;
- Monitoring of the works and any adverse effects that it may have on the environment. Decommissioning methods will be altered where it is found there is the potential to have an adverse effect on the environment;

2.6 **Decommissioning Methodologies Overview**

2.6.1 Introduction

An experienced main contractor will be appointed to undertake the of the decommissioning of the Proposed Project. The main contractors will comply with the Decommissioning Plan (DP) prepared for the decommissioning phase. An overview of the anticipated decommissioning methodologies is provided below.



2.6.2 **Decommissioning Methodology**

The proposed anticipated decommissioning methodology is summarised under the following main headings:

- General Principles
- > Wind turbines
- Turbine Foundations;
- > Transformers and Electrical Cabling;
- > 220kV Gas Insulated Switchgear Building

2.6.2.1 General Principles

Unlike most other forms of development, decommissioning of wind farms is typically a straightforward process. Infrastructure can readily be dismantled on site and removed. Following the restoration of the site, there would be no significant visible evidence of prior existence, and no legacy of pollution.

The decommissioning of the Proposed Project is not expected to pose significant risks to the environment; nevertheless, effects need to be addressed in order to ensure that no, or minimal, impact on the environment occurs.

All measures described within the Environmental Impact Assessment Report (EIAR) with regards to mitigation and protection for ecological receptors, waste management, surface water management and prevention of pollution will apply to decommissioning works; subject to review of relevant regulations and best practice at that time.

In general, all structures above ground level shall be dismantled and removed from the site for reuse or recycling where possible; however, access tracks may be retained depending on the proposed future use of the site. It is likely that, in order to minimise environmental disturbance, the majority of subsurface elements of the wind farm shall remain in situ. For example, electrical cabling shall be removed and recycled but the ducting within which it is located would remain to avoid unnecessary excavations and ground disturbance.

The overriding principle of the decommissioning process is to minimise the extent of any ground disturbance on site. While groundworks are an inevitable consequence of the decommissioning process, they shall only be undertaken where absolutely necessary.

The following sections detail the methodologies likely to be implemented during decommissioning; however, as described above, a site-specific approach will be agreed with the Planning Authority.

2.6.2.2 Wind Turbines

Prior to any decommissioning works being undertaken, a comprehensive health and safety assessment will be carried out. In advance of works to the turbines, they will be disconnected from the on-site electrical network by an appointed electrical contractor. Turbine dismantling will be undertaken in reverse order to the methodology employed during their construction. Cranes will be brought to site and will utilise the existing crane hardstandings.

Wind turbines are comprised of the tower, nacelle and blades which are modular items that can be disassembled. If the turbines are to be sold on or reused elsewhere they shall be removed from site by specialist vehicles similar to those used during their transportation to site.

If wind turbine components are not to be reused then they shall be recycled where possible.



The tower sections and nacelle are inert steel/ferrous metal structures which are readily recyclable. These will be sent to a licensed waste facility for recycling.

The turbine blades are constructed of fibreglass which is not readily re-used or recyclable. Due to the large number of turbine blades currently being decommissioned globally, extensive research is being undertaken to find an alternative use for the fibreglass. There are a number of emerging innovations for fibreglass recycling including the re-purposing of fibreglass for other civil engineering projects (e.g. as a component in concrete production, roofs for social housing and incorporation to the construction of electrical powerline masts/structures). While extensive research is being undertaken to find a means of recycling decommissioned wind turbine blades, this EIAR assumes that, at the proposed date of decommissioning, all blades will be removed to an approved waste management facility.

Having been dismantled, the turbine blades will be processed on the crane hardstanding to accommodate their removal by standard HGVs. This process is likely to avoid the requirement for abnormal-sized loads, or oversized vehicles, to utilise the local road network.

2.6.2.3 **Turbine Foundations and Hardstands**

On the dismantling of turbines, it is not intended to remove the concrete foundation from the ground. It is considered that its removal will be the least preferred options in terms of having potential effects on the environment. Therefore, the turbine foundations will be backfilled and covered with soil material. If there is usable soil or overburden material on the site, this material will be used. Alternatively, where material is not readily available on site, soil will be sourced locally and imported to site on heavy good vehicles (HGVs). The imported soil will be spread and graded over the foundation using a tracked excavator and revegetation enhanced by spreading of an appropriate seed mix to assist in revegetation and accelerate the resumption of the natural drainage management that will have existed prior to any construction. Hardstands shall be covered with soil material and regraded to match existing ground contours and profile. The area shall then be seeded out or allowed to vegetate naturally.

2.6.2.4 Transformers & Electrical Cabling

The decommissioning of transformers will depend entirely on any future use of the wind turbine. If the turbine is to be used elsewhere, the transformer will be removed from site for refurbishment and future use. If the turbine is to be recycled or sent for disposal, the transformer will be removed to an approved waste handling/recycling facility and stripped of any useable parts with the remainder being recycled.

The cables at the Proposed Project contain a core of copper which can be recycled. Cables shall be pulled from the existing ducting and removed to an approved waste handling facility where the cores shall be recycled and the remaining material shall be disposed of at an approved facility.

2.6.2.5 220kV Gas Insulated Switchgear Building

In the first instance, it should be noted that the 220kV Gas Insulated Switchgear (GIS) Building is under the control of ESB Networks and may be retained following the decommissioning of the Proposed Project. However, for the purposes of this assessment, decommissioning is assumed. The on-site GIS Building will involve the strip-out and removal of steel, conductors, switches, and other materials and equipment that can be reconditioned and reused or recycled. A soft strip of the building shall ensure that all fixtures and fittings are removed prior demolition.

Demolition of the GIS Building shall take place using conventional demolition methods. Foundations and building services shall be grubbed up to a depth of 1m below ground level. The demolition waste shall comprise mainly rubble (blocks, broken concrete, and plaster etc.) and timber. Rubble can be segregated to provide an aggregate material which may be used in the reinstatement of the site while un-suitable material will be removed and disposed of at an approved waste management facility.



Timber and other waste shall be segregated according to material type with a view to recycling where possible or disposal. All demolition materials which cannot be reused on site shall be removed off site to a licensed waste handling facility for recycling or disposal. Excavations shall be backfilled with suitable material, soiled over and seeded out or allowed to vegetate naturally.



3. ENVIRONMENTAL MANAGEMENT

The following sections give an overview of the drainage design, dust and noise control measures, a waste management plan for the site and the implementation of the environmental management procedures for the site.

3.1 Site Drainage

The site drainage features for this Proposed Project site during its construction and operation are outlined in the EIAR which accompany this application. As this Decommissioning Plan is a working document and is presented as an Appendix to the EIAR, the drainage measures are not included in this document. When the final Decommissioning Plan is prepared prior to decommissioning and presented as a standalone document, all drainage management measures, which will include maintenance of the operational drainage measures, will be included in that document, as required. The drainage proposals will be developed further prior to the commencement of decommissioning if deemed necessary. However, it should be noted that by the time decommissioning is undertaken after the planned 35-year lifespan of the Proposed Project, the areas within the Proposed Project site will have revegetated resulting in a resumption of the natural drainage management that will have existed prior to any construction. It is not anticipated that the decommissioning phase will interrupt this restored drainage regime in any way with the works proposed. As a minimum measure, areas where freshly placed soil material as part of turbine foundation reinstatement will be surrounded by silt fencing if deemed necessary until the area has naturally revegetated.

3.2 Refuelling, Fuel and Hazardous Materials Storage and General Pollution Prevention Measures

Wherever possible, vehicles will be refuelled off-site, particularly for regular road-going vehicles. On-site refuelling of machinery will be carried out at designated refuelling areas at various locations throughout the Proposed Project site. Heavy plant and machinery will be refuelled on-site by a fuel truck that will come to the Proposed Project site as required on a scheduled and organised basis. Other refuelling will be carried out using mobile double skinned fuel bowser. The fuel bowser will be parked on a level area on-site when not in use. All refuelling will be carried out outside designated watercourse buffer zones.

Only designated rained competent operatives will be authorised to refuel plant onsite. Mobile measures such as drip trays and fuel absorbent mats will be used during refuelling operations as required. All plant and machinery will be equipped with fuel absorbent material and pads to deal with any event of accidental spillage.

The plant and equipment used during decommissioning will require refuelling during the works. Appropriate management of fuels will be required to ensure that incidents relating to refuelling are avoided. The following mitigation measures, which are the same as those proposed for the construction phase, are proposed to avoid release of hydrocarbons at the site:

- Minimal refuelling or maintenance of construction vehicles or plant will take place on site. Off-site refuelling shall occur at a controlled fuelling station;
- No storage of fuels, oils, cements or chemicals will be permitted within the refined ZoC;
- Refuelling of mobile plant (i.e. diggers, dumpers etc) will only be permitted outside the refined ZoC;
- Refuelling of large immobile plant (i.e. cranes) will only be carried out with a double skinned fuel bowser that will be removed from ZoC immediately after use.



- On site re-fuelling of machinery will be carried out using a mobile double skinned fuel bowser. The fuel bowser, a double-axel custom-built refuelling trailer will be refilled off site and will be towed around the site by a 4x4 jeep to where machinery is located. The 4x4 jeep will also carry fuel absorbent material and pads in the event of any accidental spillages. The fuel bowser will be parked on a level area in the construction compound (outside of Gurteen/Cloonmore GWS refined ZoC) when not in use and only designated trained and competent operatives will be authorised to refuel plant on site. Mobile measures such as drip trays and fuel absorbent mats will be used during all refuelling operations;
- Onsite refuelling will be carried out by trained personnel only;
- A permit to fuel system will be put in place;
- Fuels stored on site will be minimised. Fuel storage areas if required will be bunded appropriately for the fuel storage volume for the time period of the construction and fitted with a storm drainage system and an appropriate oil interceptor (outside of Gurteen/Cloonmore GWS refined ZoC);
- The plant used during construction will be regularly inspected for leaks and fitness for purpose;
- An emergency plan for the decommissioning phase to deal with accidental spillages will be developed (refer to Section 4) Spill kits will be available to deal with and accidental spillage in and outside the refuelling area.
- A programme for the regular inspection of plant and equipment for leaks and fitness for purpose will be developed at the outset of the decommissioning phase.

3.3 **Dust Control**

Dust can be generated from on-site activities during decommissioning such as backfilling of foundations and travelling on site roads during prolonged periods of dry weather. The extent of dust generation will depend on the type of activity undertaken, the location, the nature of the dust, i.e. soil, and the weather. In addition, dust dispersion is influenced by external factors such as wind speed and direction and/or, periods of dry weather. Site traffic movements also have the potential to generate dust as they travel along the haul route.

Proposed measures to control dust include:

- A wheel wash facility will be installed on the Proposed Wind Farm Site and will be used by vehicles before leaving the Site.
- In periods of extended dry weather, dust suppression may be necessary along haul roads, site roads, grid route, road widening sections, substation, and construction compounds and around the borrow pit area to ensure dust does not cause a nuisance. If necessary, such as during periods of dry weather, de-silted water will be taken from stilling ponds in the Site's drainage system and will be pumped into a bowser or water spreader to dampen down haul roads, turbine bases, borrow pit and site compounds to prevent the generation of dust where required. Water bowser movements will be carefully monitored to avoid, insofar as reasonably possible, increased runoff as outlined in the CEMP in Appendix 4-4.
- Areas of excavation will be kept to a minimum and stockpiling of excavated material will be minimised by coordinating excavation, placement of material in peat and spoil repository areas.
- Turbines components, construction materials and grid connection infrastructure will be transported to the Site on specified haul routes only, as agreed with the local authority.
- > The agreed haul route roads adjacent to the site will be regularly inspected for cleanliness and cleaned as deemed necessary by the construction Site Supervisor/Site Manager.



- > The transport of construction materials may have the potential to generate dust in dry weather conditions. Roads will be watered down to suppress dust particles in the air as deemed necessary by the Site Supervisor/Manager.
- The transport of dry excavated material from the on-site borrow pits, which may have potential to generate dust will be minimised. If necessary, such as in periods of dry weather, excavated material will be dampened prior to transport from the borrow pits.

3.4 Noise Control

The operation of plant and machinery, including site vehicles, is a source of potential impact that will require mitigation at all locations within the site. Proposed measures to control noise include:

- Limiting the hours during which site activities likely to create noticeable levels of noise or vibration are permitted;
- Establishing channels of communication between the Applicant or contractor, Local Authorities and residents;
- > Selection of plant with low inherent potential for generation of noise and/or vibration;
- No plant or machinery will be permitted to cause a public nuisance due to noise;
- The best means practicable, including proper maintenance of plant, will be employed to minimise the noise produced by on site operations.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of works;
- Compressors models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers;
- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use; and
- The hours of decommissioning works (and associated traffic movements) will, insofar as possible, be limited to avoid unsociable hours. Activities shall generally be restricted to between 07:00hrs and 19:00hrs Monday to Friday and between 07:00hrs and 13:00hrs on Saturdays, with no activities on Sundays or public holidays unless in the event of an emergency.

3.5 Ground Disturbance, Material Excavation & Reinstatement

During decommissioning, all plant and machinery will keep to existing infrastructure (e.g. tracks and hardstanding) and will not encroach upon adjacent habitats unless this is essential in order to progress the decommissioning works. In the event of any necessary encroachment into adjoining habitats; given the presence of wet heath at the Proposed Project site; appropriate trackway or matting shall be placed to avoid any loss of the adjoining habitat. However, no encroachment into areas of blanket bog will be permitted.

The reinstatement of any areas disturbed during the decommissioning works will be undertaken. The contractor will record excavated volumes and storage areas, and volumes and type of material utilised for reinstatement of relevant areas. This information will be updated for the duration of the decommissioning works.

Reinstatement will be completed using site-won materials wherever possible without compromising or damaging established/existing habitats. Natural vegetation will be preferred; however, native seed mixes may also be selected to complement surrounding species. The seed mix and method of application will be agreed with a suitably qualified ecologist to ensure that the reinstated habitats are compatible with those existing and surrounding the reinstated areas at the time of decommissioning.

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All temporarily stockpiled materials will be stored in designated areas and isolated from any surface drains and a minimum of 50m away from surface water where possible. Aggregate or fine materials storage will be enclosed and screened/sheeted. No storage of materials within areas of blanket bog or wet heath shall be permitted.

Soil and vegetation must be stored separately from subsoil and shall be retained and reinstated on all areas of stripped ground as soon as possible to prevent erosion and leaching/loss of nutrients. Excavated turves; particularly in the case of wet heath, shall be appropriately stored to protect the plant species; shall be reinstated with the vegetated side facing upwards, in order to speed up the regeneration process, minimise the need for re-seeding, and help maintain the original species mix.

3.6 Invasive Species Management

Any soil material that will be imported to site as part of the foundation backfilling will be free of any invasive species (listed under the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011). The site manager will take steps to ensure this sourcing suitably clean material and verify the quality of the material by having it inspected prior to bringing it to site by a suitably qualified ecologist. Prior to decommissioning, a suitably qualified ecologist will complete an invasive species survey.

3.7 Traffic Management

The removal of turbines from site will be undertaken by a specialist haulier. The traffic management arrangements although similar to that implement for turbine delivery as outlined in the EIAR will be agreed in advance of decommission with the competent authority.

3.8 Waste Management

This section of the Decommissioning Plan provides a waste management plan (WMP) which outlines the best practice procedures during the decommissioning of the Proposed Project. The WMP will outline the methods of waste prevention and minimisation by recycling, recovery and reuse at each stage of decommissioning. Disposal of waste will be seen as a last resort.

3.8.1 Legislation

The Waste Management Act 1996 and its subsequent amendments provide for measures to improve performance in relation to waste management, recycling and recovery. The Act also provides a regulatory framework for meeting higher environmental standards set out by other national and EU legislation.

The Act requires that any waste related activity has to have all necessary licenses and authorisations. It will be the duty of the Waste Manager on the site of the Proposed Project to ensure that all contractors hired to remove waste from the site have valid Waste Collection Permits. It will then be necessary to ensure that the waste is delivered to a licensed or permitted waste facility. The hired waste contractors and subsequent receiving facilities must adhere to the conditions set out in their respective permits and authorisations.

The Department of the Environment provides a document entitled, 'Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects' (2006). It is important to emphasise that no demolition will take place at this site, however, this document was referred to throughout the process of completing this WMP.



3.8.2 Waste Management Hierarchy

The waste management hierarchy sets out the most efficient way of managing in the following order:

Prevention and Minimisation:

The primary aim of the WMP will be to prevent and thereby reduce the amount of waste generated at each stage of the project.

Reuse of Waste:

Reusing as much of the waste generated on site as possible will reduce the quantities of waste that will have to be transported off site to recovery facilities or landfill.

Recycling of Waste:

There are a number of established markets available for the beneficial use of Construction and Demolition waste such as using waste concrete as fill for new roads.

At all times during the implementation of the WMP, disposal of waste to landfill will be considered only as a last resort.

3.8.3 Waste Arising from Decommissioning

The relevant components will be removed from site for re-use, recycling or waste disposal. Any structural elements that are not suitable for recycling will be disposed of in an appropriate manner. All lubrication fluids will be drained down and put aside for appropriate collection, storage, transport and disposal. Any materials which cannot be re-used or recycled will be disposed of by an appropriately licenced contractor.

The waste types arising from the decommissioning of the Proposed Project are outlined in Table 3-1 below.

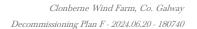
Material Type	Example	EWC Code
Cables	Electrical wiring	17 04 11
Metals	Copper, aluminium, lead and iron	17 04 07
Fibreglass	Turbine blade component	10 11 03
Hydrocarbons	Oils and lubricants drained from the turbines	13 01 01,13 02 04

Table 3-1 Expected waste types arising during the Decommissioning Phase

3.8.3.1 **Reuse**

Many construction materials can be reused a number of times before they have to be disposed of:

- Electrical wiring can be reused on similar wind energy projects
- Elements of the turbine components can be reused but this will be determined by the condition that they are as well as when decommissioning actually takes place.





3.8.3.2 **Recycling**

If a certain type of construction material cannot be reused onsite, then recycling is the most suitable option. The opportunity for recycling during decommissioning will be limited and restricted to components of the wind turbines.

All waste that is produced during the decommissioning phase including dry recyclables will be deposited in the on-site skip initially and sent for subsequent segregation at a remote facility. The anticipated volume of all waste material to be generated at the Proposed Project is low, which provides the justification for adopting this method of waste management.

3.8.3.3 Implementation

3.8.3.3.1 Roles and Responsibilities

Prior to the commencement of the decommissioning, a Construction Waste Manager will be appointed by the Contractor. The Construction Waste Manager will be in charge of the implementation of the objectives of the plan, ensuring that all hired waste contractors have the necessary authorisations and that the waste management hierarchy is adhered to. The person nominated must have sufficient authority so that they can ensure everyone working on the decommissioning adheres to the management plan.

3.8.3.3.2 **Training**

It is important for the Construction Waste Manager to communicate effectively with colleagues in relation to the aims and objectives of the waste management plan. All employees working on site during the decommissioning phase of the project will be trained in materials management and thereby, should be able to:

- Distinguish reusable materials from those suitable for recycling;
- Ensure maximum segregation at source;
- Co-operate with site manager on the best locations for stockpiling reusable materials;
 Separate materials for recovery; and
- Separate materials for recovery; and
- Identify and liaise with waste contractors and waste facility operators.

3.8.3.3.3 Record Keeping

The WMP will provide systems that will enable all arisings, movements and treatments of construction waste to be recorded. This system will enable the contractor to measure and record the quantity of waste being generated. It will highlight the areas from which most waste occurs and allows the measurement of arisings against performance targets. The WMP can then be adapted with changes that are seen through record keeping.

The fully licensed waste contractors employed to remove waste from the site will be required to provide documented records for all waste dispatches leaving the site. Each record will contain the following:

- **Consignment Reference Number**
- Material Type(s) and EWC Code(s)
- Company Name and Address of Site of Origin
- > Trade Name and Collection Permit Ref. of Waste Carrier
- > Trade Name and Licence Ref. of Destination Facility
- Σ Date and Time of Waste Dispatch
- > Registration no. of Waste Carrier vehicle
- > Weight of Material
- Signature of Confirmation of Dispatch detail



> > Date and Time of Waste Arrival at Destination Site Address of Destination Facility

3.8.3.4 Waste Management Plan Conclusion

The WMP will be properly adhered to by all staff involved in the project which will be outlined within the induction process for all site personnel. The waste hierarchy should always be employed when designing the plan to ensure that the least possible amount of waste is produced during decommissioning. Reuse of certain types of construction wastes will cut down on the cost and requirement of raw materials therefore further minimising waste levels.

This WMP has been prepared to outline the main objectives that are to be adhered to and it will be updated as required prior to decommissioning.

Environmental Management Implementation

3.9.1 Roles and Responsibilities

The Site Supervisor and/or Environmental Clerk of Works (ECoW) are the project focal point relating to decommissioning-related environmental aspects.

In general, the ECoW will maintain responsibility for monitoring the decommissioning works and Contractors/Sub-contractors from an environmental perspective. The ECoW will act as the regulatory interface on environmental matters. The Site Manager will be responsible for reporting to and liaising with Galway County Council and other statutory bodies as required.

The Site Manager in consultation with the ECoW will be responsible for employing the services of a suitably qualified ecologist and any other suitably qualified professionals as required throughout the decommissioning works.

3.9.2 **Timing of Works**

The most intrusive decommissioning works (e.g., excavations and ground profiling) will be carefully scheduled to avoid the coldest winter months and the main bird breeding season (the main breeding season being April to August inclusive). The precise scheduling of works will be reviewed by an ecological/ornithological consultant prior to commencement.



4. **EMERGENCY RESPONSE PLAN**

An Emergency Response Plan (ERP) is presented in this section of the Decommissioning Plan. It provides details of procedures to be adopted in the event of an emergency in terms of site health and safety and environmental protection.

4.1 **Emergency Response Procedure**

The site ERP includes details on the response required and the responsibilities of all personnel in the event of an emergency. The ERP will require updating and submissions from the contractor/PSCS and sub-contractors as decommissioning progresses. Where sub-contractors that are contracted on site are governed by their own emergency response procedure a bridging arrangement will be adopted to allow for inclusion of the sub-contractor's ERP within this within this document.

This is a working document that requires updating throughout the various stages of the project.

4.1.1 **Roles and Responsibilities**

The chain of command during an emergency response sets out who is responsible for coordinating the response. The Site Supervisor/Construction Manager will lead the emergency response which makes him responsible for activating and coordinating the emergency response procedure. The other site personnel who can be identified at this time who will be delegated responsibilities during the emergency response are presented in Figure 4-1. In a situation where the Site Supervisor/ Construction Manager is unavailable or incapable of coordinating the emergency response, the responsibility will be transferred to the next person in the chain of command outlined in Figure 4-1. This will be updated throughout the various stages of the project.



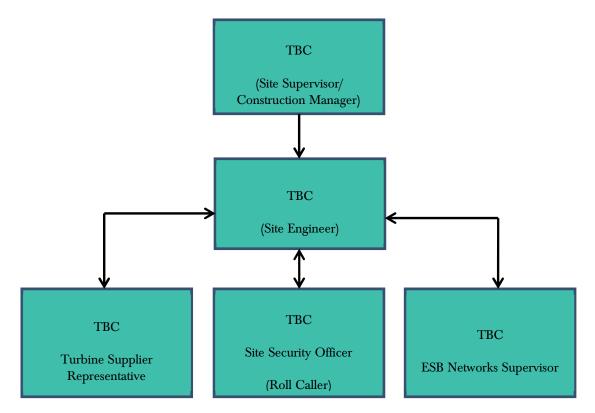


Figure 4-1 Emergency Response Procedure Chain of Command

4.1.2 Initial Steps

In order to establish the type and scale of potential emergencies that may occur, the following hazards have been identified as being potential situations that may require an emergency response in the event of an occurrence.

Theread	European au Citanti an	
Hazard	Emergency Situation	
Construction Vehicles: Dump trucks, tractors, excavators, cranes etc.	Collision or overturn which has resulted in operator or third-party injury.	
Abrasive wheels/Portable Tools	Entanglement, amputation, or electrical shock associated with portable tools	
Contact with services	Electrical shock or gas leak associated with an accidental breach of underground services	
Fire	Injury to operative through exposure to fire	
Falls from heights including falls from scaffold		
towers, scissor lifts, ladders, roofs and turbines	Injury to operative after a fall from a height	
	Illness unrelated to site activities of an operative	
Sickness	e.g. heart attack, loss of consciousness, seizure	
	This will be included the turbine manufacturers'	
Turbine Specific Incident	emergency response plan.	

Table 4-1 Hazards associated with potential emergency situations



In the event of an emergency situation associated with, but not restricted to, the hazards outlined in Table 4-1 the Site Supervisor/Construction Manager will carry out the following:

- > Establish the scale of the emergency situation and identify the number of personnel, if any, have been injured or are at risk of injury.
- Where necessary, sound the emergency siren/foghorn that activates an emergency evacuation on the site. The Site Supervisor/Construction Manager must proceed to the assembly point if the emergency poses any significant threat to their welfare <u>and if there</u> <u>are no injured personnel at the scene that require assistance</u>. The Site Supervisor/Construction Manager will be required to use their own discretion at that point. In the case of fire, the emergency evacuation of the site should proceed, without exception. The site evacuation procedure is outlined in Section 4.1.3.
- Make safe the area if possible and ensure that there is no identifiable risk exists with regard to dealing with the situation e.g. if a machine has turned over, ensure that it is in a safe position so as not to endanger others before assisting the injured.
- Contact the required emergency services or delegate the task to someone. If delegating the task, ensure that the procedures for contacting the emergency services as set out in Section 4.2 is followed.
- Take any further steps that are deemed necessary to make safe or contain the emergency incident e.g. cordon off an area where an incident associated with electrical issues has occurred.
- Contact any regulatory body or service provider as required e.g. ESB Networks the numbers for which as provided in Section 4.3.
- Contact the next of kin of any injured personnel where appropriate.

4.1.3 Site Evacuation/Fire Drill

A site evacuation/fire drill procedure will provide basis for carrying out the immediate evacuation of all site personnel in the event of an emergency. The following steps will be taken:

- Notification of the emergency situation. Provision of a siren or foghorn to notify all personnel of an emergency situation.
- An assembly point will be designated in the construction compound area and will be marked with a sign. All site personnel will assemble at this point.
- A roll call will be carried out by the Site Security Officer to account for all personnel on site.
- The Site Security Officer will inform the Site Supervisor/Construction Manager when all personnel have been accounted for. The Site Supervisor/Construction Manager will decide the next course of action, which be determined by the situation that exists at that time and will advise all personnel accordingly.

All personnel will be made aware of the evacuation procedure during site induction. The Fire Services Acts of 1981 and 2003 require the holding of fire safety evacuation drills at specified intervals and the keeping of records of such drills.

4.1.4 Spill Control Measures

Every effort will be made to prevent an environmental incident during the decommissioning phase of the project. Oil/fuel spillages are one of the main environmental risks that will exist on the site which will require an emergency response procedure. The importance of a swift and effective response in the event of such an incident occurring cannot be over emphasised. The following steps provide the procedure to be followed in the event of such an incident:

Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers.



- > If applicable, eliminate any sources of ignition in the immediate vicinity of the incident.
- Contain the spill using the spill control materials, track mats or other material as required. Do not spread or flush away the spill.
- > If possible, cover or bund off any vulnerable areas where appropriate such as drains, watercourses or sensitive habitats.
- If possible, clean up as much as possible using the spill control materials.
- Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited.
- > Notify the ECoW immediately giving information on the location, type and extent of the spill so that they can take appropriate action.
- The ECoW will inspect the site and ensure the necessary measures are in place to contain and clean up the spill and prevent further spillage from occurring.
- The ECoW will notify the appropriate regulatory body such as Galway County Council, and the Environmental Protection Agency (EPA), if deemed necessary.

The importance of a swift and effective response in the event of such an incident occurring cannot be over emphasised. Environmental incidents are not limited to just fuel spillages. Therefore, any environmental incident must be investigated in accordance with the following steps.

- The ECoW must be immediately notified.
- If necessary, the ECoW will inform the appropriate regulatory authority. The appropriate regulatory authority will depend on the nature of the incident.
- > The details of the incident will be recorded on an Environmental Incident Form which will provide information such as the cause, extent, actions and remedial measures used following the incident. The form will also include any recommendations made to avoid reoccurrence of the incident.
- > If the incident has impacted on a sensitive receptor such as an archaeological feature the ECoW will liaise with the Project Archaeologist.
- A record of all environmental incidents will be kept on file by the ECoW and the Main Contractor. These records will be made available to the relevant authorities such as Galway County Council, EPA if required.

The ECoW will be responsible for any corrective actions required as a result of the incident e.g. an investigative report, formulation of alternative works methodologies or environmental sampling, and will advise the Main Contractor as appropriate.

4.2 **Contact the Emergency services.**

In the event of requiring the assistance of the emergency services the following steps should be taken:

Stay calm. It is important to take a deep breath and not get excited. Any situation that requires 999/112 is, by definition, an emergency. The dispatcher or call-taker knows that and will try to move things along quickly, but under control.

Know the <u>location</u> of the emergency and the number you are calling from. This may be asked and answered a couple of times but do not get frustrated. Even though many emergency call centres have enhanced capabilities meaning they are able to see your location on the computer screen they are still required to confirm the information. If for some reason you are disconnected, at least emergency crews will know where to go and how to call you back.

Wait for the call-taker to ask questions, then answer clearly and calmly. If you are in danger of assault, the dispatcher or call-taker will still need you to answer quietly, mostly "yes" and "no" questions.



If you reach a recording, listen to what it says. If the recording says your call cannot be completed, hang up and try again. If the recording says all call takers are busy, WAIT. When the next call-taker or dispatcher is available to take the call, it will transfer you.

Let the call-taker guide the conversation. He or she is typing the information into a computer and may seem to be taking forever. There is a good chance, however, that emergency services are already being sent while you are still on the line.

Follow all directions. In some cases, the call-taker will give you directions. Listen carefully, follow each step exactly, and ask for clarification if you do not understand.

Keep your eyes open. You may be asked to describe victims, suspects, vehicles, or other parts of the scene.

Do not hang up the call until directed to do so by the call taker.

Due to the remoteness of the site it may be necessary to liaise with the emergency services on the ground in terms of locating the site. This may involve providing an escort from a designated meeting point that may be located more easily by the emergency services. This should form part of the site induction to make new personnel and sub-contractors aware of any such arrangement or requirement if applicable.

4.3 **Contact Details**

A list of emergency contacts is presented in Table 4-2. A copy of these contacts will be included in the Site Safety Manual and in the site offices and the various site welfare facilities.

Contact	Telephone no.
Emergency Services – Ambulance, Fire, Gardaí	999/112
Doctor – Lakeview Medical Centre, Clonbern	094 9659049
Hospital – University Hospital Galway	091 524222
FCP Emorrow Comises	1850 372 999
ESB Emergency Services	1830 372 999
Gas Networks Ireland Emergency	1850 20 50 50
Gardaí – Dunmore Garda Station.	093 38131
Health and Safety Co-ordinator - Health & Safety Services	TBC
Health and Safety Authority	1890 289 389
Inland Fisheries Ireland (IFI)	1890 347 424
	TDC
Project Supervisor Construction Stage (PSCS): TBC	TBC
Project Supervisor Design Stage (PSDS): TBC	TBC
Clonberne Windfarm Ltd.	TBC

Table 4-2 Emergency Contacts



4.3.1 **Procedure for Personnel Tracking**

All operatives on site without any exception will have to undergo a site induction where they will be required to provide personal contact details which will include contact information for the next of kin.

In the event of a site operative becoming in an emergency situation where serious injury has occurred and hospitalisation has taken place, it will be the responsibility of the Site Manager or next in command if unavailable to contact the next of kin to inform them of the situation that exists.

4.4 Induction Checklist

Table 4-3 provides a list of items highlighted in this ERP which must be included or obtained during the mandatory site induction of all personnel that will work on the site. This will be updated throughout the various stages of the project.

Table 4-3 Emergency Response Fian Items Applicable to the Site Induction Process			
ERP Items to be included in Site Induction	Status		
All personnel will be made aware of the evacuation procedure during site induction			
Due to the remoteness of the site, it may be necessary to liaise with and assist the emergency services on the ground in terms of locating the site. This may involve providing an escort from a designated meeting point that may be located more easily by the emergency services. This should form part of the site induction to make new personnel and sub- contractors aware of any such arrangement or requirement if applicable.			
All operatives on site without any exception will have undergo a site induction where they will be required to provide personal contact details which will include contact information for the next of kin.			

Table 4-3 Emergency Response Plan Items Applicable to the Site Induction Process

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5.

PROGRAMME OF WORKS

5.1 **Decommissioning Schedule**

The decommissioning phase will take approximately 3-6 months to complete from commencing the removal of turbines to the final reinstatement of the site.

At this time, it is not possible to determine when decommissioning will take place.

The phasing and scheduling of the main decommissioning task items are outlined in Figure 5-1 below, where the 1^{st} January has been shown as an indicative start date for decommissioning to commence.

Table 4-1 - Indicative Decommissioning Schedule

D	Task Name	Task Description	Month 1-3	Month 3-6
1	Site Health and Safety			
2	Turbine Decommissioning	Disconnect Power Output		
3	Turbine Dismantling	Disassemble Turbine Components		
4	Turbine Removal	Transport of all Turbine Components off site		
5	Cable Removal	Remove Underground Cables from Ducting		
6	Turbine Foundations Backfill	Reinstate Foundation Areas by Covering with Soil Material		
7	Accommodation Areas Reinstatement	Reinstate Soil Berm and Boundary Treatments		

MKO> 6. MITIGATION PROPOSALS

All mitigation measures relating to the decommissioning phase of the Proposed Project were set out in the various sections of the Environmental Impact Assessment Report (EIAR) which accompanies this substitute consent application.

This section of the Decommissioning Plan groups together all of the mitigation measures presented in the planning documentation. The mitigation measures are presented in the following pages.

By presenting the mitigation proposals in the below format, it is intended to provide an easy to audit list that can be reviewed and reported on during the operational phase of the project. The tabular format in which the below information is presented, can be further expanded upon during the course of operation and provides a reporting template for site compliance audits.



Table 6-1 D	ecommissioning .	Phase Mitigation	Measures
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Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required		
	Decommissioning Phase					
MX1	EIAR Chapter 4	The Decommissioning Plan will be updated prior to the end of the operational period in line with decommissioning methodologies that may exist at the time and will be agreed with the competent authority at that time.				
MX2	DP Section 3 Appendix 6-6	 Prior to the commencement of any decommissioning works, the following site setup procedures will be carried out: A pre-commencement survey for Rhododendron will be undertaken by a fully qualified ecologist to determine the locations and extent of the species within the development site and to determine whether there have been any changes in the extent of the infestation since the undertaking of the most recent surveys in January 2024. The locations and extent of Rhododendron within the site will be clearly marked out before removal. All seedlings will be removed by hand or with a hand tool to fully remove the plant root from the ground. This can occur at any time of the year as they will not produce flowers and seeds at this early stage of growth. For medium plant stands with no flower head present or visible and with thin stems and those that cannot be removed by hand or where the root cannot be fully removed from the ground, should be sliced at the mid-section of the stem at a 45-degree angle and treated with a herbicide immediately after being cut. Given the wet nature of the site, it is recommended that a Glyphosate-based herbicide suitable for use near watercourses be applied as a spot treatment to each 				

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Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		 individual plant to avoid contamination by spray drift to the surrounding environment and native plant species. For large plants with trunk like stems that exceed 5cm in width, it is recommended to treat in-situ by manually removing the upper parts of the plant and apply the Ecoplug method (www.landscapedepot.ie) as to avoid spray drift and to minimise the potential for spraying of non-target species. The Ecoplug method is outlined below. A 30mm deep hole, and 13mm wide will be drilled into the remaining stump and the Ecoplug will be inserted into the hole until it is flush with the top of the stump. This should comply with the bird nesting season legislation. Cutting of any foliage should not occur within bird nesting season (March 1st to August 31st). Cut the tree/plant as close to the ground as possible. This should be carried out from October to late February. The cut material can be stacked and stored on site to dry out on an impermeable membrane, used as firewood or mulched as this plant material is deemed inert and can be used for landscaping as natural weed barriers or other horticultural purposes. 		
	DP Section 3 Appendix 6-5	The following Biosecurity best practice measures should be adhered to during the treatment and management of any invasive species within the Proposed Project site.		
		 No ground works should take place on site prior to the application of this site-specific Invasive Species Management Plan (ISMP). The ISMP will ensure all measures are taken to avoid the spread of species listed on the Third Schedule. All staff will be given a Toolbox Talk, by a qualified ecologist, on invasive species removal, and their management on site. 		

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Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		 Ensure all visitors to the site are made aware of the location of the ISs recorded and are familiar with its characteristics and method of reproduction. A designated bio-secure area/exclusion zone will be set up at recorded invasive species locations to prevent disturbance in these areas. Third schedule invasive species will be marked with hazard tape in order to identify the species prior to vegetation clearance works and to keep it separate from other brash material. All machinery should be thoroughly cleaned down prior to arriving on the site to avoid the potential spread of invasive species from elsewhere. Machinery that is used for any other works until they are fully cleaned down and then visually inspected by a specialist to ensure no fragments of Invasive plant material are present. Prior to leaving the invasive species exclusion zones, all boots and clothing will be thoroughly brushed down to remove any contaminated material prior to leaving the area. Any collected loose material will be collected and disposed of in the cell/bund. The contractor will assign a member of their team as Environmental Officer to ensure the management plan is adhered to throughout the proposed works. All works in relation to the Third Schedule invasive species will be supervised by a suitably qualified ecologist. As a precautionary measure, machinery will be thoroughly cleaned down before exiting the site to prevent potential spread of invasive species elsewhere. Clean down will be carried out using brushes and shovels and power washing will be avoided insofar as possible. This is to prevent potentially contaminated run-off spreading outside the site. 		

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Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		 Material used for tracking machinery out of the contaminated areas on site and bund location e.g. plywood will be thoroughly cleaned down under supervision of the suitably qualified ecologist prior to removal off site. Once the machinery has been cleaned down as much as possible the machines will be power-washed, or air blasted to remove any remaining material. The machine will track out of the contaminated areas on site and bund location over plywood or other suitable material in order to protect the machine from potential contamination while exiting the contaminated cell/bund area. Any soil and topsoil required on the site will be sourced from a stock that has been screened for the presence of any invasive species and where it is confirmed that none are present. Any material imported to the site should be screened for invasive species by a suitably qualified ecologist before transportation to the site. All measures prescribed in the invasive species management plan will be incorporated into the contractor's respective method statements for works where Third Schedule invasive species and invasive species of potential concern occur. 		
MX3	DP Section 3 EIAR Chapter 7	The plant and equipment used during decommissioning will require refuelling during the works. Appropriate management of fuels will be required to ensure that incidents relating to refuelling are avoided. The following mitigation measures, which are the same as those proposed for the construction phase, are proposed to avoid release of hydrocarbons at the site: On site re-fuelling of machinery will be carried out using a mobile double skinned fuel bowser. The fuel bowser, a double-axel custom-built refuelling trailer will be re-filled off site, and will be towed around the site by a 4x4 jeep to where machinery		

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Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		 is located. The 4x4 jeep will also carry fuel absorbent material and pads in the event of any accidental spillages. The fuel bowser will be parked on a level area in the construction compound (outside of Gurteen/Cloonmore GWS refined ZoC) when not in use and only designated trained and competent operatives will be authorised to refuel plant on site. Mobile measures such as drip trays and fuel absorbent mats will be used during all refuelling operations; Onsite refuelling will be carried out by trained personnel only; A permit to fuel system will be put in place; Fuels stored on site will be minimised. Fuel storage areas if required will be bunded appropriately for the fuel storage volume for the time period of the construction and fitted with a storm drainage system and an appropriate oil interceptor (outside of Gurteen/Cloonmore GWS refined ZoC); The plant used during construction will be regularly inspected for leaks and fitness for purpose; and, An emergency plan for the decommissioning phase to deal with accidental spillages will be developed (refer to Section 4) Spill kits will be available to deal with and accidental spillage in and outside the refuelling area. A programme for the regular inspection of plant and equipment for leaks and fitness for purpose will be developed at the outset of the decommissioning phase. 		
MX4	DP Section 3 EIAR Chapter 10	Dust can be generated from on-site activities during decommissioning such as backfilling of foundations and travelling on site roads during prolonged periods of dry weather. The extent of dust generation will depend on the type of activity undertaken, the location, the nature of the dust, i.e. soil, and the weather. In		

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Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		addition, dust dispersion is influenced by external factors such as wind speed and direction and/or, periods of dry weather. Site traffic movements also have the potential to generate dust as they travel along the haul route.		
		 Proposed measures to control dust include: A wheel wash facility will be installed on the Proposed Wind Farm Site and will be used by vehicles before leaving the Site. In periods of extended dry weather, dust suppression may be necessary along haul roads, site roads, grid route, road widening sections, substation, and construction compounds and around the borrow pit area to ensure dust does not cause a nuisance. If necessary, such as during periods of dry weather, de-silted water will be taken from stilling ponds in the Site's drainage system and will be pumped into a bowser or water spreader to dampen down haul roads, turbine bases, borrow pit and site compounds to prevent the generation of dust where required. Water bowser movements will be carefully monitored to avoid, insofar as reasonably possible, increased runoff as outlined in the CEMP. Areas of excavation will be kept to a minimum and stockpiling of excavated material will be minimised by coordinating excavation, placement of material in peat and spoil repository areas. Turbines components, construction materials and grid connection infrastructure will be transported to the Site on specified haul routes only, as agreed with the local authority. 		
		The agreed haul route roads adjacent to the site will be regularly inspected for cleanliness and cleaned as deemed necessary by the construction Site Supervisor/Site Manager.		

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		 The transport of construction materials may have the potential to generate dust in dry weather conditions. Roads will be watered down to suppress dust particles in the air as deemed necessary by the Site Supervisor/Manager. The transport of dry excavated material from the on-site borrow pits, which may have potential to generate dust will be minimised. If necessary, such as in periods of dry weather, excavated material will be dampened prior to transport from the borrow pits. 		
MX 5	DP Section 3 EIAR Section 12	 The operation of plant and machinery, including site vehicles, is a source of potential impact that will require mitigation at all locations within the site. Proposed measures to control noise include: Limiting the hours during which site activities likely to create noticeable levels of noise or vibration are permitted; Establishing channels of communication between the Applicant or contractor, Local Authorities and residents; Selection of plant with low inherent potential for generation of noise and/or vibration; No plant or machinery will be permitted to cause a public nuisance due to noise; The best means practicable, including proper maintenance of plant, will be employed to minimise the noise produced by on site operations. All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of works; Compressors models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use 		

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		 and all ancillary pneumatic tools shall be fitted with suitable silencers; Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use; and The hours of decommissioning works (and associated traffic movements) will, insofar as possible, be limited to avoid unsociable hours. Activities shall generally be restricted to between 07:00hrs and 19:00hrs Monday to Friday and between 07:00hrs and 13:00hrs on Saturdays, with no activities on Sundays or public holidays unless in the event of an emergency. 		
MX2	EIAR Chapter 4, 5, 6	During decommissioning, it may be possible to reverse or at least reduce some of the potential impacts caused during the initial construction of the wind farm by rehabilitating construction areas such as turbine bases and hard standing areas. This will be done by covering with earth and reseeding as appropriate.		
MX3	EIAR Chapter 7	As the decommissioning works will involve works similar to those involved at construction stage, these could result in similar effects on birds. Hence, themitigation that will be undertaken during construction will also be applied during the decommissioning phase (taking into account changes that may have occurredlocally during the operational life of the project). Refer to Section 7.7.2.1 of Chapter 7 of the EIAR for construction phase mitigation measure		
MX4	EIAR Chapter 9	As the decommissioning works will involve works similar to those involved at construction stage regarding fuel leakage and soil compaction by plant and machinery, the mitigation measures to avoid contamination by accidental fuel leakage and compaction of soil by on-site plant will be implemented as per the construction phase mitigation measures as outlined in Section 9.5.2.2 and 9.5.2.6 of Chapter 9 of this EIAR.		



Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
MX6	EIAR Chapter 8	As the decommissioning works will involve works similar to those involved at construction stage regarding the potential impacts to Land, Soils and Geology, the mitigation measures are similar to those as per the construction phase mitigation measures as outlined in Section 8.5.2 of Chapter 8 of this EIAR.		
MX7	EIAR Section 10	 The transport of turbines and construction materials, waste and workers to and from the Site, (see Section 15.1 of this EIAR) will also give rise to exhaust emissions associated with the transport vehicles during the decommissioning phase. This constitutes a temporary moderate negative effect in terms of air quality. Mitigation measures in relation to exhaust emissions are presented below: All construction vehicles and plant used during construction will be maintained in good operational order while onsite. If any vehicle requires repairs, this work will be carried out, thereby minimising any emissions that arise. Turbines components will be transported to the Site on specified routes only, unless otherwise agreed with the Planning Authority. All machinery will be switched off when not in use. Users of the Site will be required to ensure that all plant and vehicles are suitably maintained to ensure that emissions of engine generated pollutants are kept to a minimum. The majority of aggregate materials for the construction of the Proposed Project will be obtained from the borrow pits on site. This will significantly reduce the number of delivery vehicles accessing the site, thereby reducing the amount of emissions associated with vehicle movements. The Materials Recovery Facility (MRF) will be local to the Proposed Project site to reduce the amount of emissions associated with vehicle movements. The nearest licensed waste facility to the 		

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		 Wind Farm Site is located approximately 44km to the southeast of the Site of the Proposed Project. Waste associated with the construction of the underground grid connection cabling route will be disposed of at the closest MRF to where waste is generated along the underground electrical cabling route. The closest licensed waste facilities in the vicinity of the underground electrical cabling route, is located approximately 38km to the south. 		
MX10	EIAR Chapter 13	Any potential direct effects will already have been resolved through mitigation measures during the construction phase which are outlined in Sections 13.4.2, 13.4.3 and 13.4.4 in Chapter 13 of this EIAR.		



7. MONITORING PROPOSALS

All monitoring proposals relating to the decommissioning phase of the Proposed Project were set out in the various sections of the Environmental Impact Assessment Report (EIAR) which accompanies this substitute consent application.

This section of the Decommissioning Plan groups together all of the monitoring proposals presented in the planning documentation. The monitoring proposals are presented in the following pages.

By presenting the monitoring proposals in the below format, it is intended to provide an easy to audit list that can be reviewed and reported on during the operational phase of the project. The tabular format in which the below information is presented, can be further expanded upon during the course of operation to provide a reporting template for site compliance audits.



Table 71 Cabadala	of Decomposition in a	Dhana Manitania Duananala
Table 7-1 Schedule	of Decommissioning	Phase Monitoring Proposals

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required			
Decommissioning Phase							
MD1	EIAR Chapter 7	It is proposed that decommissioning works will commence outside the bird nesting season (1st of March to 31st of August inclusive) to avoid the most sensitive time of the year for most bird species with the potential to use the site and its environs. Precommencement confirmatory surveys will be undertaken within one month prior to the initiation of works at the study area to identify sensitive sites (e.g. roosts). Any requirement for construction works to run into the subsequent breeding seasons following commencement will be subject to a repeat of the pre-commencement bird surveys to confirm the absence of breeding birds of conservation concern once per month during the breeding season (April to July) and once during the winter season (October). The survey will aim to identify sensitive sites e.g., nests or roosts depending on the season in question. Decommissioning phase monitoring surveys will be undertaken prior to works associated with decommissioning at the wind farm. The survey will include a thorough walkover survey to a 500m radius of the development footprint and all works areas, where access allows. If winter roosting or breeding season of the decommissioning phase. If it is found to be active during the decommissioning phase, no works shall be undertaken within a disturbance buffer (Forestry Commission Scotland, 2006; Ruddock and Whitfield, 2007) in line with industry best practice. No works shall be permitted within the buffer until it can be demonstrated that the roost/nest is no longer occupied.					
MD2	Appendix 6-6	Prior to the commencement of works in the Decommissioning phase, a pre- commencement survey for Rhododendron will be undertaken by a fully qualified					



Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
		ecologist to determine the locations and extent of the species within the development site and to determine whether there have been any changes in the extent of the infestation since the undertaking of the most recent surveys in January 2024.		



COMPLIANCE AND REVIEW

8.1

Site inspections and Environmental Audits

Routine inspections of decommissioning activities will be carried out on a daily and weekly basis by the ECoW and the Site Supervisor/Construction Manager to ensure all controls to prevent environmental impacts, relevant to the decommissioning activities taking place at the time, are in place.

Environmental inspections will ensure that the works are undertaken in compliance with this Decommissioning Plan and all other planning application documents. Only suitably trained staff will undertake environmental site inspections.

8.2 Auditing

An Environmental audit will first be carried out prior to the decommissioning phase of the Proposed Project to ensure the operational phase mitigation measures that are still in place as required are adequate. Further environmental audits will be carried out on a monthly basis during the decommissioning phase of the project and on completion of the decommissioning works.

In contrast to monitoring and inspection activities, audits are designed to shed light on the underlying causes of non-compliance, and not merely detect the non-compliance itself. In addition, audits are the main means by which system and performance improvement opportunities may be identified. Environmental audits will be carried out by the ECoW on behalf of the appointed contractor. It is important that an impartial and objective approach is adopted. Environmental audits will be conducted at planned intervals to determine whether the Decommissioning Plan is being properly implemented and maintained. The results of environmental audits will be provided to project management personnel.

8.3 Environmental Compliance

The following definitions shall apply in relation to the classification of Environmental Occurrences during the decommissioning of the wind farm:

Environmental Near Miss: An occurrence which if not controlled or due to its nature could lead to an Environmental Incident.

Environmental Incident: Any occurrence which has potential, due to its scale and nature, to migrate from source and have an environmental impact beyond the site boundary.

Environmental Exceedance Event: An environmental exceedance event occurs when monitoring results indicate that limits for a particular environmental parameter (as indicated in the Environmental Monitoring Programme) has been exceeded.

An exceedance will immediately trigger an investigation into the reason for the exceedance occurring and the application of suitable mitigation where necessary.

Exceedance events can be closed out on achieving a monitoring result below the assigned limit for a particular environmental parameter.

Environmental Non-Compliance: Non-fulfilment of a requirement and includes any deviations from established procedures, programs and other arrangements related to the Decommissioning Plan.



8.4 **Corrective Action Procedure**

A corrective action is implemented to rectify an environmental problem on-site. Corrective actions will be implemented by the Site Supervisor/Construction Manager, as advised by the Site Environmental Clerk of Works. Corrective actions may be required as a result of the following;

- > Environmental Audits;
- Environmental Inspections and Reviews;
- > Environmental Monitoring;
- Environmental Incidents; and,
- Environmental Complaints.

A Corrective Action Notice will be used to communicate the details of the action required to the main contractor. A Corrective Action Notice is a form that describes the cause and effect of an environmental problem on site and the recommended corrective action that is required. The Corrective Action Notice, when completed, will include details of close out and follow up actions.

If an environmental problem occurs on site that requires immediate attention direct communications between the Site supervisor/Construction Manager and the ECoW will be conducted. This in turn will be passed down to the site staff involved. A Corrective Action Notice will be completed at a later date.

8.5 **Decommissioning Phase Plan Review**

This Decommissioning Plan will be updated and reviewed prior to commencement of decommissioning.



Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.). The Bat Conservation Trust, London.

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive) and Directive 2009/147/EC (codified version of Directive 79/409/EEC as amended) (Birds Directive) – transposed into Irish law as European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477/2011).