EDF RENEWABLES IRELAND LIMITED

KELLYSTOWN WIND FARM

CO. LOUTH

CONSTUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

MANAGEMENT PLAN 6

DECOMMISSIONING PLAN

NOVEMBER 2024

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DOCUMENT APPROVAL

PROJECT	Kellystown Wind Farm	
CLIENT / JOB NO	EDF Renewables Ireland Limited	6918
DOCUMENT TITLE	Construction Environmental Management Plan (CEMP) Decommissioning Plan	

	Prepared by	**Reviewed /Approved by**
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KELLYSTOWN WIND FARM, CO. LOUTH

DECOMMISSIONING PLAN

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1 INTRODUCTION

This Decommissioning Plan has been prepared by Jennings O'Donovan & Partners Limited on behalf of EDF renewables Ireland Limited for the decommissioning of the Proposed Kellystown Wind Farm and relevant infrastructure which is hereafter referred to as the Proposed Development. This document is being prepared, alongside an Environmental Impact Assessment Report (EIAR), as part of an application for planning permission for the Proposed Development to Louth County Council.

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

This report provides the environmental management framework to be adhered to during the decommissioning phase of the Proposed Development 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.

As noted in the Scottish Natural Heritage report 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. Due to the efficiency of modern day turbines, it is estimated that their lifespan will be 35 years. The technological advances and preferred approaches to reinstatement are likely to change in the intervening decades.

In this regard, this Decommissioning Plan will be reviewed and updated for the written agreement of the Planning Authority prior to commencement of a decommissioning works. It will take account of the relevant conditions of the planning permission and current health and safety standards in accordance with the approach set out and the principles established in this document.

1.1 SCOPE OF THE DECOMMISSIONING PLAN

This plan for the decommissioning of the Proposed Development includes its connection to the national grid. Where the term ‘Site’ is used in the Decommissioning Plan it refers to the Site of the Proposed Development and all works associated with the Proposed Development including enabling works. 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 outlines the proposals for reviewing compliance with the provisions of this report.

2 SITE AND PROJECT DETAILS

2.1 SITE LOCATION AND DESCRIPTION

The Wind Farm Site extends to an area of 64.5 hectares which is private third-party owned land. The principal land use within the site area is comprised of pasture farmland, forestry incorporating a mosaic of wetland and scrubland habitats. The site is located 8.3km north of Drogheda, 23.6km South of Dundalk and 50km North of Dublin. The Site elevations range from 90m above ordnance datum (AOD) in the northern portion of the site to 120m AOD towards the north-west side of the wind farm. A Site Location Map showing the Redline Boundary and the Wind Farm Site Boundary is shown in **Figure 1.1** and the Project is outlined in **Figure 1.2.**

The Site is located in a rural setting and housing density in the area is low predominantly comprising one-off houses and farm holdings. There are 374 dwellings within a 2km radius of the proposed turbines **(Figure 1.3**). The nearest town is Dunleer, located c. 3.1km north of the Developable Area. The villages of Clogherhead and Termonfeckin are located approximately 6km to the east.

2.2 DESCRIPTION OF THE DECOMISSIONING

- **Wind Turbines:** Dismantling and removal of the 5 wind turbines, including blades, rotor, hub, and nacelle. The turbine towers would also be cut and transported off-site.
- **Crane Hardstand Areas:** Removal of the crane hardstand areas used during construction and turbine maintenance, potentially restoring these areas to their original condition.
- **Temporary Construction Compounds**: Removal of the temporary compounds, including offices, parking areas, and fencing, with the areas restored to their previous condition.
- **Meteorological Mast:** The 36-meter permanent meteorological mast will be dismantled and removed.
- **Substation and BESS:** Decommissioning of the 38kV substation and the Battery Energy Storage System (BESS), including the removal of all electrical equipment, security fencing, cabling, and the wastewater holding tank.
- **Electrical Grid Connection**: The 12.65 km underground cable connection to the national electricity grid would need to be decommissioned or left in place if permitted.

All other elements of the Proposed Development will remain in-situ. The Site Access Roads and associated drainage systems will serve ongoing forestry and agriculture activity in the area. All other hard surfaced areas will be allowed to revegetate naturally. Based on the experience of the project team monitoring operational wind farm sites throughout the country, the approach of allowing these areas to revegetate naturally has proven to be very successful.

Cranes of similar size to those used for construction will disassemble each turbine using the same crane hardstands. The towers, blades and all above ground components will be removed from site and reused, recycled, or disposed of in a suitably licenced facility. (The financial costs of decommissioning, at current material values, will be more than met by the recycling value of the turbine components.)

Turbines will be cut on-site to fit on articulated trucks, allowing them to be transported via the civil construction delivery route for removal.

The following elements are included in the decommissioning phase:

- Decommissioning works will be limited to action necessary to remove the wind farm structures, i.e., removal of turbines, cabling and the monitoring mast.
- Existing Hardstands will be utilised to act as a temporary compound for the appointed Contractor.
- Roads and associated drainage systems will remain in place to serve ongoing forestry and agriculture activity[1].Hardstanding areas will be allowed to revegetate naturally.
- Turbine plinths will be removed, and the hardcore covering turbine foundations will be allowed to revegetate naturally[2].
- Soil disturbance will be avoided.

2.3 TARGETS AND OBJECTIVES

This decommissioning plan has considered environmental issues as listed in Section 3.

The key targets are as follows:

- Ensure decommissioning works and activities are completed in accordance with mitigation and best practice approach presented in the accompanying Environmental

[1] For a wind farm where the roads are not to be retained, natural revegetation is preferred to reprofiling, or the importation of soil.
[2] The covering of turbine foundations with soil material was discussed, and discounted. Instead, the possibility was discussed of roughening the surface of the concrete foundation, to assist in the initiation and subsequent growth and coalescence of flora. However, the foundations will in fact be covered with hardcore, so this step is unnecessary.

Impact Assessment Report (EIAR) and associated planning documentation. A Schedule of Mitigation Measures has been included in **Appendix 17.1** of the EIAR.

- Ensure decommissioning works and activities have minimal impact/disturbance to local landowners and the local community. This will relate to transport, particularly of material off site with noise and dust also impacting on receptors at time of decommissioning to a lesser extent.
- Ensure decommissioning works and activities have minimal impact on the natural environment. Disturbance to habitats will be avoided and the use of existing infrastructure and drainage will ensure silt does not enter waterways.
- Adopt a sustainable approach to decommissioning. This means comparing alternative methods for turbine disassembly and taking the approach with the least impact on the natural environment; and,
- Provide toolbox talks, environmental training and awareness of sensitive receptors and waste management within the Site for all project personnel.

The key Site objectives are as follows:

- Avoidance of any pollution incident or near miss as a result of working around or close to existing watercourses and have emergency measures in place, in accordance with the Water Quality Management Plan. Similar mitigation measures to the construction phase will be implemented. Please Section 3 for more details.
- Avoidance of vandalism.
- Keeping all watercourses free from obstruction and debris.
- Sustainable drainage system /drainage design principles will be maintained and monitored to ensure efficiency.
- Keep impact of decommissioning works to a minimum on the local environment, namely watercourses, and wildlife through the use of defences such as buffers and silt fences.
- Correct fuel storage and refuelling procedures to be followed.
- Good waste management and housekeeping 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.

Section 3 discusses the above in more detail.

2.4 DECOMMISSIONING METHODOLOGIES OVERVIEW

2.4.1 Introduction

An experienced main contractor will be appointed to undertake the decommissioning of the Proposed Development. The main contractors will comply with the mitigation measures of the Construction and Environmental Management Plan (CEMP) prepared for the construction phase. An overview of the decommissioning methodologies is provided below.

2.4.2 Decommissioning Methodology

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

- Wind turbines
- Turbine Foundations.
- Underground Cabling.

2.4.2.1 Wind Turbines

Prior to any works being undertaken on wind turbines, they will be disconnected from the grid by the site operator in conjunction with ESB Networks and EirGrid. The dismantling and removal of wind turbines of this scale is a specialist operation which will be undertaken by the turbine supplier or competent subcontractor. Turbine dismantling will be undertaken in reverse order to methodology employed during their construction. Cranes will be brought back to Site utilising the hard stand areas. The dismantling of turbines will be bound by the same safety considerations as will be the case during construction in terms of weather conditions. Works will not be undertaken during adverse weather conditions and in particular not during high winds.

The turbine blades will be cut on site and removed in articulated trucks, the details of which are assessed in **Chapter 16 Traffic & Transportation** of the EIAR which accompany this application.

The transport of disassembled turbines from the Site will be undertaken in accordance with a Transport Management Plan (Management Plan 7 of the CEMP). The Transport Management Plan will provide for all necessary safety measures, including a convoy and Garda escort as required, off-peak turning/reversing movements and any necessary safety controls.

The Met Mast will also be removed as its purpose will cease once the turbines have been dismantle and removed. In addition, the Met Mast is solely a requirement of the operational phase to satisfy EirGrid's requirements.

2.4.2.2 Turbine Foundations

On the dismantling of turbines, it is not intended to remove the concrete foundations from the ground. It is considered that their removal will be the least preferred options in terms of potential effects on the environment. Turbine plinths will be removed and hardcore from the hardstands will be used to cover the plinth area. The hardcore covering turbine foundations will be allowed to revegetate naturally.

2.4.2.3 Underground Cabling

The cabling on Site will be pulled from the cable duct using a mechanical winch which will extract the cable and re-roll it on to a cable drum. This will be undertaken at each of the joint bays/pull pits along the cable. The ground above original pulling pits/joint bays will be excavated to access the cable ducts using a mechanical excavator and will be fully re-instated once the cables are removed. Excavated material will be temporarily stored adjacent to the site of excavation at a height of less than 1m and at 25m distance from any watercourse.

The cable ducting will be left in-situ as it is considered the most environmentally prudent option, avoiding unnecessary excavation and soil disturbance for an underground element that is not visible with no environmental impact.

The onsite substation and associated grid connection will remain in place as it will be under the ownership of the ESB and will form a permanent part of the national electricity grid.

2.4.2.4 Transport Route Accommodation Works

Turbines will be cut at the hardstand locations on site so as to fit on articulated trucks, therefore allowing the use of the civil construction delivery route for removal.

3 ENVIRONMENTAL CONTROLS

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. Based on the nature and extent of the decommissioning works these are the key on-site controls that are applicable at decommissioning. (Associated mitigation measures are described in **Section 6**).

3.1 SITE DRAINAGE

The site drainage features for this site during its construction and operation are outlined in the EIAR and **Surface Water Management Plan** which accompany this application. This document has been prepared on a preliminary (outline) basis and will be further developed and expanded following the appointment of the Contractors for the main construction/decommissioning works. Some items of this CEMP can only be finalised with appropriate input from the Contractors who will actually carry out the main construction/decommissioning works. This CEMP identifies, for the incoming Contractors, the key planning, environmental and contract document constraints that must be adhered to in order to deliver optimum environmental reassurance for the Site. As stated in Section 2.2, the drainage system will serve ongoing activity on the area.

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. However, it should be noted that by the time decommissioning is undertaken after the planned 35-year lifespan of the Proposed Development, the areas within the Site will have revegetated substantially resulting in a drainage pattern that is similar to what existed prior to any construction. It is not anticipated that the decommissioning phase will interrupt this drainage regime in any way with the works proposed. As an additional measure, areas where freshly placed soil material as part of excavation works will be surrounded by silt fencing if deemed necessary until the area has naturally revegetated e.g., near joint bays.

3.2 REFUELLING; FUEL AND HAZARDOUS MATERIALS STORAGE

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:

- Road-going vehicles will be refuelled off site wherever possible.
- On-site refuelling will be carried out at designated refuelling area at the temporary decommissioning compound at the Site. Existing Hardstands will be utilised to act as a temporary compound for the appointed Contractor. Machinery such as cranes will be refuelled directly by a mobile fuel truck that will come to site as required. Drip trays will be used in such circumstances.
- 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.
- Fuel volumes stored on site will be minimised. The fuel storage areas will be bunded to 110% of the storage volume.
- The plant used 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. Spill kits will be available to deal with an 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 is unlikely to be generated in significant amounts from on-site activities during decommissioning. The extent of dust generation will depend on the type of activity undertaken, the proximity of activities to receptors and 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, which are the same as those proposed for the construction phase, to control dust include:

- Any site roads with the potential to give rise to dust will be regularly watered, as appropriate, during dry and/or windy conditions.
- The designated public roads outside the site and along the main transport routes to the site will be inspected daily by the Site Manager for cleanliness and cleaned if deposits are found.
- Material handling systems and material storage areas influenced by convenience and ease of handling, and peat slippage safety.

- Water misting or sprays will be used in dry and windy if particularly dusty activities are necessary during dry or windy periods.
- The transport of soils or other material, which has significant potential to generate dust, will be undertaken in tarpaulin-covered vehicles.
- Daily inspection of the site to examine dust measures and their effectiveness.
- When in dry and/or windy weather and dirt is visible on the roads, sections of the haul route will be swept using a truck mounted vacuum sweeper.

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, which are the same as those proposed for the construction phase, to control noise include:

- Diesel generators will be enclosed in sound proofed containers to minimise the potential for noise impacts.
- Plant and machinery with low inherent potential for generation of noise and/or vibration will be selected. All plant and equipment to be used on-site will be modern equipment and will comply with the S.I. No. 359/1996 - European Communities (Construction Plant and Equipment) (Permissible Noise Levels) (Amendment) Regulations.
- Regular maintenance of plant will be carried out in order to minimise noise emissions. Particular attention will be paid to the lubrication of bearings and the integrity of silencers.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the works.
- Compressors will be of the “sound reduced” 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.
- Machines, which are used intermittently, will be shut down during those periods when they are not in use.
- Training will be provided by the Site Manager to drivers to ensure smooth machinery operation/driving, and to minimise unnecessary noise generation.
- Local areas of the haul route will be condition monitored and maintained, if necessary.

3.5 INVASIVE SPECIES MANAGEMENT

Prior to Decommissioning, a suitably qualified ecologist will complete an invasive species survey of the Site to identify invasive species where any excavation will be required. An Invasive Species Management Plan will be implemented if invasive species are identified.

3.6 TRAFFIC MANAGEMENT

A Traffic Management Plan will be prepared in advance of any Decommissioning works. The traffic management arrangements for the removal of turbines although similar to those that will be implemented for construction materials delivery (to a lesser extent) as outlined in the EIAR, will be agreed in advance of decommissioning with the competent authority.

The Traffic Management Plan for the decommissioning phase will also include provision for the removal of underground cables from the underground ducts within the Site. Cables in public roads will be left in-situ as they will be the responsibility of the ESB.

3.7 WASTE MANAGEMENT PLAN

This Waste Management Plan which outlines the best practice procedures during the Decommissioning of the Proposed Development . The Waste Management Plan will outline the methods of waste prevention and minimisation by recycling, recovery and reuse at each stage of decommissioning. Disposal of waste will be a last resort.

3.7.1 Legislation

The Waste Management Act 1996 as amended 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 Kellystown Wind Farm Proposed Development 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. Waste removal-related traffic volumes during the decommissioning phase, will be similar or less than those anticipated and assessed for the construction phase.

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). No demolition will take place at this Site.

3.7.2 Waste Management Hierarchy

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

1. **Prevention and Minimisation:**

The primary aim of the Waste Management Plan will be to prevent and thereby reduce the amount of waste generated.

2. **Reuse of Waste:**

No material is likely to be reused on site during the Decommissioning phase. Materials such as cabling will be reused off-site.

3. **Recycling of Waste:**

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

4. **Disposal of Waste to Landfill**

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

3.7.3 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 Development are outlined in **Table 3.1** below.

Table 3.1 Waste Types Arising during the Decommissioning Phase

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

3.7.3.1 Reuse

Many construction materials can be reused several 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 in.

3.7.3.2 Recycling

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

All wastes will be sorted and segregated on-site during the time of Decommissioning. The anticipated volume of all waste material to be generated at the Kellystown Wind Farm Proposed Development is low which provides the justification for adopting small containers as a method of waste storage.

3.7.3.3 Implementation

3.7.3.3.1 Roles and Responsibilities

The Ecological Clerk of Works will have responsibility for overseeing and the implementation of the objectives of the Decommissioning plan, ensuring that all hired waste contractors have the necessary authorisations and that the waste management hierarchy is adhered to. The person nominated will have sufficient authority so that they can ensure everyone working on the decommissioning adheres to the management plan.

3.7.3.3.2 Training

It is important for the Decommissioning 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, will 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.
- Identify and liaise with waste contractors and waste facility operators.

3.7.3.3.3 Record Keeping

The Waste Management Plan will provide systems that will enable all arisings and movements of construction waste to be recorded. This system will enable the contractor to measure and record the quantity of waste being generated. The Waste Management Plan can then be adapted with changes that are seen through record keeping.

3.7.3.4 Waste Management Plan Conclusion

The Waste Management Plan will be properly adhered to by all staff involved in the Project and will be outlined within the induction process for all site personnel. Reuse of certain types of decommissioning wastes will cut down on the cost and requirement of raw materials at other sites therefore further minimising waste levels going to landfill. This Waste Management Plan outlines the main objectives that are to be adhered to.

3.8 ENVIRONMENTAL MANAGEMENT IMPLEMENTATION

3.8.1 Roles and Responsibilities

The Site Manager and/or Environmental Clerk of Works will be key members of the Contractors team.

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

A suitably qualified and experienced ecologist and any other suitably qualified and experienced professionals such as engineers and geotechnical experts will further advise the Ecological Clerk of Works and Site Manager. This will ensure there is no negative impact on the environment as a result of the decommissioning of the Proposed Development.

4 EMERGENCY RESPONSE PLAN

An Emergency Response Plan 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 Emergency Response Plan includes details the response required and the responsibilities of all personnel in the event of an emergency. The Emergency Response Plan will require updating and submissions from the Contractor/Project Supervisor Decommissioning Stage (appointed to manage and co-ordinate health and safety matters during the construction stage) and sub-contractors as decommissioning progresses. Where sub-contractors are governed by their own emergency response procedure a bridging arrangement will be adopted to allow for inclusion of the sub-contractor's Emergency Response Plan within this document.

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 to coordinate 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.

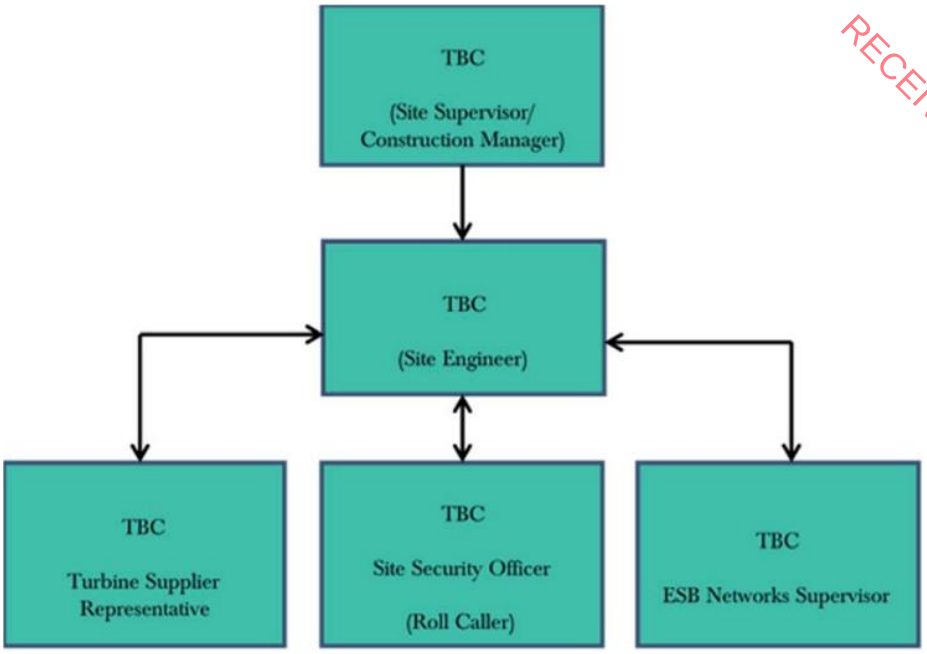

Figure 4.1 Emergency Response Procedure Chain of Command

4.1.2 Initial Steps

The following hazards have been identified as being potential situations that may require an emergency response in the event of an occurrence.

Table 4.1 Hazards associated with potential emergency situations

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
Sickness	Illness unrelated to site activities of an operative e.g. heart attack, loss of consciousness, seizure
Turbine Specific Incident	This will be included the turbine manufacturers' emergency response plan.

In the event of an emergency situation such as the hazards outlined in **Table 4.2** 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, who 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 and if there are no injured personnel at the scene that require assistance. 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 turbines and substation should proceed, without exception. The Site evacuation procedure is outlined in **Section 4.1.3.**
- Make safe the area if possible and ensure that 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 are 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 if arising, are likely to be small and localised. The importance of a swift and effective response in the event of a spill is important. 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 necessary, cover or bund off any vulnerable areas where appropriate such as drains, watercourses or sensitive habitats.
- Clean up as much as possible using the spill control materials.
- Contain any used spill control material. Dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited.
- Notify the Ecological Clerk of Works immediately giving information on the location, type and extent of the spill so that they can take appropriate action.
- The Ecological Clerk of Works 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 Ecological Clerk of Works will notify the appropriate regulatory body such as Louth County Council, and the Environmental Protection Agency, if deemed necessary.

4.1.5 Environmental Investigation

Any environmental incident must be investigated in accordance with the following steps.

- The Ecological Clerk of Works will be immediately notified.
- If necessary, the Ecological Clerk of Works will inform the appropriate regulatory authority. The 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 Ecological Clerk of Works will halt work and will liaise with the Project Archaeologist.
- A record of all environmental incidents will be kept on file by the Ecological Clerk of Works and the Main Contractor. These records will be made available to the relevant authorities such as Louth County Council, Environmental Protection Agency if required.

The Ecological Clerk of Works 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 will be taken:

Ring 999 **or** 112.

Clearly state the situation and the location.

Await further instructions from Emergency Services.

Table 4.2 Emergency Contacts

Contact	Telephone no.
Client: EDF Renewables Ireland Ltd	**TBC**
Doctor – North East Doctor on Call Ltd.	1800 777 911
Emergency Services – Ambulance, Fire, Gardaí	999/112
ESB Emergency Services	1850 372 999
Hospital – Louth University Hospital	(042) 933 4701
Gas Networks Ireland Emergency	1850 20 50 50
Gardaí – Louth Garda Station	+353429374102

Contact	Telephone no.
Health and Safety Co-ordinator - Health & Safety Services	**TBC**
Health and Safety Authority	1890 289 389
Inland Fisheries Ireland (IFI)	1890 347 424
Project Supervisor Construction Stage (PSCS): TBC	**TBC**
Project Supervisor Design Stage (PSDS)*: Jennings O'Donovan & Partners Limited	071 9161416

* Oversees the coordination of the design with the design team, architects' engineers etc.

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.

The decommissioning of the Proposed Development will take place after the 35-year operational period of the planning permission period has elapsed.

The phasing and scheduling of the main Decommissioning task items are outlined in **Figure 5.1** below, where the 1st of January has been shown as an indicative start date for decommissioning to commence.

ID	Task Name	Task Description	Q1			Q2			Q3			
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	Site Health and Safety											
2	Turbine Decommissioning	Disconnect Power Output										
3	Turbine and Met Mast Dismantling	Disassemble turbine components and met mast										
4	Turbine Removal	Transport of all turbine components off site										
5	Cable Removal	Remove underground cables form ducting										
6	Turbine Foundations Backfill	Reinstate foundation areas by covering with soil material										

Figure 5.1 Indicative Decommissioning Schedule

6 MITIGATION PROPOSALS

The Decommissioning Mitigation Measures are presented in the Table 6-1.

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 decommissioning phase of the project.

Table 6.1 Decommissioning Mitigation Measures

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
MM98	Decommissioning	Chapter 5: Population and Human Health	5.5.6 Land Use and Topography	Decommissioning works will be planned and controlled by a Construction and Environmental Management Plan (CEMP). This provides details on day to day works and methodologies. As part of these works, the public and other stakeholderswill be provided with updates on construction activities which will affect access to lands. This will be communicated to members of the public through a community liaison officer employed for the duration of the construction period.		
MM99	Decommissioning	Chapter 5: Population and Human Health	5.5.8.1 Human Health and Safety Construction and Decommissioning	Public safety will be addressed by restricting access to the public in the vicinity of the site works during the decommissioning stage. The construction site will be temporarily closed in sections to the public for the eighteen months decommissioning period. This measure aims to avoid potential injury to members of the public as a result of construction activities. Appropriate warning signage will be posted at the construction site entrance, directing all visitors to the site manager. Appropriate signage will be provided on public roads approaching site entrances and along haul routes. Once mitigation measures, including health and safety measures are implemented and followed, the potential for impact on human health for members of the public and construction workers during decommissioning of the proposed project is expected to be not significant and temporary to short-term.		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
MM100	Decommissioning	Chapter 7: Bat Ecology	7.6.4 Decommissioning Phase Mitigation	Decommissioning of the Development will be scheduled to take place after the proposed 35-year lifespan of the project. Decommissioning phase impacts for the proposed Development are likely to be broadly similar to construction phase impacts, in terms of potential surface impacts to bat foraging and roosting habitats. However, there will be a reduction in the amount of vegetation clearance required as buffers will not be implemented. While the impacts are expected to be significantly reduced during decommissioning compared to construction, based on a precautionary approach, all mitigation measures detailed for the construction phase will be adopted in full during the decommissioning phase. Restoration of the Proposed Development Site following decommissioning of infrastructure will require the prior establishment of the new baseline conditions at the Development which will have developed over the intervening 35 years life of the project. These studies will inform any modification or additional sensitivities that may need to be factored into restoration and habitat-specific measures.		
MM101	Decommissioning	Chapter 8 Ornithology	8.4 Embedded Mitigation – Decommission Phase	As decommissioning works are likely to be of a similar nature and duration as construction activities, the mitigation measures outlined for the construction phase will be implemented to ensure compliance with relevant legislation. **Ecological Clerk of Works (ECoW)**: To ensure that mitigation measures are reactive to changing conditions on Site and compliance with legislation protecting breeding birds, a suitably experienced ECoW will be present to identify any		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				potential constraints to Proposed Development works and provide advice to comply with all legislation relative to breeding birds during the construction phase. **Toolbox talk**: A 'toolbox talk' will be delivered prior to construction, and at regular intervals, by a suitably experienced ECoW to ensure that all contractors working on the Proposed Development are aware of ornithological sensitivities and relevant legislation. **Timing of works**: Given the anticipated construction period, some construction work will take place during the peak breeding season (March to August). No works will start during the breeding season without first establishing the status of breeding birds within likely disturbance distances of the proposed works. **Vegetation removal**: Where possible, any removal of vegetation, including grassland and moorland habitats, will take place outside of the breeding season. Any vegetation removal during breeding season will be subject to additional safeguards and nesting bird checks by the ECoW, with appropriate exclusion areas instated if any nests are located, following current disturbance guidance (Goodship and Furness, 2022). **Pre-construction Surveys**: Pre-construction surveys will be undertaken to identify the any breeding birds nesting within or close to working areas. Surveys will be undertaken by the ECoW, who will determine the scope of surveys required, which will be based on current		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				disturbance guidance and professional judgement (Goodship and Furness, 2022). **Protection of nesting birds**: It is an offence to wilfully destroy, injure or mutilate the eggs or nest of a protected wild bird, and to wilfully disturb a protected wild bird on or near a nest containing eggs or unflown young. If any active nests are identified during pre-construction surveys which could be damaged or destroyed, an exclusion zone around the nest/breeding territory will be established which would be informed by current guidance (Goodship and Furness, 2022). No works will be permitted within the exclusion zone and no personnel or vehicles will be allowed to enter or pass through until the ECoW has confirmed that the nesting attempt has reached a natural conclusion. **Minimising disturbance from Site vehicles**: Where construction works are required during the breeding bird season, mitigation measures to limit the impact of vehicular disturbance will be implemented. This will include no idling of vehicles, appropriate speed restrictions and dust suppression measures on Site.		
MM102	Decommissioning	Chapter 9: Aquatic Ecology	9.6.4 Decommissioning Phase Mitigation	Prior to the decommissioning work, a comprehensive plan will be drawn up that takes account of the findings of this EIAR and the contemporary legislative requirements at that time, to manage and control the component removal and ground reinstatement.		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
MM103	Decommissioning	Chapter 10: Soil and Geology	10.6.4 Decommissioning and Restoration Phases	Mitigation measures applied during decommissioning activities will be similar to those applied during construction where relevant. Some of the effects associated with reinstatement of the site (excavation of access tracks) will be avoided by leaving these in place where possible. It is proposed to leave the access tracks in-situ at the decommissioning stage. IWEA state that "it may be best" to leave site tracks in-situ depending on the size and geography of the development. It is considered that leaving the access tracks in-situ will cause less environmental damage than removing and recycling them, so these elements of the construction will be retained. Turbine base, hardstand and other ancillary infrastructure will be removed and covered with overburden material to allow for re-vegetation of the development site. Areas of excess soil and rock will be reused in order to match the surrounding land as near as possible. Drainage and slopes will be restored as close to the original ground as possible. Grid connection infrastructure including substations and ancillary electrical equipment shall form part of the national grid and will be left in situ. Removal of this infrastructure would result in considerable disruption to the local environment in terms of increased sedimentation, erosion, dust, noise, traffic		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				and an increased possibility of contamination of the local water table. However, if removal is deemed to be required by the respective local authority all infrastructure will be removed with mitigation measures similar to those during construction being employed. 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 outlined below. **Vehicular Movements** Vehicular movements will be restricted to the footprint of the Proposed Development, particularly with respect to the newly constructed Site Access Tracks. This ensures that machinery must be kept on tracks and will not move onto areas that are not permitted. Vehicular traffic on Site will be minimised through the re-use of excavated material on Site which will reduce the need to source material from external quarries. As discussed previously, excavation volumes have been reduced during the design phase by avoiding areas of sensitive or soft soils and by avoiding excessive cut and fill during construction. This will result in reduced excavation volumes and therefore reduced Site traffic.		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				Best practice as described in the IWEA and Scottish Best Practice Guidelines will be applied during construction which will minimise double handling, again reducing the Site traffic. All works will be managed and carried out in accordance with the Construction Environmental Management Plan (**Sections 3.3.3** of the CEMP in **Appendix 2.1** of **Volume IV**), which will be updated by the civil engineering contractor and agreed prior to any Site works commencing. **Soil Contamination** Careful design of the wind farm has reduced the amount of Site traffic required on Site by reducing access tracks lengths, excavation volumes and double handling. Similarly, good Site practice and a robust CEMP (**Technical Appendix 2.1**) will also result in less traffic and a lower potential for fuel spills and leakages. The CEMP (**Sections 3.3.5** and **3.4.4** of the CEMP in **Appendix 2.1** of **Volume IV**) requires the checking of assets (plant, vehicles, fuel bowsers) on a regular basis during the construction phase of the Proposed Development. The purpose of this management control is to ensure that the measures in place are operating effectively, prevent accidental leakages, and identify potential breaches in the protective retention and attenuation network during earthworks operations. Fuel management procedures adopted will include the following elements:		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				• Mobile bowsers, tanks and drums will be stored in secure, impermeable storage area, away from drains and open water; • Fuel containers will be stored within a secondary containment system e.g. bund for static tanks or a drip tray for mobile stores; • Ancillary equipment such as hoses, pipes will be contained within the bund; • Taps, nozzles or valves will be fitted with a lock system; • Fuel and oil stores including tanks and drums will be regularly inspected for leaks and signs of damage; • Only designated trained operators will be authorised to refuel plant on Site. The emergency response plan, as detailed in the CEMP, has been developed in order to deal with any emergency accidents or spills. In particular an emergency spill kit with oil boom and absorbers will be kept on Site in the event of an accidental spill. All Site operatives will be trained in its use. In addition, all vehicles will also contain emergency spill kits.		
MM104	Decommissioning	Chapter 11: Hydrology and Hydrogeology	11.6.5.1 Floodplains	During decommissioning phase, underground cables will be removed while the ducting will be left in-situ. As such there would be no effect on flooding caused by restrictions or disruption to flood flows.		
MM105	Decommissioning	Chapter 11:	11.10 Mitigating	The Irish Wind Energy Association (IWEA) states that when decommissioning a wind farm “the concrete bases could be removed, but it may be better to leave them under the ground,		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
		Hydrology and Hydrogeology	Measures Decommissioning Phase	as this causes less disturbance". As a result, underground cables will be removed while the ducting will be left in-situ. The turbine foundations will remain in-situ, turbine hardstand areas will be remediated to match the existing landscape as closely as possible, and access tracks will be left for use by the relevant landowner(s). Prior to the decommissioning work, a comprehensive plan will be drawn up that takes account of the findings of this EIAR and the contemporary legislative requirements at that time, to manage and control the component removal and ground reinstatement.		
MM106	Decommissioning	Chapter 12: Landscape and Visual	12.4 Mitigation Measures	Upon decommissioning, the turbines, meteorological mast, and all underground electrical and communications cabling will be removed. Other elements will be retained in situ to serve ongoing forestry and agriculture activity.		
MM107	Decommissioning	Chapter 18: Air Quality and Climate	18.3.7.3 Decommissioning Phase Mitigation	Good practice site procedures will be followed by the appointed contractor to prevent dirt and dust being transported onto the local road network and to minimise vehicle exhaust emissions. Good practice site control measures will comprise the following: • Site Access Tracks will be upgraded and built in the initial decommissioning phases. These roads will be finished with graded aggregate which compacts, preventing dust. • Approach roads and decommission areas will be cleaned on a regular basis to prevent build-up of mud		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				and prevent it from migrating around the Site and onto the public road network. • Wheel wash facilities will be provided near the Site entrance to prevent mud/dirt being transferred from the site to the public road network. • Public roads along the construction haul route will be inspected and cleaned daily. In the unlikely event that dirt/mud is identified on public roads, the roads will be cleaned. The wheel wash facility will be investigated, and the problem fixed to prevent this from happening again. • During periods of dry and windy weather, there is potential for dust to become friable and cause nuisance to nearby residences and users of the local road network. This requires wetting material and ensuring water is supplied at the correct levels for the duration of the work activity. The weather will be monitored so that the need for damping down activities can be predicted. Water bowsers will be available to spray work areas (wind turbine area and grid connection route) and haul roads to suppress dust migration from the Site. • Vehicles delivering materials to the site will be covered appropriately when transporting materials that could result in dust, e.g., crushed rock or sand. • Exhaust emissions from vehicles operating within the site, including trucks, excavators, diesel generators or other plant equipment, will be controlled by the Contractor by ensuring that emissions from vehicles are minimised through regular servicing of machinery. • All machinery when not in use will be turned off.		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				• Ready-mix concrete will be delivered to the Site and no batching of concrete will take place on the Site. Only washing out of chutes will take place on site and this will be undertaken at a designated concrete washout facility at the contractor's compound. The concrete wash water will be disposed of at a licensed facility as outlined in the Construction Environment Management Plan (CEMP) – Management Plan 5 Waste Management Plan (Appendix 2.1) • Speed restrictions of 15km/h on Access Tracks will be implemented to reduce the likelihood of dust becoming airborne. Consideration will be given to how on-site speed limits are policed by the Contractor and referred to in the toolbox talks. • Stockpiling of materials will be carried out in such a way as to minimise their exposure to wind. Stockpiles will be covered with geotextiles layering and damping down will be carried out when weather conditions require it. • Earthworks and exposed areas/soil stockpiles will be re-vegetated to stabilise surfaces as soon as practicable. • An independent, qualified Geotechnical Engineer will be contracted for the detailed design stage of the project and geotechnical services and will be retained throughout the construction phase, including monitoring and supervision of construction activities on a regular basis. The methodology statement will be signed off by a suitably qualified Geotechnical Engineer.		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				• A complaints procedure will be implemented on site where complaints will be reported, logged and appropriate action taken. The appointed contractor responsible for the detailed design of the project will provide details to the planning authority for agreement in writing prior to the commencement of development of environmental safety methodology including best practice procedures to manage construction activities. The methodology statement will be signed off by a suitably qualified geotechnical engineer/engineering geologist. An independent, qualified geotechnical engineer/engineering geologist will be contracted for the detailed design stage of the project and geotechnical services will be retained throughout the construction phase, including monitoring and supervision of construction activities on a regular basis.		
MM108	Decommissioning	Appendix 20.1 Management Plan 6 Decommissioning Plan	3.5 Invasive Species Management	Prior to Decommissioning, a suitably qualified (CIEEM accredited) ecologist will complete an invasive species survey of the material proposed for turbine foundation backfilling. The invasive species survey will also be undertaken along the cable route to identify invasive species at joint bay locations where excavation to expose the cabling for removal will be required.		
MM109	Decommissioning	EIAR Chapter 2 Desription of the	3.2 Refueling; Fuel and Hazardous	The following mitigation measures are proposed to avoid release of hydrocarbons at the Site: • Road-going vehicles will be refuelled off site wherever possible. • On-site refuelling will be carried out at designated refuelling area (Planning Drawing No. 803) at the Site.		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
		Proposed Development	Materials Storage	Machinery such as cranes will be refuelled directly by a fuel truck that will come to site as required. • 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. • Fuel volumes stored on site will be minimised. The fuel storage areas will be bunded to 110% of the storage volume. • The plant used 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. Spill kits will be available to deal with an 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. • Vehicles will undergo a visual inspection prior to being permitted to drive onto the proposed site or progress beyond the Contractors' yard. Vehicles will also be in good working order. The Contractors and Ecological Clerk of Works will retain a record of all inspections/findings of Environmental Clerks within Section 4 of the main CEMP document. All records will be made available for discussion during meetings.		
MM110	Decommissioning	Appendix 20.1 Management Plan 6 Decommissioning Plan	3.3 Dust Control	Proposed measures to control dust, the same as those proposed for the construction phase, include: • Any site roads with the potential to give rise to dust will be regularly watered, as appropriate, during dry and/or windy conditions. • Although highly unlikely to occur, the designated public roads outside the Site and along the main		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
		EIAR Chapter 18 Air and Climate		transport routes to the site will be inspected daily by the Site Manager for cleanliness and cleaned if deposits are found. • Material handling systems and material storage areas will be designed and laid out to minimise exposure to wind. • Water misting or sprays will be used in dry and windy if particularly dusty activities are necessary during dry or windy periods. • The transport of soils or other material, which has significant potential to generate dust, will be undertaken in tarpaulin-covered vehicles. • Daily inspection of the site to examine dust measures and their effectiveness. When in dry and/or windy weather and dirt is visible on the roads, sections of the haul route will be swept using a truck mounted vacuum sweeper.		
MM111	Decommissioning	Appendix 20.1 Management Plan 6 Decommissioning Plan EIAR Chapter 13 Noise	3.4 Noise control	Proposed measures to control noise, the same as those proposed for the construction phase, include: • Diesel generators will be enclosed in sound proofed containers to minimise the potential for noise impacts. • Plant and machinery with low inherent potential for generation of noise and/or vibration will be selected. All plant and equipment to be used on-site will be modern equipment and will comply with the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations SI No. 320/1988 and SI No 359/1996. • Regular maintenance of plant will be carried out in order to minimise noise emissions. Particular attention will be paid to the lubrication of bearings and the integrity of silencers. • All vehicles and mechanical plant will be fitted with		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				effective exhaust silencers and maintained in good working order for the duration of the works. • Compressors will be of the "sound reduced" 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. • Machines, which are used intermittently, will be shut down during those periods when they are not in use. • Training will be provided by the Site Manager to drivers to ensure smooth machinery operation/driving, and to minimise unnecessary noise generation. • Local areas of the haul route will be condition monitored and maintained, if necessary. Contractors working on the site and along the site haul routes will be required to have 'white noise' reversing beepers on all dump trucks to minimise the potential for tonal noise.		
MX19	Decommissioning	Decommissioning Plan Section	Section 3	Ecological Clerk of Works will maintain responsibility for monitoring the decommissioning works and Contractors/Sub-contractors from an environmental perspective. The Ecological Clerk of Works will act as the regulatory interface on environmental matters. The Site Manager will be responsible for reporting to and liaising with Louth County Council, Louth County Council and other statutory bodies as required.		
MX20	Decommissioning	Decommissioning Plan Section 3		A suitably qualified and experienced ecologist and any other suitably qualified and experienced professionals such as engineers and geotechnical experts will further advise the Ecological Clerk of Works and Site Manager on works and mitigation measures associated with the Decommissioning phase. This will ensure there is no negative impact on the		

Ref. No.	Reference Heading	EIAR Chapter	Section	Mitigation Measure	Audit Result	Action Required
				environment as a result of the decommissioning of the Proposed Development.		
MX21	CEMP	CEMP Management plan 8 Blast Management plan	Section 1.3	All works on site will cease on site during the blast window prior to the blasting. All site personnel will move to the safe zone (Construction Compound) which is located 500m from the quarry and is outside the danger zone for rock-fly. A rollcall will be taken by the H&S Manager to ensure all personnel are present at the designated safe zone. Once all blasting events are complete all personnel can return to their workstations and work can commence on site.		

7 COMPLIANCE AND REVIEW

7.1 SITE INSPECTIONS AND ENVIRONMENTAL AUDITS

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

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. These staff will have undergone third level educational training and will have experience in a similar role.

7.2 AUDITING

An Environmental audit will first be carried out prior to the decommissioning phase of the Proposed Development to ensure the implementation of mitigation measures. Further environmental audits will be carried on a monthly basis during the construction phase of the project and again after the decommissioning of the wind turbines.

Environmental audits will be carried out by the Ecological Clerk of Works. An impartial and objective approach will be taken. Environmental audits will be conducted at monthly to determine to determine whether the Decommissioning Plan is being properly implemented and maintained. The results of environmental audits will be provided to the contractor.

An audit of compliance with the decommissioning mitigation measures will be completed by the Ecological Clerk of Works during the decommissioning phase of the Proposed Development . The findings of each audit will be documented by the Ecological Clerk of Works in an audit report within the Decommissioning Plan for the site. The audit report will be made available to Louth County Council on request.

7.3 ENVIRONMENTAL COMPLIANCE

The following definitions will apply in relation to the classification of Environmental Occurrences during decommissioning of the proposed wind farm Proposed Development:

- **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 immediate area of the incident.
- **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.

Any of these events will immediately trigger an investigation into the reason for the incident 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 e.g. 25mg/L total suspended solids in waters (Inland Fisheries Ireland, 2016).

7.4 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
- 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 Ecological Clerk of Works 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.

7.5 DECOMMISSIONING PLAN REVIEW

This Decommissioning Plan will be reviewed and confirmed prior to commencement of decommissioning works. Further details will be added to the plan during decommissioning works to adapt to specific situations or site conditions that are encountered that need to be considered by the Plan.