

Appendix I

Kerry Planning Authority - Inspection Purposes Only!



Kerry Planning Authority - Inspection Purposes Only!

**Appendix I
Stability Risk Matrices and Ratings.**



Accounting for Landslide History and Substrate Topology with a view to adjusting calculated FoS ($FoS_{Adj} = \mu_{Topo} * \mu_{Hist}$)		Landslide History (μ_{Hist})		
		No History of Landslides in the vicinity of site.	Some instances of landslides in the vicinity of site	Recorded landslides occurrences within the site
Substrate Topology Characteristics (μ_{Topo})	μ	1	2	4
Substrate is parallel to surface topology.	4	FoS -0.25	FoS -0.5	FoS -0.5
Substrate varies from surface topology to a minor extent.	2	FoS + 0.0	FoS -0.25	FoS -0.5
Substrate varies from surface topology to a significant extent.	1	FoS +0.25	FoS + 0.0	FoS -0.25

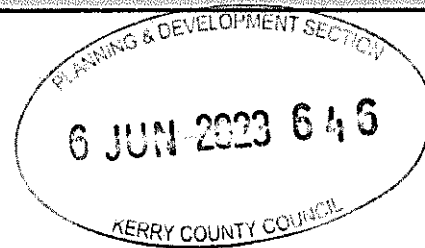
FoS Adjustment Coefficient (μ)	4	8	16
2	2	4	8
1	1	2	4

Ranking Risk re Potential for Adverse Consequences on Sensitive Receptors ($RR_{SF} = \mu_{FoS} * \mu_{SF}$)		FoS re Slope Stability (μ_{FoS})		
		Acceptable (FoS >= 1.3)	Marginally Stable (Acceptable) (FoS = 1-1.3)	Unstable (FoS < 1)
Significant Feature (μ_{SF})	μ	1	2	4
Non-critical infrastructure.	1	Neg.	Neg.	Low
Sensitive receptors e.g. surface water feature	2	Neg.	Low	Mod.
Community, dwellings and buildings.	4	Low	Mod.	High

RR _{SF} Coefficient (μ)	1	2	4
2	2	4	8
4	4	8	16

Accounting for distance to Sensitive Receptors ($RR_D = \mu_{RRSF} * \mu_{Dist.}$)		Distance to Sig. Feature ($\mu_{Dist.}$)		
		>150m	50-150m	<50m
Risk Ranking re Significant Feature (μ_{RRSF})	μ	1	2	4
Neg. (RR _{SF} = 1-2)	1	Neg.	Low	Mod.
Low (RR _{SF} = 4)	2	Low	Mod.	High
Mod. (RR _{SF} = 8)	4	Mod.	High	High
High (RR _{SF} = 16)	8	High	High	High

RR _D Coefficient (μ)	1	2	4
2	2	4	8
4	4	8	16
8	8	16	32



Kerry Planning Authority - Inspection Purposes Only!

Kerry Planning Authority - Inspection Purposes Only!



**MANAGEMENT PLAN 5 –
WASTE MANAGEMENT PLAN**



Kerry Planning Authority - Inspection Purposes Only!

INCHAMORE WIND DAC

INCHAMORE WIND FARM CO. CORK

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

MANAGEMENT PLAN 5 WASTE MANGEMENT PLAN

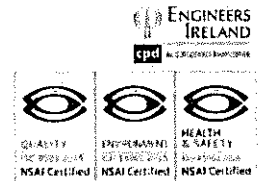
May 2023



Inchamore Wind DAC,
C/O FuturEnergy Ireland,
27/28 Herbert Place,
Dublin 2,
D02DC97,
Ireland.



Jennings O'Donovan & Partners Limited,
Consulting Engineers,
Finisklin Business Park,
Sligo.
Tel.: 071 9161416
Fax: 071 9161080
email: info@jodireland.com



JENNINGS O'DONOVAN & PARTNERS LIMITED

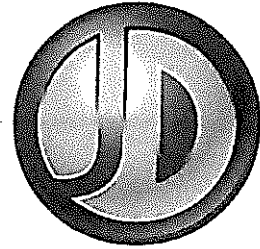
Project, Civil and Structural Consulting Engineers,
 FINISKLIN BUSINESS PARK,
 SLIGO,
 IRELAND.

Telephone (071) 91 61416

Fax (071) 91 61080

Email info@jodireland.com

Web Site www.jodireland.com

**DOCUMENT APPROVAL**

PROJECT	Inchamore Wind Farm	
CLIENT / JOB NO	Inchamore Wind DAC	6226
DOCUMENT TITLE	Construction Environmental Management Plan (CEMP) Waste Management Plan	

Prepared by**Reviewed/Approved by**

Document Final	Name Shirley Bradley	Name David Kiely
Date May 2023	Signature 	Signature

This document, and information or advice which it contains, is provided by JENNINGS O'DONOVAN & PARTNERS LIMITED solely for internal use and reliance by its Client in performance of JENNINGS O'DONOVAN & PARTNERS LIMITED's duties and liabilities under its contract with the Client. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The advice and opinions in this document are based upon the information made available to JENNINGS O'DONOVAN & PARTNERS LIMITED at the date of this document and on current standards, codes, technology and construction practices as at the date of this document. Following final delivery of this document to the Client, JENNINGS O'DONOVAN & PARTNERS LIMITED will have no further obligations or duty to advise the Client on any matters, including development affecting the information or advice provided in this document. This document has been prepared by JENNINGS O'DONOVAN & PARTNERS LIMITED in their professional capacity as Consulting Engineers. The contents of the document does not, in any way, purport to include any manner of legal advice or opinion. This document is prepared in accordance with the terms and conditions of JENNINGS O'DONOVAN & PARTNERS LIMITED contract with the Client. Regard should be had to those terms and conditions when considering and/or placing any reliance on this document. Should the Client wish to release this document to a Third Party for that party's reliance, JENNINGS O'DONOVAN & PARTNERS LIMITED may, at its discretion, agree to such release provided that:

- (a) JENNINGS O'DONOVAN & PARTNERS LIMITED written agreement is obtained prior to such release, and
- (b) By release of the document to the Third Party, that Third Party does not acquire any rights, contractual or otherwise, whatsoever against JENNINGS O'DONOVAN & PARTNERS LIMITED and JENNINGS O'DONOVAN & PARTNERS LIMITED, accordingly, assume no duties, liabilities or obligations to that Third Party, and
- (c) JENNINGS O'DONOVAN & PARTNERS LIMITED accepts no responsibility for any loss or damage incurred by the Client or for any conflict of JENNINGS O'DONOVAN & PARTNERS LIMITED's interests arising out of the Client's release of this document to the Third Party.

Directors: D. Kiely, C. McCarthy

Regional Director: A. Phelan

Consultants: C. Birney, R. Gillan

Senior Associates: R. Davis, M. Forbes, S. Gilmartin, J. Healy, S. Lee, J. McElvaney, T. McGloin, S. Molloy

Associates: B. Coyle, D. Guilfoyle, L. McCormack, C. O'Reilly, M. Sullivan

Company Reg No. 149104 **VAT Reg. No.** IE6546504D



CONTENTS

1	INTRODUCTION	1
1.1	Scope and Requirements	1
1.2	Waste Prevention & Waste Regulations	1
1.2.1	A Circular Economy	1
1.3	Benefits of Waste Prevention	5
1.4	Reference Documentation	6
2	WASTE MANAGEMENT PLAN MINIMUM REQUIREMENTS	6
2.1	Planning	7
2.2	Implementation	7
2.3	Monitoring	7
2.3.1	Checks and Records	7
2.3.2	Waste Inventory	7
2.3.3	Monitoring of Site Waste Management Plan	8
2.4	Completion, Audit and Review	8
2.5	Site Waste Management as Part of Site Induction process	8
3	GENERAL WASTE MANAGEMENT PRINCIPLES	8
4	ANTICIPATED CONSTRUCTION WASTE STREAMS	10
4.1	Waste from Staff Facilities	10
4.1.1	General Waste Generate at Staff facilities	10
4.1.2	Sewage	11
4.2	Concrete	11
4.2.1	Concrete Waste and wash-out water	11
4.3	Chemicals, Fuel and Oils	12
4.3.1	Transport of Diesel/Oils to the site	13
4.3.2	Refuelling on Site	13
4.4	Packaging	13
4.5	Waste Metals	14
5	EXCAVATED MATERIALS	14
5.1	Anticipated materials to be excavated on site	14
5.1.1	Classification and Plan for Excavated Materials on site	14
5.2	Estimated Volumes of Soil	14
5.3	Waste or Not Waste	15
6	PEST CONTROL	16

Appendix A - Licenced Facilities



1 INTRODUCTION

1.1 Scope and Requirements

This Management Plan is a 'live' document that can be reviewed and updated at regular intervals throughout the project life cycle. The Contractor is required to develop and adapt this document in line with the activities of the project being undertaken for the Development. The contractor will approve this Plan (and any future amendments of the document) with the Ecological Clerk of Works prior to any work commencing.

The information in this document forms part of the Construction Environmental Management Plan (CEMP) and is the Site Waste Management Plan for the Project.

The CEMP and the measures detailed in this Waste Management Plan are part of the main requirements for consents for planning permissions. As such, the contractor (and all sub-contractors) on site are obligated to incorporate these waste requirements (contained herein) in all operations.

The general methods and principles detailed within this document will be adhered to by the contractor as they are committed to reduce the resources it uses in the construction work of the Development.

1.2 Waste Prevention & Waste Regulations:

1.2.1 A Circular Economy

On a global level, the linear consumption model of increasing extraction of natural resources and disposal of waste is a major contributor to habitat and biodiversity loss and contributes to global warming. According to the circularity gap report 2020¹, material consumption has trebled from 26.7 billion tonnes in 1970 to 92 billion tonnes in 2017. A primary driver of global habitat loss and deforestation is the extraction of resources, the majority of which are wasted.

Half of total greenhouse gas (GHG) emissions and more than 90% of biodiversity loss and water stress come from resource extraction and processing. A transition to a circular economy offers the possibility of a sustainable alternative future and is a fundamental step towards achieving climate targets and United Nations Sustainable Development Goals (SDGs).

¹ <https://www.circularity-gap.world/2020> [Accessed online 28/03/2023]

The Waste Action Plan for a Circular Economy (Department of Environment, Climate and Communications, 2020) is Ireland's National Waste Policy 2020 – 2025 and is the new roadmap for waste planning and management. This Plan shifts focus away from waste disposal and looks instead to how we can preserve resources by creating a circular economy.

The Plan outlines the contribution of the sector to the achievement of a number of other national plans and policies including the Climate Action Plan². It also matches the level of ambition being shown across the European Union through the European Green Deal³, which encompasses a range of actions supporting circularity and sustainability. To support the policy, regulation is already being used (Circular Economy Legislative Package), or in the pipeline (Single Use Plastics Directive).

Goals of the Waste Action Plan for household and business include:

- Recycling targets for waste collectors
- Standardised bin colours across the State: green for recycling, black for residual and Brown for organic waste.
- Waste recovery levy to encourage recycling
- Waste oversight body to manage consumer rights
- Education and awareness campaign to improve segregation

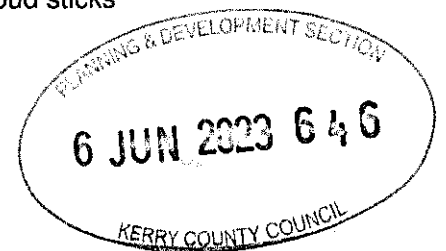
Plastic, packaging and single use plastic goals include:

- Single use items banned from July 2021 include: Cotton bud sticks
 - Cutlery
 - Plates
 - Stirrers
 - Chopsticks
 - Straws
 - Polystyrene containers
 - Oxo-degradable plastic products
- Significantly reduce single use plastics being placed on the market by 2026
- All packaging reusable or recyclable by 2030

Food waste goals include:

² Climate Action Plan 2023 CAP23 Changing Ireland for the Better, Dept of the Environment, Climate and Communications, 2023. <https://www.gov.ie/en/publication/7bd8c-climate-action-plan-2023/> [Accessed online 28/03/2023]

³ A European Green Deal, Striving to be the first climate-neutral continent, European Commission. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en [Accessed 28/03/2023]



- Halve our food waste by 2030
- Waste segregation infrastructure for apartment dwellers
- Sustainable food waste management options for all homes and businesses

Extended Producer Responsibility goals include for:

- Mandatory extended producer responsibility for all packaging producers before 2024 EU Deadline
- New rules for schemes to incentivise good practice in waste recycling and drive better product design
- Producers liable for modulation fees

In terms of construction and demolition wastes, the Plan aims to

- Streamline by-product notification and end-of-waste decision making
- Revision of the 2006 best practice guidelines for Construction and Demolition Waste
- Working group to develop national end-of-waste applications for priority waste streams

The Textiles related goals include:

- Textile action group to explore options to improve future circularity in textiles
- Consider global impacts of the international trade in used textiles
- Work with Irish designers and retailers to promote eco-design for clothing and textiles

Enforcement goals in the Plan include:

- Expanded role for Local Authorities to address priority waste enforcement challenges
- Unauthorised sites action plan and anti dumping toolkit
- Fixed penalty notices for breaches of waste law

Treatment of wastes as part of the Plan include:

- Review state support for development of recycling infrastructure
- Standardise waste streams accepted at civic amenity sites
- Examine legislation and procedures for development of waste management infrastructure

Government leadership on Circular Economy goals include:

- High level all of government circular economy strategy

- Inclusion of green criteria and circular economy principles in all public procurement
- Develop circular economy sectoral roadmaps
- Explore how Ireland's digital sector can accelerate transition to a circular economy

A Resource Opportunity

In 2012, the Department of the Environment, Community and Local Government published the Waste Management Policy in Ireland (DoECLG, 2012). One of its guiding principles is to minimise waste.

The Waste Hierarchy which contractors are obligated to apply: (Source: EC⁴):



The waste management hierarchy applies to all waste, including hazardous waste. The top of the hierarchy indicates that the priority should be in preventing waste being produced in the first place.

The Contractor will:

- Ensure that the disposal and recovery of waste does not present a risk to water, air, soil, plants and animals
- Not allow waste disposal to constitute a public nuisance through excessive noise levels or unpleasant odours, or to degrade places of special natural interest

⁴ European Commission [Accessed Online 03/05/2022]
https://ec.europa.eu/environment/topics/waste-and-recycling/waste-framework-directive_en

- Prohibit the dumping or uncontrolled disposal of waste
- Prepare Waste Management Plans
- Ensure that waste treatment operations are licensed
- Require waste collectors to have special authorization and to keep records
- Ensure that the waste which cannot be prevented or recovered is disposed of without causing environmental pollution.

The EU Integrated Pollution Prevention and Control Directive (Directive 96/61/EC) provides for a permit system for activities including waste management. In adherence with this Directive the Contractor must:

- Be in possession of a waste permit for waste disposal, and
- Be prepared at all times for inspection regarding monitoring of waste activities.

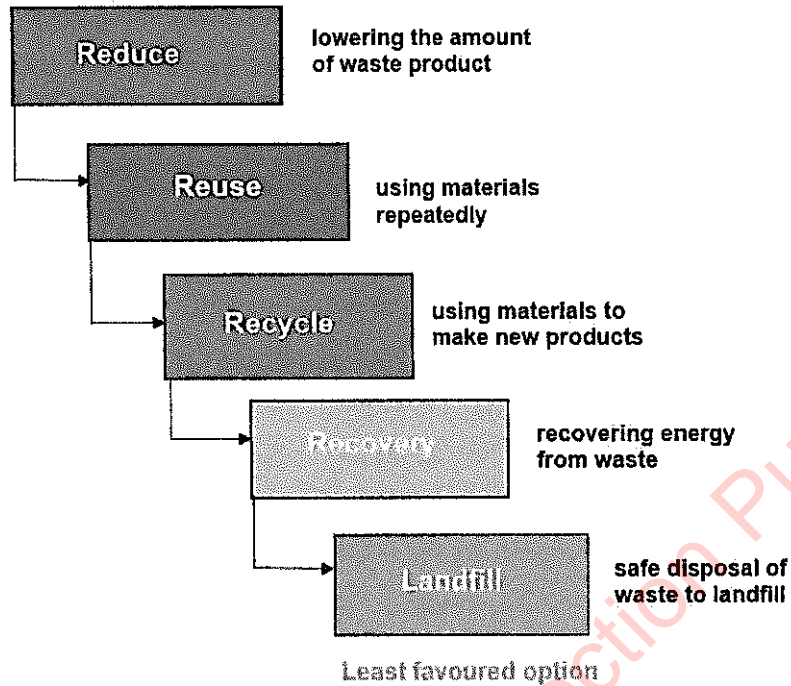
1.3 Benefits of Waste Prevention

The contractor will prevent waste through implementing reduction and effectively managing resources from the design stage of construction to the completion of the construction of the project. This will ensure that:

- Legal obligations are met;
- Waste production is minimised;
- Build costs are minimised;
- A framework for continuous assessment and best practice is implemented, and
- Carbon emissions and negative environmental impacts of and from waste materials are reduced.

The following image explains this in more detail. The least favoured option is to dispose of waste to landfill where embodied energy is not recovered. The Waste Hierarchy (EU Waste Framework Directive, 2008) is outlined below:

Most Favoured Option



1.4 Reference Documentation

As well as the Waste Management Act 1996, as amended, other guidance documents have been used to develop this plan. These include:

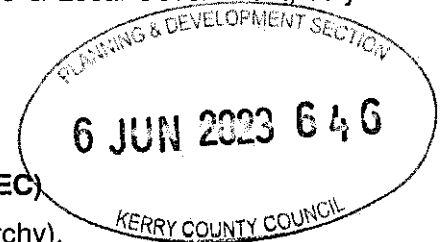
Pollution Prevention Guidelines:

Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of Environment, Heritage & Local Government, July 2006.

EU Directive:

Article 4 of Waste Framework Directive (Directive 2008/98/EC)

This sets out the five steps for dealing with waste (waste hierarchy).



2 WASTE MANAGEMENT PLAN MINIMUM REQUIREMENTS

A Site Waste Management Plan involves the following stages:

- Planning;
- Implementation;
- Monitoring, and
- Review.

2.1 Planning

The planning stage of the Development has taken into account the nature of the site, design of the wind farm, environmental considerations and construction methods to minimise the quantity of waste produced on site during its construction.

2.2 Implementation

This Waste Management Plan will include:

1. An inventory of waste type expected to be produced in the course of the project.
2. Estimates of each type of waste that will be produced in the construction of this wind farm.
3. A statement showing how the contractor will minimise each type of waste to be produced prior to any activity generating this waste.
4. Procedures for identification of the waste management actions proposed for each different waste type, including re-using, recycling, recovery and disposal (in accordance with the waste hierarchy priorities).

2.3 Monitoring

2.3.1 Checks and Records

All stores on site of oil, fuel, chemicals etc will be regularly checked (in particular in extreme weather conditions) for evidence of leaks or spills. The timing of each of these checks is detailed in Section 3. These checks will be visual inspections to look for evidence of contamination.

Records of all visual checks will be maintained and be available for inspection on request. Waste Management will be a regular item on team meetings as required by the CEMP. Waste Management Practices will be revised at these meetings. A waste audit will be carried out every six months (Section 2.3.3 Monitoring of Site Waste Management Plan).

2.3.2 Waste Inventory

A waste inventory will be maintained and kept up to date. It will include an inventory of all waste materials leaving the site for disposal and the name of the licensed operator and intended disposal facility. A Waste Inventory Spreadsheet will be added to this plan by the Contractor.

2.3.3 Monitoring of Site Waste Management Plan

The contractor will appoint a person to implement and monitor the Waste Management Plan. This will be the Environmental Manager.

As stated, the Waste Management Plan will include an inventory of the types and estimates of the waste to be produced on site. The appointed person will ensure that a Site Waste Audit is carried out every six months.

2.4 Completion, Audit and Review

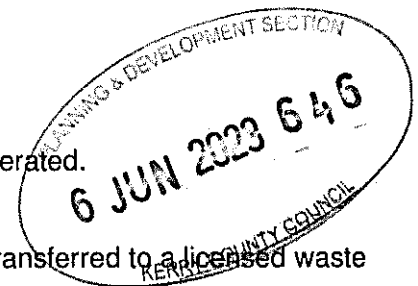
Upon completion of construction works but before the end of the defects correction period, a Waste Management Review will be undertaken. The aim of this is to identify project progress, measure compliance with licenses and to consider lessons learnt. A Waste Management Review will be carried out at the end of construction.

2.5 Site Waste Management as Part of Site Induction process

All workers on-site at the Development will be fully briefed with the Waste Management Plan. All site visitors will be briefed on appropriate waste storage and disposal units. Littering on site will not be tolerated. All personnel have a Duty of Care to challenge others noted littering on site.

3 GENERAL WASTE MANAGEMENT PRINCIPLES

- 3.1 The Contractor will avoid or minimise the volume of waste generated.
- 3.2 All wastes will be stored at the Site Compound until it can be transferred to a licensed waste facility by a waste permit holder. Any wastes arising from the Project will not be stored within a minimum distance of 65 m from watercourses or drains.
- 3.3 Waste storage and disposal will be carried out in a way which prevents pollution in compliance with legislation.
- 3.4 All waste to be transported off-site to a licensed disposal site. The nearest licenced waste facility is over 20 km south-east of the Site in Codrum, Macroom, Co. Cork (Civic Amenity Services). Excavated material along the Grid Connection Route will be removed to a licenced waste facility. A list of waste facilities within the vicinity of the Development has been included in **Appendix A**. Duty of Care Waste Control docketts must be produced and filed on site with each load. These **MUST** detail:



- An adequate description of the waste;
 - Where the waste came from;
 - The appropriate code from the List of Wastes Regulations for the waste (commonly referred to as the European Waste Codes)⁵ ;
 - Information on the quantity and nature of the waste and how it is contained;
 - Names and addresses of the transferor at Inchamore Wind Farm (the person currently in control of the waste) and the transferee (usually either a registered waste carrier or a waste management licence holder (waste manager)
 - The Standard Industry Classification code (2007 or 2003 for hazardous waste only) of the business from where the waste was received
 - Where applicable, indicate that the Waste Hierarchy has been complied with
 - The place, date and time of transfer of the waste. If using a season ticket, the period for which it is valid (i.e., valid from dd/mm/yyyy to dd/mm/yyyy)
- 3.5 Only trained operatives will handle hazardous substances. All stored hazardous waste will be clearly labelled.
- 3.6 All oil storage facilities will be located within the construction compound and will have secondary containment facilities of 110% storage capacity (e.g., bund, enclosure, drip tray). All of these will be regularly inspected for visual signs of leaks or something that would impact on their capacity – e.g., a drip tray full of rainwater.
- 3.7 Waste storage areas will be clearly located and signed. Key waste streams will be separated.
- 3.8 All waste will be transported from site at appropriate frequency by a registered waste contractor to prevent over-filling of waste containers.
- 3.9 Frequency of Checks. The contractor will ensure that all storage facilities are checked on a weekly basis. The checklist for completion is attached below.

⁵ <https://www.epa.ie/publications/monitoring--assessment/waste/2019--FULL-template.pdf>

VISUAL WASTE STORAGE CHECKLIST		
Waste Area Checked	Date Checked	Initials of Checker
GENERAL OFFICE WASTE		
BOWSER		
PORTALOO		
EXCAVATED SOIL		
WASHINGS		
CONCRETE		
OIL		
HAZARDOUS WASTE e.g., 17 05 03* soil and stones containing hazardous substances 6		

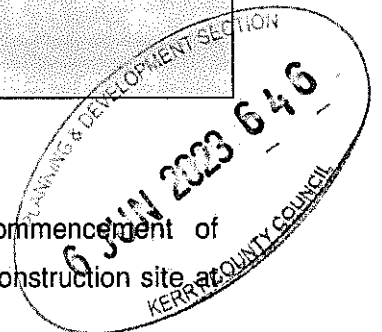
4 ANTICIPATED CONSTRUCTION WASTE STREAMS

As stated previously, the Contractors will outline prior to commencement of construction all anticipated waste streams to be produced at the construction site of the Development.

4.1 Waste from Staff Facilities

4.1.1 General Waste Generate at Staff facilities

There will be the typical waste generated in an office such as left-over food and sandwich wrappers. This is a non-hazardous waste. All such waste will be stored appropriately and safely from wind, rain and wild animals that often tear apart rubbish bags. Provision for separation of waste streams will be provided so that e.g., paper and cardboard waste and bottles may be recycled.



⁶ <https://www.epa.ie/publications/monitoring--assessment/waste/2019--FULL-template.pdf>

4.1.2 Sewage

The self-contained port-a-loo units will be located within the contractors compound and will be managed and serviced regularly (by removal of the contents by tanker to a designated sewage treatment plant such as Ballyvourney/Ballymakeera Wastewater Treatment Plant). Port-a-loo units will be removed off site on completion of construction. Toilet waste is a non-hazardous waste.

4.2 Concrete

4.2.1 Concrete Waste and wash-out water

Precast concrete will be used wherever possible i.e., formed offsite. Elements of the Development where precast concrete will be used have been identified and are indicated in the CEMP. Elements of the Development where the use of precast concrete will be used include structural elements of watercourse crossings (single span / closed culverts) as well as Cable Joint Bays. Elements of the Development where the use of precast concrete is not possible includes turbine foundations and joint bay pit excavations.

Where the use of precast concrete is not possible the following mitigation measures will apply:

- The acquisition, transport and use of any cement or concrete on site will be planned fully in advance and supervised at all times.
- Vehicles transporting such material will be clean upon arrival on site, that is; vehicles will be washed/rinsed removing cementitious material leaving the source location of the material. There will be no excess cementitious material on the vehicle which could be deposited on trackways or anywhere else on site. To this end, vehicles will undergo a visual inspection prior to being permitted to drive onto the proposed site or progress beyond the contractor's yard. Vehicles will also be in good working order.
- Any shuttering installed to contain the concrete during pouring will be installed to a high standard and will be checked for leak potential prior to fills. Additional measures will be taken, for example the use of plastic sheeting or other sealing products at joints.
- Concrete will be poured during metrological dry periods/seasons—This will reduce the potential for surface water run off being significantly affected by freshly poured concrete. This will require limiting these works to dry

meteorological conditions i.e., avoid foreseen sustained rainfall (any foreseen rainfall event longer than 4-hour duration) and/or any foreseen intense rainfall event (>3mm/hour, yellow on Met Eireann rain forecast maps), and do not proceed during any yellow (or worse) rainfall warning issued by Met Eireann. This also will avoid such conditions while concrete is curing, in so far as practical.

- Ground crew will have a spill kit readily available, and any spillages or deposits will be cleaned/removed as soon as possible and disposed of appropriately.
- Pouring of concrete into standing water within excavations will be avoided. Excavations will be prepared before pouring of concrete by pumping standing water out of excavations to the buffered surface water discharge systems in place.
- Temporary storage of cement bound sand (if required) will be on hardstand areas only where there is no direct drainage to surface waters and where the area has been bunded e.g., using sandbags and geotextile sheeting or silt fencing to contain any solids in run-off.
- No surplus concrete will be stored or deposited anywhere on site. Such material will be returned to the source location or disposed of off-site appropriately. A concrete washings area can be seen on **Planning Drawing No. 6226-PL-803**.

4.3 Chemicals, Fuel and Oils

All storage containers of over 200 litres will have a secondary containment of 110% capacity to ensure that any leaking oil is contained and does not enter the aquatic environment. Oil waste is classified as hazardous.

A Chemical and Waste Inventory will be kept. This inventory will include:

- List of all substances stored on-site (volume and description).
- Procedures and location details for storage of all materials listed; and
- Waste disposal records, including copies of all Waste Transfer Notes detailing disposal routes and waste carriers used.
- Any tap or valve permanently fixed to the mobile unit through which oil can be discharged to the open or when delivered through a flexible pipe which is fitted permanently to the mobile unit, will be fitted with a lock and locked shut when not in use.
- Sight gauges will be fitted with a valve or tap, which will be shut when not in use. Sight gauge tubes, if used will be well supported and fitted with a valve.

- Mobile units must have secondary containment when in use/out on site.

Where mobile bowers are used on site guidelines will be followed so that:

- Any flexible pipe, tap or valve will be fitted with a lock where it leaves the container and be locked shut when not in use.
- Flexible delivery pipes will be fitted with manually operated pumps or a valve at the delivery end that closes automatically when not in use. Where possible, a nozzle designed to dispense oil is used.
- The pump or valve will have a lock and be locked shut when not in use.

4.3.1 Transport of Diesel/Oils to the site

Diesel is classified as a dangerous substance. Under the EU Directive 95/55/EC all such dangerous substances will be conveyed in a container that complies with the ADR (Accord Dangereux Routier). As such the manufacturer of each bowser will provide certification to contractors that the following:

- A leak-proof test certificate
- A copy of the IBC approval certificate
- An identification plate attached to the container

For loads in excess of 1000 litres (220 gallons), the bowser vehicle driver will have undergone training and hold a special license.

4.3.2 Refuelling on Site

Where possible all refuelling on site will be within the temporary compound within the re-fuelling area (see **Planning Drawing No. 6226-PL-803**). Only essential refuelling (e.g., cranes) will be carried out, outside of this area, but not within 65m of any watercourse. In such cases a non-permeable High-density Polyethylene (HDPE) membrane will be provided beneath connection points to catch any residual oil during filling and disconnection. This membrane will be inspected and if there is any sign of oil contamination, it will be removed from site by a specialist licensed waste contractor.

All vehicles will be well maintained and free from oil or hydraulic fuel leaks.

4.4 Packaging

Packaging will be brought on site and can include cardboard, wood and plastics used to package turbine components. In accordance with the waste hierarchy, packaging

will be returned to the originator ahead of re-use or recycling. Where this is not possible, waste will be separated as appropriate and safely stored on site appropriately in anticipation of recycling. This waste is non-hazardous.

4.5 Waste Metals

Waste metals from concrete reinforcing etc will have commercial value and will be re-used or recycled with the appropriate licensed waste contractor. This waste is non-hazardous.

5 EXCAVATED MATERIALS

Excavated materials will be required for habitat and ecological restoration, reprofiling and backfilling in accordance with the **Peat and Spoil Management Plan**. As such, excavated materials will not be classified as waste except along the Grid Connection Route.

5.1 Anticipated materials to be excavated on site.

No excavated material will be removed from within the Site Boundary. Road surfacing will be stored in slabs for reuse/recycling.

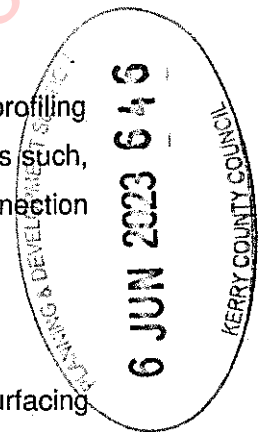
It is anticipated that c. 50,271 m³ of sub-soil and 31,856 m³ of peat will be excavated during construction.

5.1.1 Classification and Plan for Excavated Materials on site

The contractor will liaise with the Local Authority on all aspects of waste management relating to excavated soil to ensure compliance during construction. The Ecological Clerk of Works will ensure all mitigation measures outlined are adhered to. All excavated materials are to be reused on site except that which is excavated along the Grid Connection Route. A list of potential Local Authority licenced facilities in the vicinity of the Development is included in **Appendix A**.

5.2 Estimated Volumes of Soil

Volumes are outlined in a **Peat and Spoil Management Plan** and provided in Management Plan 4 of the CEMP. Whilst there will be significant volumes of soil to be excavated on site during the construction of the Development, excavated material will be used for reinstatement and restoration works. Where this is not possible, e.g., along the Grid Connection Route and Turbine Delivery Route where some soils contain



hydrocarbons (hazardous material), the waste materials will be taken to a licenced facility by an authorised permit holder.

The **Peat and Spoil Management Plan** outlines the re-use proposals for excavated materials.

5.3 Waste or Not Waste

Any excavated materials which are not intended to be disposed of, or discarded, will NOT be considered as waste. It will not be regulated under waste management controls where the following six criteria are ALL met:

- i) Use is a necessary part of the planned works
- ii) Material is suitable for that use
- iii) Material does not require any processing or treatment before it is reused
- iv) No more than the quantity necessary is used
- v) Use of the material is not a mere possibility but a certainty and
- vi) Use of the soil will not result in pollution of the environment or harm to human health

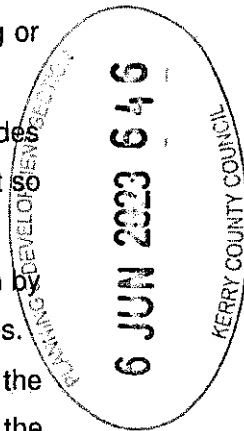
Where excavated soil on site does not meet all of the six criteria listed above, for the purposes of waste description, it would fall under chapter 17 of the European Waste Catalogue (EWC) Construction and Demolition wastes. The EWC code '17 05 04 soil and stones (non-hazardous) waste or 17 05 03* soil and stones containing hazardous substances would apply. This will occur on along the Grid Connection Route and parts of the Off-site Road Upgrade Nodes (turning area off the N22).

The principles of the waste hierarchy will be strictly adhered to avoid and minimise production of excavated soil, and to ensure that all materials are recovered and reused on site.

6 PEST CONTROL

Responsible rodenticide use will be practiced on site. Incorrect use and management of rodenticide can indirectly have a negative impact on wildlife. Best practice use include:

- Pest control on site will be undertaken by a trained professional.
- Rodenticide baits will only be used for as long as is necessary to achieve satisfactory control.
- Good house-keeping and proper waste management practices will ensure there are no food sources available to vermin.
- A record of all bait points and the amount of bait laid will be maintained during the treatment. Activity will be noted at each bait point, including any missing or disturbed baits, as the treatment progresses.
- By carefully recording the sites of all bait points, responsible users of rodenticides will return to these sites at the end of the treatment and remove uneaten bait so that it does not become available to wildlife.
- The bodies of dead rodents may carry residues of rodenticides and, if eaten by predators or scavengers, may be a source of wildlife exposure to rodenticides.
- Regular searches for rodent bodies will be carried out, both during and after the treatment period. Bodies may be found for several days after rats have eaten the bait and rats may die up to 100 metres or more away from the baited site.
- Any rodent bodies will be removed from the Site and disposed of safely using the methods recommended on the label.
- Bait will be sufficiently protected to avoid accidentally poisoning other mammals and birds. Natural materials will be used where possible.
- Bait stations will be appropriate to the prevailing circumstances. They will provide access to the bait by rodents, while reducing the risks of non-target access and interference by unauthorised persons. They will protect the bait from contamination by dust or rain. Their design, construction and placement will be such that interference is minimised.
- On completion of the treatment, records will be updated to signify that the infestation is controlled and that, as far as reasonably practical, all steps have been taken to ensure that the site is now free of rodenticide bait.



WASTE INVENTORY

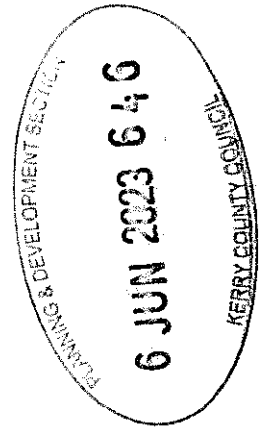
THE CONTRACTOR WILL PREPARE AND UPDATE REGULARLY A WASTE INVENTORY FOR INCLUSION IN THE WASTE MANAGEMENT PLAN

Kerry Planning Authority - Inspection Purposes Only!

Client: Inchamore Wind DAC
Project Title: Inchamore Wind Farm
Document Title: CEMP – Waste Management Plan

Date: May 2023
Project No: 6225
Document Issue: Final

Kerry Planning Authority - Inspection Purposes Only!



APPENDIX A

LICENCED FACILITIES

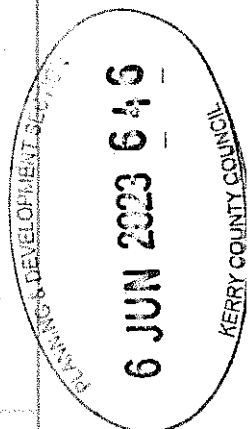


¹Local Authority Waste Facility Register: Cork; 17 05 04

Authorisation Reference	Name	Trading As	Address
<u>WFP-CK-17-0173-01</u>	Martin O'Regan Enterprises Ltd		Derry Berrings Co. Cork
<u>WFP-CK-17-0178-01</u>	Conhor Landfill Limited		Kilnaglory Ballincollig Co Cork
<u>WFP-CK-18-0180-01</u>	Mallow Contracts Limited		Corbally Waterfall Co. Cork
<u>WFP-CK-13-0126-03</u>	O'Flynn Construction Co. Unlimited Company		Knockanemore Ovens
<u>COR-CK-18-0118-01</u>	Greenvalley Plant Hire & Land Reclamation Ltd		Ballyheen South Kanturk Co Cork
<u>WFP-CK-14-0137-02</u>	Conhor Construction Ltd		Aherla Beg Aherla Co. Cork
<u>WFP-CK-20-0203-01</u>	Richard & Denis Carroll Plant Ltd		Clonfadda Macroom Co Cork
<u>COR-CK-10-0029-03</u>	Chris Barry Plant Hire Ltd		Thornhill Waterfall Castletownbere Co Cork
<u>WFP-CK-20-0211-01</u>	Ciaran Ryan Plant Hire Ltd		Gurranenagappul Clondrohid Macroom Co Cork
<u>WFP-CK-20-0212-01</u>	Mallow Contracts Ltd		Carhoo Lower Coachford Co Cork
<u>COR-CK-16-0095-02</u>	Tomas (Thomas) Mullins aka Thomas Mullins (Junior)		Scrahanagown Coolea Macroom Co Cork

¹ <http://www.nwcpo.ie/default.aspx>

Local Authority Waste Facility Register: Kerry; 17 05 04			
Authorisation Reference	Name	Trading As	Address
<u>WFP-KY-15-0007-02</u>	Killarney Waste Disposal Ltd		Sheans East Killarney Co. Kerry
<u>WFP-KY-17-0006-01</u>	Eugene McCarthy	Brendan Cronin Plant Hire	Deerpark Killarney Co Kerry
<u>WFP-KY-20-0006-01</u>	Liebherr Container Cranes Ltd	Liebherr Container Cranes Ltd	Knoppoge Killarney Co. Kerry
<u>WFP-KY-20-0004-01</u>	ML Lynch Civil Engineering Ltd		Brewsterfield Headford Killarney Co. Kerry
<u>WFP-KY-20-0008-01</u>	Jimmy O'Mahony		Gortanahaneboy East Rathmore Co Kerry
<u>WFP-KY-20-0001-01</u>	Healy Rae Plant Hire Ltd		Coologes Kilgarvan Co. Kerry
<u>COR-KY-11-0008-03</u>	Brian Bruton		Dromdoohig More Killarney Co. Kerry
<u>COR-KY-22-0001-01</u>	Kenmare Plant Hire Ltd.,	KPH Construction	Shronederragh Barraduff Killarney Co. Kerry



Local Authority Waste Facility Register: Kerry County; 17 05 03*						
Authorisation Reference	Name	Trading As	Address	Condition	X_ITM	Y_ITM
<u>WFP-KY-18-0001-01</u>	Higgins Waste & Recycling Services Ltd		Knockanacuig The Kerries Tralee Co Kerry V92 Y519	5,550 tonnes per annum limit.	482237	614575

17 05 03* soil and stones containing hazardous substances ²
 17 05 04 soil and stones other than those mentioned in 17 05 03

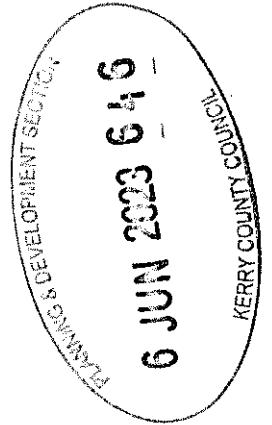
² <https://www.epa.ie/publications/monitoring-assessment/waste/2019-FULL-template.pdf>

Kerry Planning Authority - Inspection Purposes Only!

Client: Inchamore Wind DAC
Project Title: Inchamore Wind Farm
Document Title: Construction Environmental Management Plan

Date: May 2023
Project No: 6226
Document Issue: Final

Kerry Planning Authority - Inspection Purposes Only!



MANAGEMENT PLAN 6 – DECOMMISSIONING PLAN



Kerry Planning Authority - Inspection Purposes Only!

INCHAMORE WIND DAC

INCHAMORE WIND FARM CO. CORK

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

MANAGEMENT PLAN 6 DECOMMISSIONING PLAN

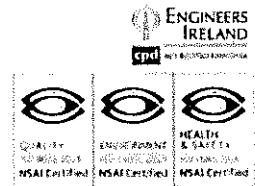


MAY 2023

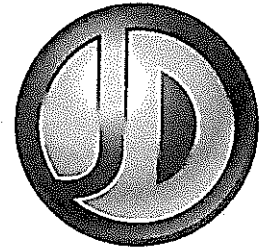
Inchamore Wind DAC,
C/O FuturEnergy Ireland,
27/28 Herbert Place,
Dublin 2,
D02DC97,
Ireland.



Jennings O'Donovan & Partners Limited,
Consulting Engineers,
Finisklin Business Park,
Sligo.
Tel.: 071 9161416
Fax: 071 9161080
email: info@jodireland.com



JENNINGS O'DONOVAN & PARTNERS LIMITED
 Project, Civil and Structural Consulting Engineers,
 FINISKLIN BUSINESS PARK,
 SLIGO,
 IRELAND.



Telephone (071) 91 61416
 Fax (071) 91 61080

Email info@jodireland.com
 Web Site www.jodireland.com

DOCUMENT APPROVAL

PROJECT	Inchamore Wind Farm	
CLIENT / JOB NO	Inchamore Wind DAC	6226
DOCUMENT TITLE	Construction Environmental Management Plan (CEMP) Decommissioning Plan	

Prepared by		Reviewed /Approved by	
Document Final	Name Shirley Bradley	Name Sean Molloy	
Date May 2023	Signature <i>Shirley Bradley</i>	Signature <i>Sean Molloy</i>	

This document, and information or advice which it contains, is provided by JENNINGS O'DONOVAN & PARTNERS LIMITED solely for internal use and reliance by its Client in performance of JENNINGS O'DONOVAN & PARTNERS LIMITED's duties and liabilities under its contract with the Client. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The advice and opinions in this document are based upon the information made available to JENNINGS O'DONOVAN & PARTNERS LIMITED at the date of this document and on current standards, codes, technology and construction practices as at the date of this document. Following final delivery of this document to the Client, JENNINGS O'DONOVAN & PARTNERS LIMITED will have no further obligations or duty to advise the Client on any matters, including development affecting the information or advice provided in this document. This document has been prepared by JENNINGS O'DONOVAN & PARTNERS LIMITED in their professional capacity as Consulting Engineers. The contents of the document does not, in any way, purport to include any manner of legal advice or opinion. This document is prepared in accordance with the terms and conditions of JENNINGS O'DONOVAN & PARTNERS LIMITED contract with the Client. Regard should be had to those terms and conditions when considering and/or placing any reliance on this document. Should the Client wish to release this document to a Third Party for that party's reliance, JENNINGS O'DONOVAN & PARTNERS LIMITED may, at its discretion, agree to such release provided that:

- (a) JENNINGS O'DONOVAN & PARTNERS LIMITED written agreement is obtained prior to such release, and
- (b) By release of the document to the Third Party, that Third Party does not acquire any rights, contractual or otherwise, whatsoever against JENNINGS O'DONOVAN & PARTNERS LIMITED and JENNINGS O'DONOVAN & PARTNERS LIMITED, accordingly, assume no duties, liabilities or obligations to that Third Party, and
- (c) JENNINGS O'DONOVAN & PARTNERS LIMITED accepts no responsibility for any loss or damage incurred by the Client or for any conflict of JENNINGS O'DONOVAN & PARTNERS LIMITED's interests arising out of the Client's release of this document to the Third Party.

Directors: D. Kiely, C. McCarthy
 Regional Director: A. Phelan
 Consultants: C. Birney, R. Gillan

Senior Associates: R. Davis, M. Forbes, S. Gilmartin, J. Healy, S. Lee, J. McElvaney, T. McGloin, S. Molloy
 Associates: B. Coyle, D. Guilfoyle, L. McCormack, C. O'Reilly, M. Sullivan

Company Reg No. 149104 VAT Reg. No. IE6546504D

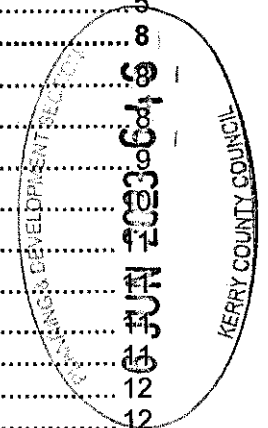


INCHAMORE WIND FARM, CO. CORK

DECOMMISSIONING PLAN

CONTENTS

1	INTRODUCTION	1
1.1	Scope of the Decommissioning Plan	1
2	SITE AND PROJECT DETAILS	3
2.1	Site Location and Description.....	3
2.2	Description of the Decommissioning	3
2.3	Targets and Objectives	4
2.4	Decommissioning Methodologies Overview	5
2.4.1	Introduction.....	5
2.4.2	Decommissioning Methodology	5
3	ENVIRONMENTAL CONTROLS	8
3.1	Site Drainage	8
3.2	Refuelling; Fuel and Hazardous Materials Storage.....	8
3.3	Dust Control	8
3.4	Noise Control	8
3.5	Invasive Species Management.....	8
3.6	Traffic Management	8
3.7	Waste Management Plan	8
3.7.1	Legislation	8
3.7.2	Waste Management Hierarchy.....	12
3.7.3	Waste Arising from Decommissioning.....	12
3.8	Environmental Management Implementation.....	14
3.8.1	Roles and Responsibilities.....	14
4	EMERGENCY RESPONSE PLAN	16
4.1	Emergency Response Procedure.....	16
4.1.1	Roles and Responsibilities.....	16
4.1.2	Initial Steps	17
4.1.3	Site evacuation/Fire Drill	18
4.1.4	Excessive Peat Movement.....	19
4.1.5	Onset of Peat Slide.....	19
4.1.6	Spill Control Measures.....	20
4.1.7	Environmental Investigation	20
4.2	Contact the Emergency Services	21
5	PROGRAMME OF WORKS	23
5.1	Decommissioning Schedule	23
6	MITIGATION PROPOSALS	24
7	COMPLIANCE AND REVIEW	30
7.1	Site Inspections and Environmental Audits.....	30
7.2	Auditing	30
7.3	Environmental Compliance.....	30
7.4	Corrective Action Procedure.....	31
7.5	Decommissioning Plan Review	32



1 **INTRODUCTION**

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

Decommissioning of the 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 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 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 Development and all works associated with the 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.

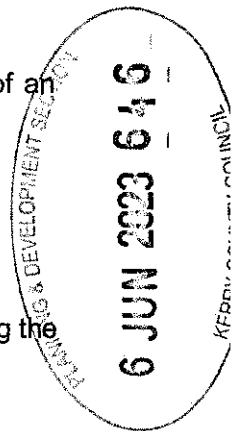
Section 3 sets out details of the environmental controls to be implemented on site including the mechanisms for implementation. A waste management plan is also included in this section.

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 Site, as shown in **Figure 2.1**, is located within an agricultural and forested landscape. Inchamore is situated between Milleeny, Co. Cork, Coomagearlahy, and Derryreag, in Co. Kerry. The nearest settlements are Inchamore which is situated 741 m to the south of the Site Boundary, and the village of Milleeny is located 1 km to the south-east of the Site Boundary. The Site is located 5.9 km west of Ballyvourney, Co. Cork and shares a boundary with the county boundary between Cork and Kerry. It is 54 km west of Cork City, and 23 km north-east of Kenmare, Co. Kerry.

The Site extends to 170 ha, of which a significant area is commercial forest owned by Coillte. The remaining land is third party land and the principal land use in the general area is comprised of a mix of agricultural sheep and cattle grazing, farmland, residential properties and open mountain heath. These existing uses will continue during the operation of the wind farm.

2.2 DESCRIPTION OF THE DECOMMISSIONING

- Removal of five wind turbines and concrete plinths.
- Removal of permanent meteorological mast.
- Removal of all associated underground electrical and communications cabling connecting the wind turbines to the wind farm substation. Ducting is to remain *in-situ*.

All other elements of the proposed development will remain in-situ. The Site Access Roads and all 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 so as to fit on articulated trucks, therefore allowing the use of 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 activity¹. Hardstanding areas will be allowed to revegetate naturally.
- Turbine plinths will be removed, and the hardcore covering turbine foundations will be allowed to revegetate naturally².
- 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 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,

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.



- 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 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, and
- 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 15: Traffic & Transportation** of the EIAR which accompanies 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.

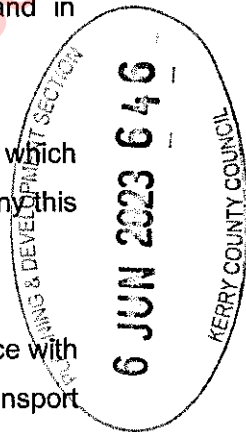
The Met Mast will also be removed as its purpose will cease once the turbines have been dismantled and removed. In addition, the Met Mast is solely a requirement of the operational phase to satisfy EirGrid's requirements.

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 reinstated once the cables are removed. Excavated material will be temporarily stored adjacent to the site of excavation at a height of less than 1 m and at 25 m 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. There will be no need for additional temporary works on access roads for the removal of turbines.

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** (Management Plan 3 of the Construction and Environmental 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 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:

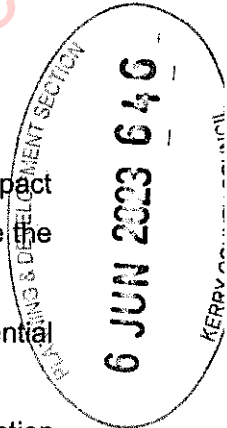
- Any site roads with the potential to give rise to dust will be regularly watered, as appropriate, during dry and/or windy conditions.
- The designated public roads outside the site and along the main transport routes to the site will be inspected daily by the Site Manager for cleanliness and cleaned 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.

During the field surveys of 2020 to 2022, a search for Invasive Alien Species (IAS) listed under the Third Schedule of the European Communities Regulations 2011 (S.I. 477 of 2015) was conducted. No species listed on this schedule were recorded during the surveys.

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 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 Inchamore Wind Farm 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 Development are outlined in **Table 3.1** below.

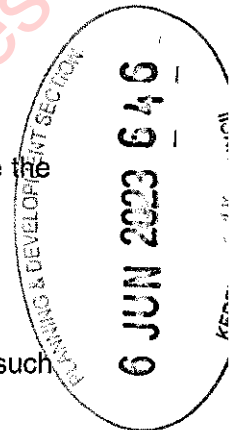


Table 3.1 Waste Types Arising during the Decommissioning Phase

Material Type	Example	EWG 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 Inchamore Wind Farm 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

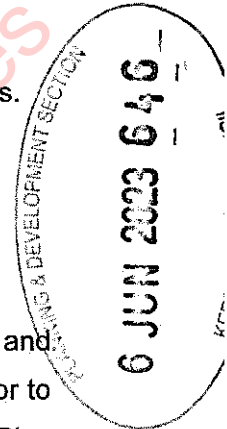
The Waste Management Plan will be properly adhered to by all staff involved in the project and will be outlined within the induction process for all site personnel. Reuse of certain types of decommissioning wastes will cut down on the cost and requirement of raw materials at other sites therefore further 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 Cork 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 Development.

Kerry Planning Authority - Inspection Purposes Only!

4 **EMERGENCY RESPONSE PLAN**

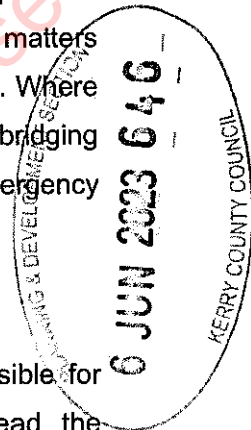
An Emergency Response Plan provides details of procedures to be adopted in the event of an emergency in terms of site health and safety and environmental protection.

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.



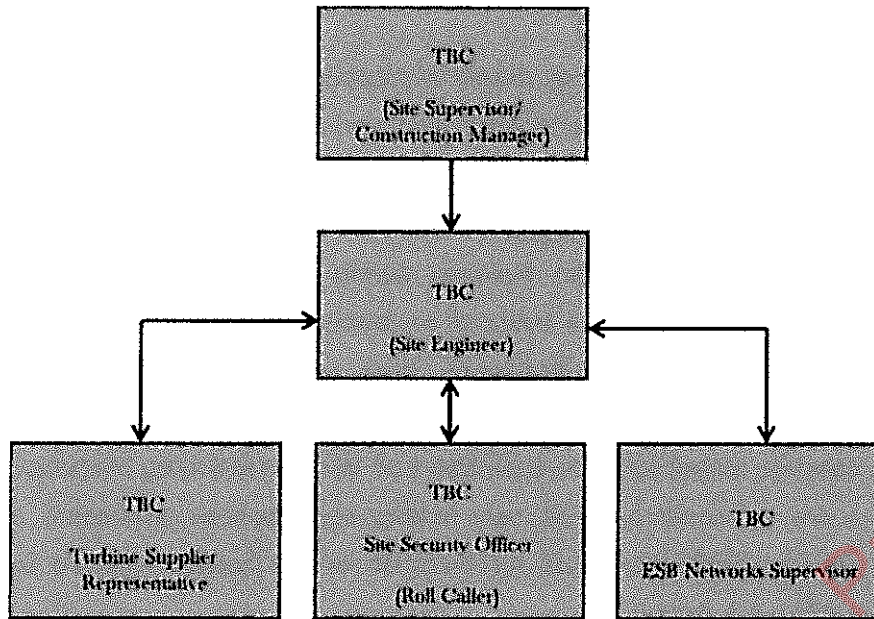


Figure 4.1 Emergency Response Procedure Chain of Command

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.
Peat Instability	Excessive movement of peat on site; onset of peat slide.
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.

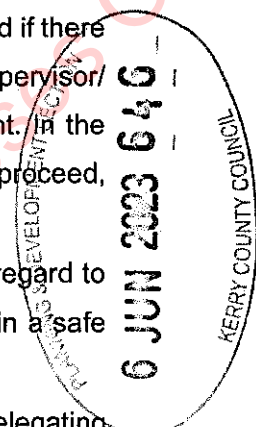
In the event of an emergency situation such as the hazards outlined in Table 4.2 the Site Supervisor/Construction Manager will carry out the following:

- 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 Excessive Peat Movement

The wind farm infrastructure has been designed such that peat will be stable (See **EIAR Appendix 8.1 Site Investigations Report**). No excessive excavation works are proposed for the decommissioning phase. In the unlikely event of excessive peat movement or continuing peat movement recorded at a monitoring location, or identified at any location within the Site, but no apparent signs of distress to the peat (e.g., cracking, surface rippling) (not as a result of the decommissioning of the Wind Farm) then the following shall be carried out:

1. All decommissioning activities shall cease within the affected area.
2. Increased monitoring at the location shall be carried out. The area will be monitored, as appropriate, until such time as movements have ceased.
3. Re-commencement of limited construction activity will only start following a cessation of movement and the completion of a geotechnical risk assessment by a geotechnical engineer.
4. Such detailed monitoring and awareness will further ensure that the potential for a peat slide is absolutely minimised as actions arising from monitoring will reduce the significance of the possible negative effects.

4.1.5 Onset of Peat Slide

Neither the site activities nor the site characteristics are conducive to a peat slide arising as a result of decommissioning. In the highly unlikely event of an onset or actual detachment of peat then the following shall be carried out:

1. On alert of a peat slide incident, all activities will cease and all available resources will be diverted to assist in the required mitigation procedures.
2. For localised peat slides that do not represent a risk to a watercourse and have essentially come to rest the area will be stabilised initially by rock infill, if required. The failed area

and surrounding area will then be assessed by the geotechnical engineer and stabilisation procedures implemented. The area will be monitored, as appropriate, until such time as movements have ceased.

4.1.6 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 Cork County Council, and the Environmental Protection Agency, if deemed necessary.

4.1.7 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 Cork County Council and/or 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: FuturEnergy Ireland	01 6698565
Doctor – Ballyvourney Health Centre	026 45 341
Emergency Services – Ambulance, Fire, Gardaí	999/112
ESB Emergency Services	1850 372 999
Hospital – Cork University Hospital	021 49 22 000
Gas Networks Ireland Emergency	1850 20 50 50
Gardaí – Ballyvourney Garda Station	026 45 002

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.



Kerry Planning Authority - Inspection Purposes Only!



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 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 January has been shown as an indicative start date for decommissioning to commence.

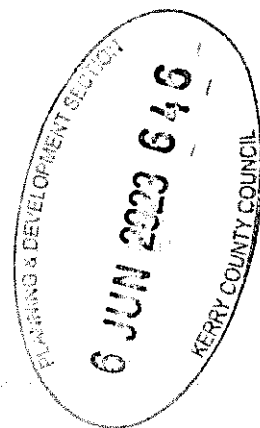
ID	Task Name	Task Description	Q1			Q2			Q3			
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1	Site Health and Safety		[Gantt bar spanning Jan to Jun]									
2	Turbine Decommissioning	Disconnect Power Output	[Gantt bar in Jan]									
3	Turbine and Met Mast Dismantling	Disassemble turbine components and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

Figure 5.1 Indicative Decommissioning Schedule

6 MITIGATION PROPOSALS

The decommissioning 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 decommissioning phase of the project.



Kerry Planning Authority - Inspection Purposes Only!



Table 6.1 Mitigation Measures

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
Decommissioning Phase				
MM1	EIAR Chapter 2 Project Description	This plan will be updated and agreed in writing with Cork County Council.		
MM2	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 environment as a result of the decommissioning of the Development.		
MM3	Decommissioning Plan Section 3	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.		
MM4	EIAR Chapter 2 Project Description Decommissioning Plan Section 2	The approach proposed for decommissioning is one of minimal intervention. <ul style="list-style-type: none"> Decommissioning works will be limited to action necessary to remove the wind farm structures, i.e., removal of turbines, cabling and the monitoring mast. Roads and associated drainage systems will remain in place to serve ongoing forestry and agriculture activity. Hardstanding areas will be allowed to revegetate naturally. 		

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
Decommissioning Phase				
MM5	EIAR Chapter 2 Project Description Decommissioning Plan Section 3	<ul style="list-style-type: none"> Turbine pinrths will be removed, and the hardcore covering turbine foundations will be allowed to revegetate naturally. Soil disturbance will be avoided. A permanent permission is being sought for the substation. It is outside the scope of the decommissioning process. <p>The following mitigation measures are proposed to avoid release of hydrocarbons at the Site:</p> <ul style="list-style-type: none"> 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. 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. 		

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
Decommissioning Phase				
MM6	EIAR Chapter 10 Air and Climate DP Section 3	<p>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.</p> <ul style="list-style-type: none"> 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. <p>Proposed measures to control dust, the same as those proposed for the construction phase, include:</p> <ul style="list-style-type: none"> Any Site Access 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 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. 		

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
Decommissioning Phase				
MM7	EIAR Chapter 11 Noise Decommissioning Plan Section 3	<ul style="list-style-type: none"> 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. <p>No significant construction noise effects have been identified. Therefore, no specific mitigation measures are required. However, general guidance for controlling construction noise through the use of good practice given in BS 5228 will be followed. During construction of the project, activity shall be limited to working times incorporated in any planning permission.</p> <p>During decommissioning noise levels are likely be no more than predicted in the construction phase as similar plant will be utilised. Any legislation, guidance or best practice relevant at the time of decommissioning will be complied with. All construction/decommissioning activities are temporary day time activities.</p>		
MM8	EIAR Chapter 15 Traffic and Transportation	<ul style="list-style-type: none"> Signage will be erected at the site entrance and on the N22 approaching the site. Construction traffic associated with decommissioning will be scheduled so as to avoid school drop off and collection times. 		

Ref. No.	Reference Location	Mitigation Measure	Audit Result	Action Required
Decommissioning Phase				
	Decommissioning Plan Section 3	<ul style="list-style-type: none"> All vehicles using or while in operation at the wind farm site shall either have roof mounted flashing beacons or will use their hazard lights. A speed limit of 25km/h shall apply to all vehicles within the wind farm site. 		
MM9	Decommissioning Plan Section 3	<p>Waste Management is detailed in Section 3.7 of the Decommissioning Plan. A Waste Management Plan detailing the best practice procedures during the decommissioning of the Development will be prepared. 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.</p>		
MM10	Decommissioning Plan Section 3	<p>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 Cork County Council and other statutory bodies as required.</p>		

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 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.

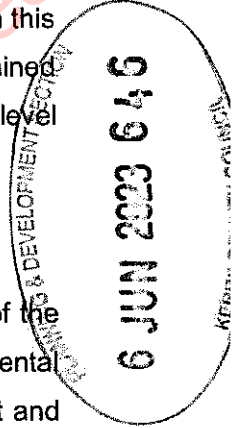
Environmental audits will be carried out by the Ecological Clerk of Works. An impartial and objective approach will be taken. Environmental audits will be conducted at monthly to determine to determine whether the Decommissioning Plan is being properly implemented and maintained. The results of environmental 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 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 Cork 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 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., 25 mg/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:

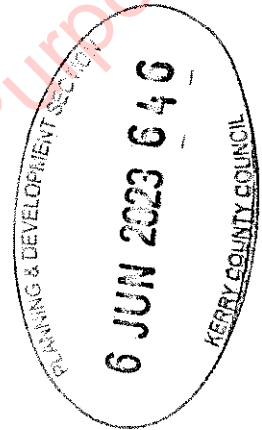
- Environmental Audits
- Environmental Inspections and Reviews
- Environmental Monitoring
- Environmental Incidents
- Environmental Complaints

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.



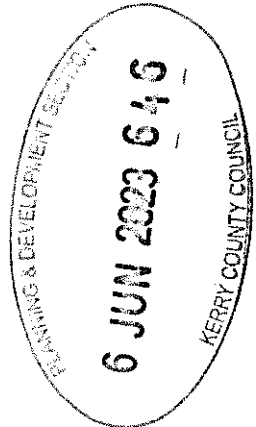
Kerry Planning Authority - Inspection Purposes Only!

Kerry Planning Authority - Inspection Purposes Only!

Client: Inchamore Wind DAC
Project Title: Inchamore Wind Farm
Document Title: Construction Environmental Management Plan

Date: May 2023
Project No: 6226
Document Issue: Final

Kerry Planning Authority - Inspection Purposes Only!



**MANAGEMENT PLAN 7 –
TRAFFIC MANAGEMENT PLAN**



Kerry Planning Authority - Inspection Purposes Only!

INCHAMORE WIND DAC

INCHAMORE WIND FARM CO. CORK

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

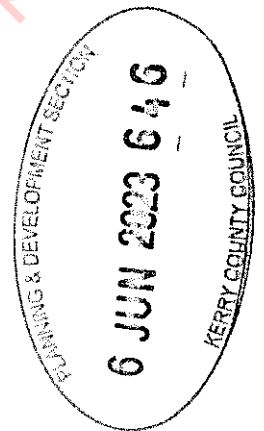
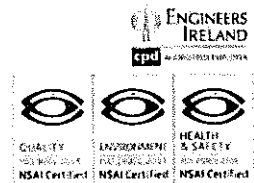
MANAGEMENT PLAN 7 TRAFFIC MANAGEMENT PLAN

MAY 2023

Inchamore Wind DAC,
C/O FuturEnergy Ireland,
27/28 Herbert Place,
Dublin 2,
D02DC97,
Ireland.



Jennings O'Donovan & Partners Limited,
Consulting Engineers,
Finisklin Business Park,
Sligo.
Tel.: 071 9161416
Fax: 071 9161080
email: info@jodireland.com



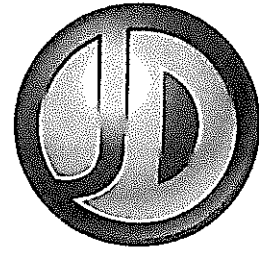
Kerry Planning Authority Inspection Purposes Only!

JENNINGS O'DONOVAN & PARTNERS LIMITED

Project, Civil and Structural Consulting Engineers,
FINISKLIN BUSINESS PARK,
SLIGO,
IRELAND.

Telephone (071) 91 61416
Fax (071) 91 61080

Email info@jodireland.com
Web Site www.jodireland.com



DOCUMENT APPROVAL

PROJECT	Inchamore Wind Farm	
CLIENT / JOB NO	Inchamore Wind DAC	6226
DOCUMENT TITLE	Construction Environmental Management Plan (CEMP) Traffic Management Plan	

Prepared by

Reviewed/Approved by

Document	Name	Name
Final	David Kiely	Sean Molloy
Date	Signature	Signature
May 2023		

This document, and information or advice which it contains, is provided by JENNINGS O'DONOVAN & PARTNERS LIMITED solely for internal use and reliance by the Client in performance of JENNINGS O'DONOVAN & PARTNERS LIMITED's duties and liabilities under the contract with the Client. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The advice and opinions in this document are based upon the information made available to JENNINGS O'DONOVAN & PARTNERS LIMITED at the date of this document and on current standards, codes, technology and construction practices as at the date of this document. Following final delivery of this document to the Client, JENNINGS O'DONOVAN & PARTNERS LIMITED will have no further obligations or duty to advise the Client on any matters, including development affecting the information or advice provided in this document. This document has been prepared by JENNINGS O'DONOVAN & PARTNERS LIMITED in their professional capacity as Consulting Engineers. The content of the document does not, in any way, purport to include any manner of legal advice or opinion. This document is prepared in accordance with the terms and conditions of JENNINGS O'DONOVAN & PARTNERS LIMITED contract with the Client. Regard should be had to those terms and conditions when considering and/or placing any reliance on this document. Should the Client wish to release this document to a Third Party for that party's reliance, JENNINGS O'DONOVAN & PARTNERS LIMITED may, at its discretion, agree to such release provided that:

- JENNINGS O'DONOVAN & PARTNERS LIMITED written agreement is obtained prior to such release, and
- By release of the document to the Third Party, that Third Party does not acquire any right, contractual or otherwise, whatsoever against JENNINGS O'DONOVAN & PARTNERS LIMITED and JENNINGS O'DONOVAN & PARTNERS LIMITED, accordingly, assume no duties, liabilities or obligations to that Third Party, and
- JENNINGS O'DONOVAN & PARTNERS LIMITED accept no responsibility for any loss or damage incurred by the Client or for any conflict of JENNINGS O'DONOVAN & PARTNERS LIMITED's interest arising out of the Client's release of this document to the Third Party.

Directors: D. Kiely, C. McCarthy
Regional Director: A. Phelan
Consultants: C. Birney, R. Gillan

Senior: R. Davis, M. Forbes, S. Gilmartin, J. Healy, S. Lee,
Associates: J. McElvaney, T. McGloin, S. Molloy

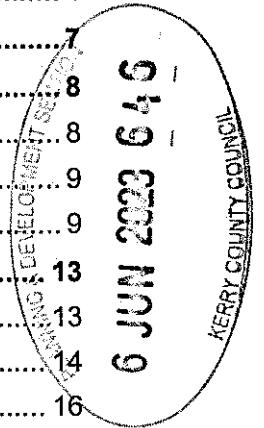
Associates: B. Coyle, D. Guilfoyle, L. McCormack
C. O'Reilly, M. Sullivan

Company Reg No. 149104 VAT Reg. No. IE6546504D



CONTENTS

1	INTRODUCTION	1
1.1	General.....	1
1.2	Objectives.....	1
1.3	Implementation and Monitoring.....	2
2	THE PROJECT.....	2
2.1	Project Location.....	2
2.2	Project Description.....	3
2.3	Site Access and Egress	4
3	EXISTING ROAD NETWORK	7
4	CONSTRUCTION STAGE.....	8
4.1	Programme.....	8
4.2	Hours of Construction	9
4.3	Construction Phase Traffic.....	9
5	CONSTRUCTION PHASE TRAFFIC MANAGEMENT PLAN.....	13
5.1	Consents, Licences, Notifications and Permissions	13
5.2	General Provisions	14
5.3	Site Access and Egress.....	16
5.4	Routing of Construction Phase Traffic.....	17
5.5	Site Specific Temporary Traffic Measures	17
5.6	Enforcement of Traffic Management Plan.....	22
5.7	Emergency Procedures during the Construction.....	22
6	OPERATIONAL AND DECOMMISSIONING PHASES	23
6.1	Operational Phase.....	23
6.2	Decommission Phase	23
7	CONCLUSION.....	25



Kerry Planning & Development Services - Inspection Purposes Only!



1 INTRODUCTION

1.1 General

This document is a Traffic Management Plan (TMP), prepared as an Appendix to the Construction Environmental Management Plan (CEMP).

The TMP is a “living document”. Therefore, any changes which may occur in the planning process and in the detailed construction programme can be incorporated, as can inputs by the Contractor(s), the detailed design team and the Developer. The commitments included within the Environmental Impact Assessment Report (EIAR) and in the CEMP are the minimum commitments that the Contractor shall follow, and others will be developed during the Construction Phase in consultation with the various stakeholders, including the Local Authorities.

1.2 Objectives

This TMP has been prepared prior to the appointment of a Contractor, material suppliers and final Construction Phase programme. It will be updated following grant of planning permission and prior to commencement of any construction works as outlined in Section 3.15 of the CEMP.

The primary objectives of this TMP are to:

- Outline minimum road safety measures to be undertaken at site access/egress locations during the Construction Phase, including approaches to such access/ egress locations.
- Demonstrate to the Developer, Contractor and suppliers the need to adhere to the relevant guidance documentation for such works.

The TMP addresses the following issues which are explained in detail in this report:

- Consent, Licenses, Notifications and Permissions;
- General Provisions;
- Site Access and Egress;
- Routing of Construction Traffic;
- Site Specific Temporary Traffic Measures;
- Enforcement of Traffic Management Plan, and
- Emergency Procedures During the Construction.

1.3 Implementation and Monitoring

The works are likely to be constructed under three separate contracts:

- Turbine Supply Contract;
- Civil Works Balance of Plant Contract, and
- Electrical Works Balance of Plant Contract including Grid Connection.

In addition, forestry will be clearfelled and removed from site by a specialist forestry felling Contractor.

All contracts have the potential to impact on traffic and roads.

The Contractors shall agree and implement measures to monitor the effectiveness of the TMP, in conjunction with the Local Authority and Developer. On finalisation of the TMP, the Contractors shall adopt the plan and associated monitoring measures.

In order to ensure that environmental awareness and compliance is communicated effectively at the start and throughout the construction works, this TMP in conjunction with the CEMP and its contents, will be communicated to all site personnel, including management staff, operative and sub-contractors. The key elements of this CEMP will form part of the site induction which will be mandatory for all employees, Contractors and visitors attending the site. Refer to Environmental Training and Awareness in Section 4.6 of the CEMP.

2 THE PROJECT

2.1 Project Location

The Site, as shown in **Figure 2.1**, is located within an agricultural and forested landscape. Inchamore is situated between Milleeny, Co. Cork, Coomagearlahy, and Derryreag, in Co. Kerry. The nearest settlements are Inchamore which is situated 741 m to the south of the Site Boundary, and the village of Milleeny is located 1 km to the south-east of the Site Boundary. The Site is located 5.9 km west of Ballyvourney, Co. Cork and shares a boundary with the county boundary between Cork and Kerry. It is 54 km west of Cork City, and 23 km north-east of Kenmare, Co. Kerry.

The Development is located within the townlands of Inchamore, Mileeny, Derryreag and Derreenaling.

The overall length of the grid connection between the substation and the existing 220 kV GIS substation at Ballyvouskill is 19.9 km, of which 1.3 km is within the Site. The remaining 18.6 km is located off-road and in third-party lands through the townlands of Inchamore, Derryreag, Derreenaling, Cummeenavrick, Glashacormick, Clydaghroe, Cummeennabuddoge and Caherdowney. The proposed grid connection will consist of underground cables.

Turbine components will be delivered via Ringaskiddy Port, Co. Cork.

The N22 National Primary Road runs in a south-east to north-west direction some 0.9km north of the wind farm site. The Macroom By-Pass (22km new section of the N22) is currently under construction (14km remaining to be constructed) and is expected to be fully open to traffic on the 9th December 2023.

2.2 Project Description

The project will include the construction of 5 No. Wind Turbines, a meteorological mast, an on-site substation and all ancillary works and the construction of an underground grid connection to Ballyvouskill 220kV GIS substation, Co. Cork.

The Development will consist of the following main components:

- Construction of six wind turbines with an overall ground to blade tip height ranging from 177 m to 185 m inclusive. The wind turbines will have a rotor diameter ranging from 149 m to 155 m inclusive and a hub height ranging from 102.5 m to 110.5 m inclusive.
- Construction of permanent turbine hardstands and turbine foundations.
- Construction of a temporary construction compound with associated temporary site offices, parking areas and security fencing.
- Installation of a (35-year life cycle) meteorological mast with a height of 110 m and a 4 m lightning pole on top.
- Development of an on-site borrow pit.
- Construction of new permanent internal site access roads and upgrade of existing internal site access to include passing bays and all associated drainage infrastructure.

- Development of an internal site drainage network and sediment control systems.
- Construction of a permanent 38 kV electrical substation including a control building with welfare facilities, all associated electrical plant and equipment, security fencing and gates, all associated underground cabling, wastewater holding tank, and all ancillary structures and works.
- All associated underground electrical and communications cabling connecting the wind turbines to the wind farm substation.
- Ancillary forestry felling to facilitate construction of the Development.
- All associated site development works including berms, landscaping, and soil excavation.
- Upgrade works on the Turbine Delivery Route to include the following:
- Improvement of an entrance to an existing forest road off the N22 to include localised widening of the road and creation of a splayed entrance, removal of existing vegetation for visibility splays to facilitate the delivery of abnormal loads and turbine component deliveries.

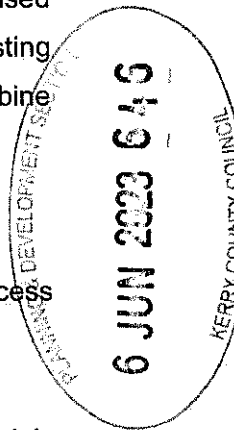
2.3 Site Access and Egress

2.3.1 There are three separate elements of the works which will have somewhat different access routes viz:

- Haul route for delivery of turbine components.
- Haul route for crushed stone, concrete, substation components and other materials for the wind farm site.
- Haul routes for construction of the grid connection.

It is proposed that the turbine and electrical components will be delivered via Ringaskiddy Port, Co. Cork.

- Exit Ringaskiddy Port onto N28.
- At the roundabout, continue on N28.
- At the roundabout, continue on N28.
- At the roundabout, take the 2nd exit onto N28.
- Continue on N28, then take the slip road onto N40.
- Continue on N40 to N22, use the Macroom By-Pass which ends north-west of Ballyvourney (Ballyvourney junction).
- Rejoin the existing N22, Continue on N22, then turn left at site access point at Derryreag. Continue on 2.5km of forest track to the wind farm site.



- On exit, turn left onto N22, then turn right at the island junction at Cummeenavrick and complete a 180 degree turning manoeuvre and continue on the N22.

Figures 2.1 and 2.2 show the turbine component haul route.

2.3.2 While sub-base and base course materials for the internal wind farm site Access Tracks and Turbine Hardstand construction will be sourced from an on site borrow pit, crushed stone will be imported for the final running layer. Specific grades of rock fill may be required as fill under Turbine Foundations. The crushed stone as well as rock fill and concrete for Turbine Foundations, concrete blocks for the construction of the substation building and precast chambers for site cabling will be sourced from one of the local quarries in the area. Concrete, crushed stone and concrete blocks for construction of the Development will come from licenced quarries in the locality such as:

- McGroup Keim Quarry;
- Coppeen Concrete, Enniskeane;
- Mid-Cork Quarries, Gortnadiha;
- McSweeney Bros, Kilmichael;
- Keohane Readymix, Ballygurteen, and
- Murray Bros Tarmacadam Ltd, Ardcahan.

These quarries will also be the source of crushed stone and concrete for grid connection works.

The N22 Macroon By-Pass is a dual carriageway Type 2 road with four junctions:

- Baile Bhuirne (Ballyvourney) grade-separated junction: the tie in with the existing N22 at the western end of the road development west of Baile Bhuirne.
- Tonn Láin (Toolane) grade-separated junction and off-line roundabout: This will provide access to and from the existing N22, to the east of Baile Mhic Íre.
- Gurteenroe grade-separated junction and off-line roundabout: The location where the proposed route crosses the regional road, R582.
- Coolcour roundabout: This is the tie-in with the existing N22 at the eastern end of the road development in the townland of Coolcour.

Two of these junctions are at each end of the by-pass with only two in between.

The materials delivery routes proposed are such as to maximise use of the new N22 Macroom By-Pass and to avoid centres of population such as Macroom, Ballyvourney and Ballymakeery.

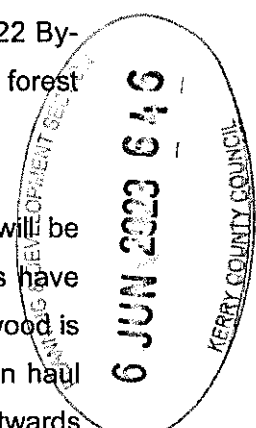
For the quarries to the south, trucks will use the R587, then the R584, then the existing N22 south-eastwards to join the new N22 Macroom By-Pass, will follow the new N22 Macroom By-Pass to the Ballyvourney Junction, then exit onto existing N22 and travel westwards to Derryreag and then follow the existing forest track to the wind farm Site (see **Figure 2.3**).

From Keim, trucks will follow the R582 in a south-easterly direction and join the New Macroom By-Pass (N22) at Gurteenroe Junction. They will then follow the new N22 By-Pass to Ballyvourney Junction and then the existing N22 to Derryreag to access the forest track to the wind farm site (see **Figure 2.3**).

Wood from forestry felling required to accommodate part of the Development will be removed from site once the civil works are complete. Possible suitable locations have been identified in Enniskeane and Lissarda. The proposed route for transporting wood is shown on **Figure 2.4**. This route is effectively the reverse of the civil construction haul route and trucks will leave the wind farm site via the forest track and N22, drive eastwards on the existing N22 to the Ballyvourney junction of the new N22 Macroom By-Pass, follow the By-Pass to either the entrance junction and north-westwards to the R584 or to the Coolcour junction with the existing N22 and then proceed south-eastwards to the L-7489.

- 2.3.3 The proposed grid route is largely independent of the haul routes (see **Figure 2.5**). Leaving the wind farm site, the grid route will follow the forest tracks for c.1.5km as far as the N22 which will be crossed by directional drilling (70m). It will then follow the old route of the N22 (also by directional drilling) for a short distance (c.0.58km) before following forestry tracks to the existing Ballyvouskill Substation. Of the total length of 19.9km, only 0.07km will be within public roads with a further 0.58km under former roads. The majority of the line (18.2km) is within lands under the control of the Developer.

For the grid connection, general material excavated from trenches will be graded on top of or adjacent to the existing tracks. As the N22 will be crossed by directional drilling, very little waste (c.30m³) will arise from drilling. This soil waste will be transported to one or more of the following licensed facilities (see **Figure 2.6**):



- Tomas Mullins, Scrahanagown, Coolea, Co. Cork
- Richard & Dennis Carroll Plant Ltd., Clonfadda, Macroom, Co. Cork
- Ciaran Ryan Plant Hire Ltd., Ballymacorcoran, Clondrohid, Co. Cork
- Séan Ó Luasa, Na Foithrí (Fuhirees), Cúil Aodha, Maighchromth, Co. Chorcaí

Soil and stone spoil from road widening at the site access from the N22 at Derryreagh will be disposed of to the same facilities.

Grid construction traffic for the section of grid south-west of the N22 will be from the N22 at the site access port at Derryreag Td. For the section of the grid connection north-east of the N22, access will be gained from the N22 at Cummeenavrick Td.

The widened front access junction with the N22 at Derryreag for the wind farm site will comply with the requirements of a 2.4m 'X-distance' setback with 'Y-distance' of 160m. The geometry of the junction (once widened) to accommodate articulated vehicles has been confirmed by swept path analysis.

3 EXISTING ROAD NETWORK

The EIAR Traffic and Transport Chapter (Chapter 15) describes the existing surrounding road network to be impacted by the proposed wind farm Development including grid connection. The main routes to the various elements of the works are via the N22, Regional Roads and forest tracks.

Table 3.1 summarises the roads to be impacted by the proposed Development.

Table 3.1: Roads to be Impacted by the Proposed Development

Road Number	Activity Likely to Generate Impact
N22 (incl. By-Pass)	To be used for delivery of wind turbine components, electrical equipment, concrete, reinforcing steel, precast concrete components, crushed stone, building materials, electrical ducts, road surfacing materials for the wind farm, haul route works and grid connection. To be used for removal of forestry logs from the site. May be used for spoil disposal for haul route works and grid works. Will also be used for construction workers travelling to/from the site.
R582, R584, R587, R585, R588, R586, L-4604 & L-4605 L-4624	To be used for the delivery of crushed stone, concrete, precast concrete products. To be used for the delivery of road surfacing for grid connection. May be used for removal of forestry logs.

PLANNING & DEVELOPMENT
 6 JUN 2023 6:46
 KERRY COUNTY COUNCIL

4 CONSTRUCTION STAGE

4.1 Programme

The project will have a construction period of 21 months as follows:

- Mobilisation, Setting Out, Preparatory Work, Environmental Controls Month 1
- Other site establishment works, forest felling Months 2-3
- Civil and Building Works Months 2 – 11
- Electrical Works – substation and wind farm Months 9 –17
- Haul Route Works incl. Clear Span Bridge Months 6 – 9
- Forestry Removal Months 13 – 15
- Turbine Deliveries Months 12 – 16
- Turbine Erection Months 13 – 16



- | | |
|------------------------------|----------------|
| • Turbine Pre-Commissioning | Months 17 – 18 |
| • Construction of Substation | Months 2 -14 |
| • Grid Connection Works | Months 6 -17 |
| • Energisation | Month 18 |
| • Commissioning | Months 19 – 21 |

However, the programme will be dependent on lead times for turbines, transformers and electrical cable as well as weather conditions and the programme could stretch to 24 months.

It is anticipated that, subject to obtaining Planning Permission, securing a grid connection offer under the Enduring Connection Process (ECP) and being successful in obtaining a Renewable Energy Support Scheme (RESS) contract, work could commence during 2026.

4.2 Hours of Construction

The hours of construction activity will be limited to avoid unsociable hours, where possible. Construction operations shall generally be restricted to between 07:00hrs and 19:00hrs on weekdays and between 07:00hrs and 14:00hrs on Saturdays.

However, to ensure that optimal use is made of good weather periods or at critical periods within the programme (i.e. concrete pours or to accommodate delivery of large turbine components along public routes), it may be necessary on occasion to work outside of these hours. Any such out of hours working will be agreed in advance with the Local Authority.

4.3 Construction Phase Traffic

4.3.1 Staff Levels

For the wind farm construction, a peak workforce of 40 persons are anticipated on the main Site. There will be peaks and troughs in the numbers, with the peak workforce during the general Site works.

In addition to the onsite construction workforce, additional construction staff will be required for the grid connection cable laying works. Two gangs will be required for the grid connection. A maximum of 20 construction staff are anticipated. Thus, up to 60 workers could be employed at peak times between the wind farm and grid connection.

4.3.2 Staff Traffic Generations

The 60 workers will generally travel to the Site via light vehicle (LV) (i.e. car or small van) assuming 1 person per vehicle, or 60 trips to and 60 trips from the site per day. This is made up of:

- 40 trips each way to/from wind farm Site.
- 20 trips each way to/from grid construction works.

4.3.3 Construction Vehicles

The construction phase for the proposed Development will result in additional traffic on the roads in the vicinity of the Development. The proposed HGVs will typically be rigid vehicles (i.e. concrete trucks, dump trucks, delivery vehicles) or maximum legal articulated vehicles within normal vehicle loading.

This additional construction traffic will include the following:

- Construction worker vehicles, e.g. cars or vans (light vehicles).
- HGVs carrying conventional earthworks equipment such as an excavator, a roller, stone crusher, forklifts, etc.
- Forestry felling machinery and timber transportation trucks.
- Mobile Cranes.
- Delivery vehicles carrying:
 - Conventional construction materials for the site, e.g. aggregate, concrete, rebar, etc.
 - Conventional construction materials for the substation, e.g. electrical components, bricks, concrete, rebar, fencing, etc.
 - Drainage infrastructure i.e. culverts, clear span bridge, tanks, etc.
 - Met mast, electric cabling, transformers and electrical equipment for the on-site substation.

The main 38/20kV transformer for the substation and the wind turbine components will be abnormal loads. An assessment of these loads have been made based on the details in the EIAR Chapter 15, Section 15.5.1 pending confirmation of the specification during procurement at Construction Stage. The contractor will be responsible for obtaining all associated licenses from the Local Authority or Gardaí during construction for the abnormal loads.



4.3.4 Summary of Peak Additional Traffic Movements on Roads during Construction Phase and Likely Impacts

Section 15.5.1 of the EIAR presents an analysis of the HGV and abnormal loads associated with each of the construction elements.

Referring to Table 15.24 of the EIAR (within Section 15.5.1), the peak times for HGV deliveries will be in months 5 to 11 when the turbine foundations will be constructed, hardstands and Site tracks will be finished in imported stone and the grid connection works will be ongoing. This is estimated to result in a maximum of 485 trips each month with an average of 22 HGV trips per day in this period. Peak deliveries are expected to be during the period of concrete pours for turbine foundations when there will be approximately 140 loads per turbine foundation. If one foundation is poured per month, then the balance of the loads in the busiest month would be 335 loads or 16 loads per day over the remaining days of the month.

The predicted impacts of the additional traffic on roads during the construction phase are discussed in Section 15.5.3 of the EIAR.

Table 4.1 below (Table 15.26 from the EIAR) presents a summary of the peak traffic movements per day on each of the road elements. The various nodes are shown on Figure 4.1.

Table 4.1: Summary of Peak Additional Construction Traffic Movements on Roads

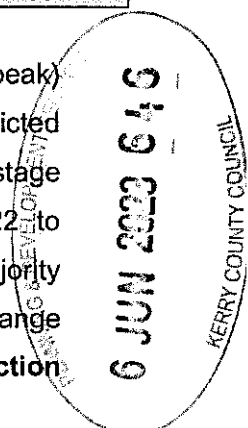
Node	Road	Total No. Of Deliveries	Peak Deliveries/ Month	Peak Deliveries/ Day	Staff	Peak Traffic Movements/ Day
Ringaskiddy to A	Ringaskiddy Port to Coolcour Junction of New N22 Macroom By-Pass	212	45	5	0	10
B to A	Existing N22 between R584 Junction and Coolcour Junction with New N22 By-Pass	2,949	480	150	40	380
Keim to C	Keim to Gurteenroe Junction on New N22 By-Pass	2,949	480	150	40	380
A to C	New N22 By-Pass between Coolcour Junction and Gurteenroe junction	3,161	485	150	60	420

Node	Road	Total No. Of Deliveries	Peak Deliveries/ Month	Peak Deliveries/ Day	Staff	Peak Traffic Movements/ Day
C to D	New N22 By-Pass between Gurteenroe Junction and Ballyvourney Junction	3,161	485	150	60	420
D to E	Existing N22 between Ballyvourney Junction of New N22 By-Pass and L Forest Access at Derryreag	3,161	485	150	60	420
E to F	Existing N22 between Forest Access at Derryreag and Grid Entrance at Cummeenavrick	3,161	485	150	60	420
F to G	Forest Track	944			20	60

The numbers of HGVs generated by the Development (420 movements per day at peak) could be considered as a significant increase on the numbers of HGVs which are predicted to use the existing N22 in 2026 (510) (see Section 15.3.6). However, the construction stage traffic movements between Ringaskiddy Port and Macroom (N28, N40 and N22 to Macroom) will be low at 10 movements (5 deliveries) per day. Assuming that the majority of the route between Ringaskiddy and Macroom has a capacity of 11,600 AADT, the change would be 0.1%. The magnitude of change is considered as being "Very Low" (see Section 15.2.9 of EIAR).

For the existing N22 near Macroom between the R584 and the Coolcour Junction of the new N22 Macroom By-Pass (Nodes B to A), an additional 380 traffic movements per day will arise during concreting of turbine foundations. The predicted flows (see Section 15.3.6 of EIAR) for the N22 for 2027 would be 8,900 – 9,500 AADT around Macroom. Assuming a guidance capacity of 11,600 AADT, adding a further 380 traffic movements would increase flows to 9,280 – 9,880 which would still be within the guidance capacity of 11,600 AADT. The flows would increase by 4.1% which, in terms of magnitude, are considered as being "Very Low" (see Section 15.2.9 of EIAR).

For the new N22 Macroom By-Pass, the peak additional 420 traffic movements per day will arise during concreting of turbine foundations. The predicted flows for the new N22 Macroom By-Pass for 2027 are 11,100 to 11,200 AADT (see Section 15.3.6). This is 56% of the guidance capacity of 20,000 AADT. Adding a further 420 movements would increase the 2027 flows to 11,490 to 11,590 which is still well within the guidance capacity of 20,000.



The flows would increase by 3.8% which, in terms of magnitude, are considered as being “Very Low” (See Section 15.2.9 of EIAR).

From the analysis above, the significance of the impacts are assessed (with reference to Table 15.6 of EIAR) and are presented in Table 15.24 of EIAR. The significance of the impacts are “Negligible” to “Minor” on the N22 (existing and new Macroom By-Pass).

5 CONSTRUCTION PHASE TRAFFIC MANAGEMENT PLAN

The Contractors shall develop and take account of the commitments imposed within this TMP. The following are the commitments made at the planning stage of the project which shall be further developed by the Contractor and agreed with the Roads Authorities, prior to works commencing on site:

- General Provisions
- Site Access & Egress
- Routing of Construction Phase Traffic
- Site Specific Temporary Traffic Measures
 - Traffic Management Logistics
 - Traffic Management Speed Limits
 - Traffic Management Signage
 - Road Closures
 - Timings of Material Deliveries to Site
 - Abnormal Load
 - Road Cleaning
- Enforcement of Traffic Management Plan and
- Emergency Procedures During the Construction.

5.1 Consents, Licences, Notifications and Permissions

The key consents, licences, notifications and permissions likely to be required for the project with regards to traffic and roads are summarised as:

- Planning permission and associated planning compliance.
- Abnormal loads – it is envisaged that permits will be required for the abnormal loads that will be required for the delivery of the transformer and turbine components to the site.

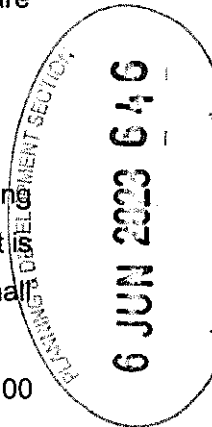
- Road opening licences for underground cable works, junction upgrade works, foundations in the public roadway etc.
- Approval of temporary traffic management plans.
- Road closures and diversions.
- Permission for works outside of standard construction operation hours agreed with Kerry County Council and Cork County Council.
- Permission from the Motorway Maintenance and Renewal Contractor (MMaRC) / Public Private Partnership Contractor (PPP) on the relevant national roads.

The above list is non-exhaustive but identifies the key consents, licenses, notifications and permissions required for the project. This list will be further populated as required through planning compliance and stakeholder engagement to ensure that any further consents are identified as early as possible and do not impact on the construction programme.

5.2 General Provisions

The construction traffic impacts of the proposed Development have been identified as being temporary in nature. It is important that any impact caused by the proposed Development is minimised as far as possible and, considering this the following mitigation measures shall be included in future developments of this TMP:

- Traffic movements will be limited to 07:00 - 19:00 Monday to Friday and 07:00 – 14:00 Saturday, unless otherwise agreed in writing with Kerry County Council and with Cork County Council.
- HGV movements will be restricted during peak road network hours (including morning school hours) from 08.30 – 09.30 and 17.00 - 18.00 Monday to Friday, unless otherwise agreed in writing with Kerry County Council and with Cork County Council.
- No parking shall be permitted along the access route for unloading or activities that result in blockages of access routes. Such vehicles will be immediately requested to move to avoid impeding the works and traffic on the road network.
- Measures to remove queuing of construction traffic on the adjoining road network including turning space and queuing of convoy HGVs will be provided within the site (i.e. one-way internal access track loop system and passing bays).
- Wheel wash equipment will be used on site to prevent mud and stones being transferred from site to the public road network.



- Activities generating dust will be minimised where practical during windy conditions. Loads will be covered on arrival and departure from site, where required. Other measures are outlined in the CEMP.
- Clear construction warning signs will be placed on the public road network to provide advance warning to road users to the presence of the construction site and slower moving vehicles making turning manoeuvres.
- Access to the construction site will be controlled by on site personnel and all visitors will be asked to sign in and out of the site by security / site personnel and site visitors will all receive a suitable Health and Safety site induction.
- Security gates will be sufficiently set back from the public road, so that vehicles entering the site will stop well clear of the public road.
- Passing bays located within the main Wind Farm site will have dimensions of 5.0m x 50m long.
- Compound locations have been identified for storage, site offices and welfare facilities.

The final TMP will also include provision by the appointed Contractor, for details of intended construction practice for the development, including:

- Traffic Management Co-ordinator – a competent traffic management co-ordinator will be appointed for the duration of the project and this person will be the main point of contact for all matters relating to traffic management.
- Delivery Programme – a programme of deliveries will be submitted to Cork County Council in advance of the delivery of the turbine components to site.
- Information to locals – local residents in the area will be informed of any upcoming traffic related matters, e.g. temporary lane/road closures (if required) or any night deliveries of turbine components, via letter drops and posters in public places. Information will include the contact details of the Developer's representative (Community Liaison Officer), who will be the main point of contact for all queries from the public or local authority during normal working hours. An "out of hours" emergency number will also be provided.
- Pre and Post Construction Condition Survey:
 - A pre-condition survey of roads on approach to the site (N22 between Cummeenrick and Ballyvourney Junction of Macroom By-Pass) will be carried out prior to construction commencement to record the condition of the road.
 - A post construction survey will be carried out after works are completed.

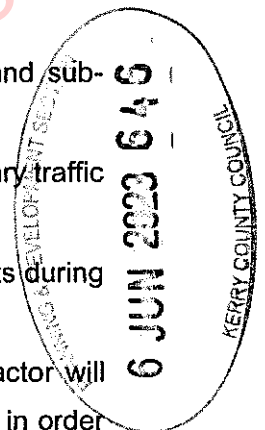
- Impacts on the road condition as a result of the proposed Development will be rectified and the road condition returned at least to its original condition.
- The timing of these surveys will be agreed with Kerry County Council and Cork County Council.
- Liaison with Local Authorities – liaison with Kerry County Council, Cork County Council and other Local Authorities, including the roads and transport section, through which the delivery route traverses and An Garda Síochána, during the delivery phase of the abnormal loads, wherein an escort for all convoys may be required.
- Temporary Alterations – implementation of temporary alterations to road network at critical junctions.
- Travel plan for construction workers – a travel plan for construction staff and sub-contractor construction staff.
- Temporary traffic signs – As part of the traffic management measures, temporary traffic signs will be put in place.
- Traffic Management Operatives (TMOs) will be present at all site access points during peak delivery times.
- Delivery Times of Large Turbine Components – The Turbine Supply Contractor will include the option to deliver the larger wind turbine plant components at night in order to minimise disruption to general traffic during the construction stage.
- All vehicles using or while operating within the wind farm site shall either have roof mounted flashing beacons or will use their hazard lights.

The Traffic Management Plan (TMP) will be updated by the Contractors (on appointment) and agreed with the Planning Authorities prior to commencement of development in the event of a grant of permission.

5.3 Site Access and Egress

At the proposed access points to the proposed Development, visibility splays shall be provided and maintained in accordance with the TII guidelines of a 2.4m setback over a length of 160m in both directions. To ensure a safe working access for all construction vehicles on the Wind Farm, these works will be required to be undertaken in advance of all other activities on the site utilising this access.

At the forest junction at the N22 (wind farm access), bitumen macadam surface will be provided some 30m into the junction with room to park HGV's clear of the N22. The forest



access track will be regraded so as to reduce the gradient towards the N22. An "Aco" type drain shall be provided (near the joint with the hard shoulder of the N22) to intercept rainfall run-off. All the traffic to the wind farm site will approach from the east such that they turn left at the forest access. All traffic leaving the wind farm site will turn left only and, if required, can turn around at Cummeenavrick. Signage and road markings will be provided to facilitate/promote these manoeuvres.

The Contractors shall be required to utilise a safe system of traffic management, including the use of Traffic Management Operatives (TMOs) for the control of traffic during access / egress operations at the wind farm site access location during the peak construction activities (e.g. during the 6 days of delivery for the turbine foundation concrete pours).

5.4 Routing of Construction Phase Traffic

The proposed haul roads were identified based on review of existing quarry sources, principal road networks (i.e. national and regional) and consultation with the local authorities. The haul routes utilise the national and regional road network as much as feasible. All construction traffic to the wind farm site and grid connection will arrive via the N22. As detailed in Section 4.3.4, the majority of materials delivered to site will be delivered using maximum legal articulated lorries or smaller vehicles.

Project construction HGV traffic will be directed away from communities and sensitive receptors (i.e. schools, dense residential areas, urban centres) where possible to minimise the effect on these communities.

Other Construction Materials such as stone fill required for internal access tracks, concrete, fencing materials and landscaping elements will be sourced by the relevant Contractors. Such material deliveries are envisaged to utilise one of the haul routes identified in **Figure 2.3**. The Contractors shall be required, in the further development of the TMP, to confirm the specific sources and proposed haul routes for all material supplies.

5.5 Site Specific Temporary Traffic Measures

The specific details of each temporary traffic measure shall be developed by the Contractor(s) for each site access in consultation with the Roads Authority, An Garda Síochána and other Emergency services, before being submitted to the Roads Authority for formal approval prior to any works taking place.

Where reasonably practicable, consideration will be given to the scheduling of deliveries so as to avoid/consider:

- Particularly high traffic volumes due to sporting or other events
- Adverse weather conditions
- Emergency access

If the night-time or weekend Temporary Traffic Management (TTM) measures varies from daytime plan, a separate TTM will be prepared to be approved by the Roads Authority.

On completion of the works, the traffic management measures are to be removed when the road is safe and free from obstructions, all reinstatement of road surfacing is completed and all permanent signs, road markings and other items are in place.

5.5.1 Traffic Management Systems / Logistics

The Contractor as a minimum shall employ the following traffic management systems and logistics to facilitate the safe transport of materials to and from the proposed Development.

5.5.1.1 Traffic Management Operatives (TMOs)

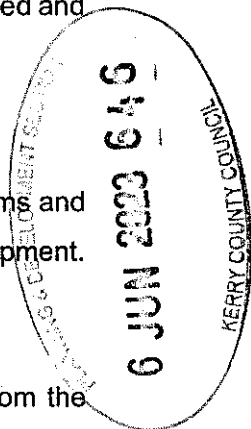
No pinch points are present on the public road during the delivery of materials from the sources on the haul routes to the site access on the N22. It is not envisaged that TMOs would be required at the N22 access during average construction traffic volumes. They will be provided during concrete pours for turbine foundations. The road has adequate width for vehicles to turn into the site and advanced warning signage is proposed. During peak construction activities, the appointed Contractor may require TTM (i.e. stop / go system) at the site access to facilitate movement of construction vehicles off site if in convoy.

TMOs will be required within the wind farm site to manage the movement of HGVs within the internal layout, in particular during peak construction activities such as during concrete pours for turbine foundations.

The requirement for TMOs in conjunction with pilot vehicles for the wind turbine component delivery will be confirmed by the appointed Contractor in consultation with the specialised haulage provider, An Garda Síochána and the Local Authority.

5.5.1.2 Convoy System

A convoy system shall be employed by the Contractor, applied to HGVs departing the site, involving:



- Traffic management operatives at the proposed Development access / egress points. The TMOs shall restrict HGVs exiting the site, to facilitate the development of a convoy system (maximum 4 no. HGVs).
- Suitable spaces shall be made available within the site for queuing of HGVs (i.e. passing bays and at widened crossing points / site accesses).
- Traffic management operatives shall be stationed at the wind farm site entrance with suitable intercommunication system (i.e. radio) to control the release of the convoy system between the main site and the forestry access to the N22.
- The convoy shall have separation between convoys to facilitate use of the public road network in the absence of construction HGV movements.

5.5.2 Traffic Management Speed Limits

It shall be noted that where a temporary speed limit is deemed appropriate by the contractor(s) to facilitate the Construction Phase activities along the public roads serving the proposed Development, it shall be a requirement for the appointed Contractor to liaise with the relevant Roads Authority for the purpose of obtaining a temporary speed limit.

Adherence to posted / legal speed limits will be emphasised to all staff / suppliers and Contractors during induction training. In speed zones greater than 60km/h, drivers of construction vehicles / HGVs will be instructed that vehicular movements in sensitive locations, such as schools and local community areas, shall be restricted to 60 km/h. Such advisory speed limits will only apply to Construction Phase haulage traffic and shall not apply to general traffic. It is not proposed to signpost such speed limits in the interest of clarity for local road users.

Within the wind farm site, the speed limit shall be 25km/h.

5.5.3 Traffic Management Signage

Signage for temporary traffic measures shall be provided in accordance with the Department of Transport's Traffic Signs Manual, August 2019 - Chapter 8 – Temporary Traffic Measures and Signs for Roadworks (or any subsequent update of the standards that will be in place at the time of construction).

Advanced warning signs will be used to alert drivers to the unexpected road layout. Clear construction warning signs shall be placed at adjacent roads and the entrances, to advise the general public of the presence of construction sites and activities. All permanent road

signs contrary to the proposed roadworks will be covered for the duration of the works and uncovered on removal of the temporary traffic management measures.

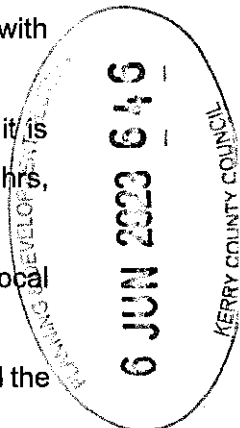
Signage showing the route of the Bearna to Breiffne Way will be provided and maintained during the construction phase.

5.5.4 Timing of Material Deliveries

In order to reduce impacts on local communities and residents adjacent to the proposed sites, it is proposed that:

- Construction activities will be undertaken based on a six-day working week, with deliveries between 07:00-19:00 on weekdays and 07:00-14:00 on Saturdays.
- HGV deliveries shall avoid passing schools at opening and closing times where it is reasonably practical. Deliveries are restricted between the hours of 08:00 and 09:00hrs, the school morning peak and peak traffic on the road network.
- Construction activities and deliveries outside these hours shall be agreed with the Local Authorities in advance.
- The Contractors shall liaise with the management of other construction projects and the local authority to co-ordinate deliveries.
- The Contractors shall schedule deliveries in such a way that construction activities and delivery activities do not occur during peak traffic flows or run concurrently, such as:
 - avoiding pouring of concrete on the same day as other large material deliveries to site in order to avoid conflicts between vehicles.
 - staggering the pouring of concrete on different days.
- HGV deliveries to the Development site will be suspended on the days of any major events (i.e. sporting, agricultural etc), that have the potential to cause larger than normal traffic volumes on the existing road network, in the vicinity of the works.
- The Contractor will be required to interact with members of the local community to ensure that deliveries will not conflict with sensitive events such as funerals.
- It is likely that some deliveries will be required to be undertaken outside these hours. For example, during large concrete pours or other essential continuous operation whereby the continuous delivery of material will be required. Such deliveries will be agreed in advance with Cork County Council and with Kerry County Council.

The scheduling of material deliveries is required in order to facilitate the implementation of traffic management activities at the site and the works zones within the site. It will also impact on the offsite works locations for the abnormal loads advanced works. A convoy



system shall be employed for HGVs departing the proposed Development to reduce the frequency of isolated HGV movements on the public road network as much as practicable.

5.5.5 Abnormal Loads for Turbine Components

A total of 107 no. abnormal loads for turbine components are anticipated to be transported to the site along the abnormal loads haul route identified in **Figure 2.2** associated with the delivery of anchor cages, tower sections, nacelles, blades, transformers, panels and cabling, crane establishment and removal. It is envisaged that these loads will be moved outside of normal hours as night-time works in convoys. A maximum of 3 turbines (i.e. all tower, nacelle and blades) will be delivered to site per month. The convoys are anticipated to have 3 or 5 no. abnormal loads per convoy with deliveries over a maximum of 17 days or a minimum of 10 days.

The Contractor shall ensure that the haulage of these abnormal loads is done in conjunction with an Gardaí Síochána and the Roads Authorities. The appointed Contractor and their haulage provider will be responsible for obtaining all necessary permissions and licences from the local authorities and Gardaí.

5.5.6 Road Closures

In order to facilitate the grid connection of the proposed wind farm to the national grid, a connection between the proposed site and Ballyvouskil Substation is required, see **Figure 2.5**. This requires a crossing of the N22. The N22 cable laying crossing will be by hydraulic directional drilling.

No Road closures are required.

5.5.7 Road Cleaning

Regular visual surveys of the road network in the vicinity of the sites will be carried out. Where identified / required, the Contractor shall carry out road sweeping operations, employing a suction sweeper to remove any project related dirt and material deposited on the road network by construction / delivery vehicles. It shall be a requirement of the works contract that the Contractor(s) will be required to provide wheel cleaning facilities, and any other necessary measures to remove mud and organic material from vehicles. In addition, the cleaning of delivery lorries such as concrete delivery lorries shall be carried out at the material storage yard as outlined in the CEMP.

5.6 Enforcement of Traffic Management Plan

The appointed Contractor will further develop this TMP in consultation with the Road Authorities. The Contractor will, during the development and adoption of the TMP, agree and implement an appropriate way of monitoring the effectiveness of the plan.

All project staff and material suppliers will be required to adhere to the Traffic Management Plan. Inspections / spot checks will also be carried out by the Contractor(s) to ensure that all project staff and material supplies follow the agreed measures adopted in the Traffic Management Plan.

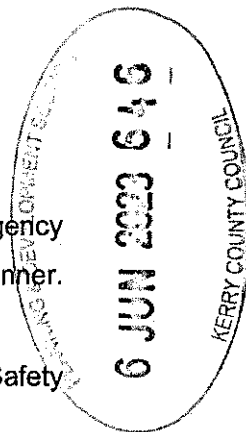
5.7 Emergency Procedures during the Construction

In the case of an emergency, the following procedure shall be followed:

- Emergency Services will be contacted immediately by dialling 112.
- Exact details of the emergency/ incident will be given by the caller to the emergency line operator to allow them to assess the situation and respond in an adequate manner.
- Follow the instructions of the Local Authorities and An Garda Síochána.
- The emergency will then be reported to the Site Team Supervisors and the Safety Officer.
- Where required, appointed site first aiders will attend the emergency immediately.
- The Safety Officer will ensure that the emergency services are enroute.

It is important that during the Construction Phase, emergency services can gain ready access to any property along the Haul Road or in the vicinity of any of the Infrastructure sites, or indeed can gain priority usage of any Haul Road. Emergency procedures will be agreed, and contact numbers provided to the local Emergency Services. On being notified of a priority condition, all construction vehicles will be directed to give right of way to the emergency vehicles until the need for priority access has passed.

With respect to an emergency condition arising on any of the sites, priority access to and from these sites will be given to ambulance or fire tenders.



6 OPERATIONAL AND DECOMMISSIONING PHASES

6.1 Operational Phase

On completion of the construction works, and when the wind farm is operational, the majority of the traffic generated for the operation of the site will be for routine maintenance by a small van or four by four. The access to the wind farm site will not be via the forest junction of the N22 at Derryreag which was the main construction haul route.

The site will be regularly accessed for forestry proposes similar to the existing background traffic generated.

All vehicles using the wind farm site shall either have roof mounted flashing beacons or will use their hazard lights.

A speed limit of 25km/h shall apply to all vehicles within the wind farm site.

Internal wind farm signage shall be maintained throughout the operational period.

Road surfaces shall be inspected on a quarterly basis and any maintenance work identified shall be completed within one month of the inspection.

Overall, due to the relatively low operational and recreational traffic, it is envisaged that the operational impacts of the proposed Development will be slight when compared to the existing background traffic.

As the site accesses for construction have been designed as new or upgraded in accordance with the TII DN-GEO-03060 (Geometric Design of Junctions), adequate visibility splays are available from the accesses in both directions. Minor maintenance of hedgerows and vegetation to maintain the required visibility shall be required.

The arrangements for access/egress at the junction will be reviewed every two years to confirm or otherwise if the entry from the east only and exit to west only will apply.

6.2 Decommission Phase

The wind turbines proposed as part of the proposed Development are expected to have a lifespan of up to 35 years. Following the end of their useful life, the wind turbines may be

replaced with a new set of machines, subject to planning permission being obtained, or the site may be decommissioned fully, with the exception of the electricity substation.

Upon decommissioning of the proposed wind farm, the wind turbines will be disassembled in reverse order to how they were erected. All above ground turbine components will be separated and removed off-site for recycling. Turbine foundations will remain in place underground and will be covered with earth and allowed to revegetate or reseeded as appropriate. Leaving the turbine foundations in-situ is considered a more environmentally prudent option, as to remove that volume of reinforced concrete from the ground could result in potentially significant environment nuisances such as noise, dust and/or vibration. The site roadways will be in use for additional purposes to the operation of the wind farm (e.g. for forestry and recreational use) by the time the decommissioning of the project is to be considered, and therefore the site roads will remain in situ for future use. If it were to be confirmed that the roads were not required in the future for any other useful purpose, they could be removed.

The turbine blades can be cut into manageable lengths on decommissioning reduces the requirement for adjustments to signage and sheet furniture for decommissioning.

The traffic management of the decommissioning phase will be advised by the road conditions at the time of decommissioning. It is not possible to predict the changes to the public road infrastructure and policies in the next 30-40 years. It is envisaged that a Traffic Management Plan will be developed for the decommissioning phase.

Nevertheless, the following traffic management measures are likely to be required:

- Signage will be erected at the site entrance and on the N22 approaching the site.
- Construction traffic associated with decommissioning will be scheduled so as to avoid school drop off and collection times.
- All vehicles using or while in operation at the wind farm site shall either have roof mounted flashing beacons or will use their hazard lights.
- A speed limit of 25km/h shall apply to all vehicles within the wind farm site.

6 JUN 2023 6:46
PLANNING & DEVELOPMENT

7 CONCLUSION

The TMP is a living document and shall be developed through the Detailed Design and Construction phases with ongoing consultation with the Local Authority, An Garda Síochána, Emergency Services and other stakeholders.

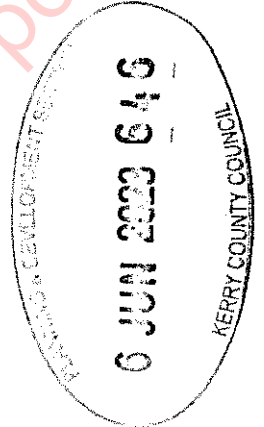
This TMP has thus far been developed to the Planning Stage, so that the necessary steps are taken throughout the planning proposals to support an efficient, safe transportation operation, with the least possible impact upon vulnerable road users and traffic along the haul roads or in close proximity to the Development.

Kerry Planning Authority - Inspection Purposes Only!

Client: Inchamore Wind DAC
Project Title: Inchamore Wind Farm
Document Title: CEMP – Traffic Management Plan

Date: May 2023
Project No: 6226
Document Issue: Final

Kerry Planning Authority - Inspection Purposes Only!



FIGURES



JENNINGS O'DONOVAN
A PARTNERSHIP LIMITED
CONSULTING ENGINEERS

Kerry Planning Authority - Inspection Purposes Only!