18. INTERACTION OF THE FOREGOING

18.1 Introduction

The potential effects of the proposed project and the measures proposed to mitigate these effects have been outlined in this EIAR. However, in any development with the potential for environmental effect there is also the potential for interaction between effects of the different environmental factors.

The result of these interactions may either exacerbate the magnitude of the effect or may in fact ameliorate it. As part of the requirements of an EIAR, the interaction of the effects on the surrounding environment needs to be addressed.

Table 18-1 outlines the different environmental factors which have potential to interact as a result of the proposed project during the construction (C), operation (O) and decommissioning (D) phases of the project. Interactions have been clearly identified in the early stages of the proposed project and where the potential exists for interaction between environmental effects, each EIAR chapter has taken the interactions into account in the assessment. Potential interactions (both positive and negative) have been considered for the construction, operation and decommissioning phases of each of the different environmental factors. Where interactions have been identified they are discussed in Section 18-2.

The potential interactions discussed in this chapter are based on the full range of turbines dimensions and both grid connection options (see Chapter 2 (Description of Proposed Project)) and have been considered within this assessment.

18.2 Statement of Authority

This chapter of the EIAR has been prepared by Serena Byrne and reviewed by Allison Murphy of TOBIN.

This chapter was prepared by Serena Byrne of TOBIN. Serena Byrne is a Project Manager at TOBIN, with over 12 years' multidisciplinary experience in engineering and environmental consulting. She has recently completed a MSc in Environmental Sustainability in University College Dublin, including EIA modules. She has a number of years' experience preparing EIAR chapters, including for population and human health, on renewable energy projects.

This chapter was reviewed by Allison Murphy who is an Associate Director in TOBIN. Allison has twenty years' postgraduate experience in environmental consultancy. Allison is a Chartered Environmentalist and holds an MSc in Environmental Resource Management. Allison has considerable experience in project managing renewable energy developments and carrying out associated impact assessments.

Table 18-1: Interaction between Environmental Factors

Interaction Matrix (√ = Interaction)	Phase	Population and Human Health	Biodiversity	Ornithology	Land, Soils & Geology	Hydrology & Hydro-Geology	Air Quality & Climate	Noise & Vibration	Landscape & Visual	Archaeology & Cultural Heritage	Traffic & Transportation	Material Assets	Shadow Flicker
Population and Human Health	C				√	√	√	√	√		√		
	O				√	√	√	√	√		√	√	√
	D				√	√	√	√	√		√		
Biodiversity	C			√	√	√	√	√			√		
	O			√	√	√	√	√			√		
	D						√	√			√		
Ornithology	C				√	√	√	√			√		
	O				√	√	√						
	D						√	√			√		
Land, Soils & Geology	C					√	√		√	√			
	O												
	D						√						
Hydrology & Hydrogeology	C						√						
	O												
	D												
Air Quality & Climate	C										√	√	
	O										√		
	D												

Interaction Matrix (√ = Interaction)	Phase	Population and Human Health	Biodiversity	Ornithology	Land, Soils & Geology	Hydrology & Hydro-Geology	Air Quality & Climate	Noise & Vibration	Landscape & Visual	Archaeology & Cultural Heritage	Traffic & Transportation	Material Assets	Shadow Flicker
Noise & Vibration	C										√		
	O										√		
	D										√		
Landscape & Visual	C												
	O												
	D												
Archaeology, Architectural & Cultural Heritage	C												
	O												
	D												
Traffic & Transportation	C												
	O												
	D												
Material Assets	C												
	O												
	D												
Shadow Flicker	C												
	O												
	D												

18.3 Discussion of Interactions

In addition to Table 18-1, the following section summarises the primary interrelationships of the environment factors with the potential for significant effects as a result of the proposed project.

All identified potential hazards and source of hazards associated with the proposed project have been considered through the technical assessments of this EIAR (Chapters 5 to 17), and therefore any interactions are covered by the below summary.

Where no significant interactions have been identified within the technical assessments, this has been noted and the typical potential interactions between environmental factors has been outlined.

18.3.1 Population and Human Health

No significant interactions with other environmental factors were identified in the Population and Human Health assessment.

The following interactions with Population and Human Health have been identified as having the potential to occur during the construction, operation and / or decommissioning phases of the proposed project.

Interactions of Population and Human Health, Land, Soils and Geology, Hydrology and Hydrogeology, and Air Quality and Climate

There is potential for short-term interaction between the environmental factors of Population and Human Health, Land, Soils and Geology, Hydrology and Hydrogeology, and Air Quality and Climate during the construction phase.

This is primarily associated with the excavation / disturbance of ground where required (e.g. proposed borrow pits, access roads, hardstands, proposed GCO One and proposed TDR works areas) during construction, which if not properly managed or mitigated, has the potential to generate dust emissions to air and wastewater with suspended solids, potentially increasing run-off to surface waters and/or being transported off site by construction vehicles. The decommissioning phase will result similar effects as the construction phase, albeit to a lesser extent groundworks will be less.

During the operational phase, site visits and maintenance will be carried out as required. These works have the potential to result in the mobilisation of suspended solids from shallow excavations if required, and use of fuel and lubricating oils from machinery and equipment.

These potential effects, along with proposed mitigation measures, are discussed in detail within Chapters 8 (Land, Soils and Geology), 9 (Hydrology and Hydrogeology), and Chapter 14 (Air Quality and Climate) of the EIAR, which will reduce the potential direct and indirect effect on Population and Human Health from activities associated with the proposed project.

Therefore, with both embedded and additional mitigation measures proposed, the potential effects from the interactions between Population and Human Health, Land, Soils and Geology, Hydrology and Hydrogeology, and Air Quality and Climate are considered not significant.

Interactions of Population and Human Health and Shadow Flicker

During the operational phase there is potential for interaction between Population and Human Health and Shadow Flicker (primarily related to the residential amenity).

However, it should be noted that the Applicant is committed to minimising any adverse effects from the proposed wind farm on the local community / near zero shadow flicker occurrence, as described in Chapter 10 (Shadow Flicker) of this EIAR.

As described in Chapter 10 (Shadow Flicker), the incorporation of set-back distances from the proposed turbines to residential properties means that there are no sensitive receptors located within 720 m of a proposed turbine location. The potential for shadow flicker to occur is entirely predictable and the modelling software used in this assessment and installed in the proposed wind turbines can accurately predict when shadow flicker has potential to occur at specific properties. This design measure, along with the implementation of screening and turbine shutdown mitigation measures will ensure that there are no significant post-mitigation effects of shadow flicker on the local community irrespective of which turbine is selected within the turbine range

Interactions of Population and Human Health and Material Assets

During the operational phase, generating electricity from wind energy has the potential to interfere with the quality of radio waves and microwaves used for communication purposes (including TV signals, radio signals, aircraft landing, navigation systems and microwave links). Any interference that might occur with local communications and radio/tv signals would have potential interactions with residential amenity for those affected, in the event that they could not use their phone/radio/tv.

As outlined in Chapter 11 (Material Assets), consultation was undertaken with relevant aviation and telecommunications operators in relation to potential interference. Furthermore, desktop surveys and analysis were undertaken.

An assessment of the aviation infrastructure in the study area indicates that there will be no significant potential effects to aviation during the operational phase as a result of the proposed project. With the implementation of the mitigation measures set out in Chapter 11 (Material Assets), the proposed project will have no significant residual effects.

Following consultation with telecommunication provides some effects were highlighted. These links have been mapped relative to the proposed wind farm site to assist in the design of the site layout and to identify suitable mitigation measures to ensure there are no significant impacts to telecommunications (see Chapter 11 Material Assets). Any interference that might occur with local communications and phone/radio/tv signals would have potential interactions with the residential amenity for those affected, in the event they could not use their phone/radio/tv. The applicant has committed to addressing any issues in the unlikely event that they arise, as such no significant impact is predicted from this interaction.

Interactions of Population and Human Health and Noise and Vibration

During the construction, operational, and decommissioning phases the proposed project will generate noise. Noise and vibration effects have been considered in Chapter 12 (Noise and Vibration) of the EIAR. Any potential noise effects will have the potential to negatively interact with population (i.e., residential amenity) and human health.

During the construction and operational phases of the proposed wind farm, the likely predicted noise and vibration effects will be below the relevant guidance limits and/or thresholds, as identified within Chapter 12 (Noise and Vibration), and are not anticipated to give rise to significant effects.

The decommissioning phase will result similar effects as the construction phase, in particular if the site is to be decommissioned fully, albeit to a lesser extent.

As per the construction phase, any works required during the decommissioning of the proposed project will have the potential to give rise to noise. The likely predicted noise and vibration impacts during the decommissioning phase are below the limits and/or thresholds identified within Chapter 12 (Noise and Vibration).

Overall, with mitigation, potential effects from the interaction between Population and Human Health and Noise and Vibration are considered not significant.

Interactions of Population and Human Health and Landscape and Visual Effects

Any landscape and visual effects associated with the proposed wind farm would have the potential to interact with population and human health, primarily in relation to residential amenity.

As assessed and detailed in Chapter 13 (Landscape and Visual Impact Assessment), the significance of the landscape effect reduced quickly with distance. During the construction, operation and decommissioning phases, the assessed landscape effects are deemed Not Significant.

Local community views are considered to be those experienced by people who live, work and move around the area within approximately 5 km of the proposed wind farm site. These are generally the people that are most likely to have their visual amenity affected by a wind energy proposal due to proximity to the turbines, a greater potential to view turbines in various directions, or having turbines as a familiar feature of their daily views.

Wind turbines are a familiar feature of the local landscape with existing wind farms adjacent and nearby.

Overall, local community receptors will afford some clear views of the turbines, where they will present as defining built features in this landscape. However, it is considered that the scale and nature of the proposed project can be well accommodated within this robust landscape context, which is influenced by existing wind energy development and other typical rural and working land uses. Indeed, it is not considered that the proposed turbines will significantly detract from the productive rural values of this landscape context. Therefore, visual effects at local community receptors during the operational phase of the development are assessed as Not Significant.

Overall, potential effects from the interaction between Population and Human Health and Landscape and Visual aspects are considered not significant.

Interactions of Population and Human Health and Traffic and Transportation

Effects on the surrounding road network are discussed in detail in Chapter 16 (Traffic and Transportation). Traffic and transportation have the potential to interact with population and human health primarily through the generation of noise, dust emissions (i.e., impacting on local residential amenity), and traffic disruption.

Public perception of the construction phase will likely be influenced primarily from the impact of traffic movement. To reduce the impact from construction traffic, a Traffic Management Plan has been developed for the project. Impacts will be short-term in nature (expected duration of

construction phase is approximately 24 months) and no significant negative effects are predicted from this interaction.

Once the wind farm is operational, traffic volumes associated with the wind farm site, primarily associated with maintenance personnel and public use of the amenity car parks, will be low. Decommissioning phase Traffic and Transportation effects will be similar in nature to construction phase effects, albeit to a lesser extent.

Overall, potential effects from the interaction between Population and Human Health and Traffic and Transportation are considered not significant.

Any increase in traffic volumes has the potential to create noise and dust nuisance, thereby having the potential to interact with residential amenity and human health for those living in the area. The interaction of Noise and Vibration and Traffic and Transportation is discussed in further detail in Section 18.2.8.

18.3.2 Biodiversity

No significant interactions with other environmental factors were identified in the Biodiversity assessment.

The following interactions with Biodiversity have been identified as having the potential to occur during the Construction, Operation and/or Decommissioning Phases of the proposed project.

Interactions of Biodiversity and Hydrology and Hydrogeology

Biodiversity and Hydrology and Hydrogeology interact in terms mitigation on water quality impacts. The two topics share a combined potential effect of water quality impacts during the construction and decommissioning phases of the proposed project.

Activity during the construction phase, primarily relating to excavation, ground works, movement and storage of spoil, site drainage, and use and storage of contaminants onsite, has the potential, if not properly managed or mitigated for, to impact on nearby habitats and aquatic environments, resulting in a potential interaction between Biodiversity and Hydrology and Hydrogeology.

These potential effects, along with proposed mitigation measures, are discussed in detail within Chapters 8 (Land, Soils and Geology), 9 (Hydrology and Hydrogeology) and the Construction Environmental Management Plan (CEMP) (see Appendix 2-6) of the EIAR, which will reduce the potential direct and indirect effect on Biodiversity from activity associated with the proposed project.

Therefore, with embedded mitigation and proposed mitigation measures, the potential effects from the interactions between Biodiversity and Hydrology and Hydrogeology are considered not significant.

Interactions of Biodiversity and Air Quality and Climate

There is an interaction between biodiversity and air quality in terms of mitigation of dust effects. The two topics share a combined potential effect due to dust impacts during construction and decommissioning phases of the proposed project.

Activity during the construction phase, primarily relating to excavation, ground works, movement and storage of spoil, has the potential, if not properly managed or mitigated for, to

impact on nearby habitats and aquatic environments, resulting in a potential interaction between Biodiversity and Air Quality.

These potential effects, along with proposed mitigation measures, are discussed in detail within Chapters 8 (Land, Soils and Geology), Chapter 14 (Air Quality and Climate) and the CEMP (see Appendix 2-6) of the EIAR, which will reduce the potential direct and indirect effect on Biodiversity from activity associated with the proposed project.

Therefore, with proposed mitigation measures, the potential effects from the interactions between Biodiversity and Air Quality are considered not significant.

Interactions of Biodiversity and Ornithology

There is an interaction between biodiversity and ornithology in relation to the full assessment of Special Protection Areas (SPAs) as these are not considered within the biodiversity chapter. The topics share potential effects on habitat loss during the construction and decommissioning phases of the proposed project.

Interactions of Biodiversity, Noise and Vibration, and Traffic and Transportation

There is potential for interaction between Biodiversity, Noise and Vibration and Traffic and Transportation during the construction, operational and decommissioning phases of the proposed project. Traffic and site activity during the construction and decommissioning phases could give rise to noise that could be a nuisance for fauna.

However, as noted above, noise and vibration effects during the construction, operational and decommissioning phases of the proposed project are predicted to be within the relevant guidance limits and/or thresholds, as identified within Chapter 12 (Noise and Vibration). Furthermore, any effects for the construction and decommissioning phases will be short-term in nature. Traffic / vehicle movements associated with operational phase will be minimal.

Overall, with mitigation, potential effects from the interaction between Biodiversity and Noise and Vibration and Traffic and Transportation are considered not significant.

18.3.3 Ornithology

No significant interactions with other environmental factors were identified in the Ornithology assessment.

The following interactions with Ornithology have been identified as having the potential to occur during the construction, operation and/or decommissioning phases of the proposed project.

Interactions of Ornithology, Lands, Soils and Geology, and Hydrology and Hydrogeology

Exposing soils during the construction phase has the potential, if not properly managed, to cause sedimentation of nearby watercourses which could lead to indirect effects on birds and their prey species through the disturbance and deterioration of the aquatic habitat quality. However, clear span bridges and horizontal directional drilling are included in the project design to avoid in stream works. Mitigation measures detailed within the CEMP (see Appendix 2-6) will be put in place to control siltation occurring during the construction phase and ensure protection of the aquatic environment. There will be no significant negative effects arising from this interaction.

Interactions of Ornithology, Noise and Vibration, and Traffic and Transportation

There is potential for interaction between Ornithology, Noise and Vibration and Traffic and Transportation during the construction phase of the proposed project. However, as noted above, noise and vibration effects during both the construction and the decommissioning phase of the proposed project are predicted to be within the relevant best practice guidance limits, and for the construction and decommissioning phases will be short-term in nature. Therefore, the in-combination effects of noise and vibration caused by additional traffic during the construction and decommissioning phases will have a limited effect on ornithology and not expected to be significant.

Interactions of Ornithology and Air Quality and Climate

There is potential for interaction between Ornithology, and Air Quality and Climate during the construction and decommissioning phases of the proposed project. There is a potential for localised dust to be a nuisance for birds in any given area. Any such effect would be localised, short-term and not significant.

18.3.4 Land, Soils and Geology

No significant interactions with other environmental factors were identified in the Land, Soils and Geology assessment.

The following interactions with Land, Soils and Geology have been identified as having the potential to occur during the construction, operation and decommissioning phases of the proposed project.

Interactions of Land, Soils and Geology, Hydrology and Hydrogeology and Air Quality and Climate

During the construction phase, excavations associated with installation of infrastructure and the construction of internal site roads could potentially lead to increased suspended solids in surface water run-off.

However, with mitigation (as discussed in Chapter 9 (Hydrology and Hydrogeology)), the potential effects from the interaction between Land, Soils and Geology and Hydrology and Hydrogeology during the construction phase on are considered not significant.

The impact of flood risk has been assessed for the project and the surface water drainage network will be designed to cater for increased rainfall in future years as a result of climate change.

Overall, with mitigation, potential effects from the interaction between Biodiversity and Noise and Vibration and Traffic and Transportation are considered not significant.

Interactions of Lands, Soils and Geology and Archaeology and Cultural Heritage

There is potential for interaction between Land, soils and Geology and Archaeology and Cultural Heritage where excavations / removal of material is taking place, and on any unrecorded subsurface archaeological artefacts or sites, if present, are encountered.

Chapter 15 (Archaeology and Cultural Heritage) states that following the application of mitigation measures there will be no significant residual effects on the previously unrecorded archaeological, architectural or cultural heritage resource as a result of the construction

proposed project. This is due to the fact that any remains that are encountered during the course of monitoring or test trenching will be subject to preservation by record or preservation in-situ.

Residual effects will remain with regards to the setting of archaeological, architectural and cultural heritage sites, due to the fact that the effects on the setting of the sites cannot be mitigated. These effects will not be significant or permanent, and will be removed following the decommissioning of the turbines.

Therefore, with mitigation, the potential effects from the interaction between Land, Soils and Geology and Archaeology and Cultural Heritage are considered not significant.

18.3.5 Hydrology and Hydrogeology

No significant interactions with other environmental factors were identified in Hydrology and Hydrogeology assessment (Chapter 9 (Hydrology and Hydrogeology)).

Interactions with Hydrology and Hydrogeology that have been identified as having the potential to occur during the construction, operation and/or decommissioning phases of the proposed project have been discussed in the following sections of this chapter:

- Section 18.2.1 Interactions of Population and Human Health
- Section 18.2.2 Interactions of Biodiversity
- Section 18.3 Interactions of Ornithology
- Section 18.2.4 Interactions of Land, Soils and Geology

18.3.6 Shadow Flicker

No significant interactions with other environmental factors were identified in the Shadow Flicker assessment (Chapter 10 (Shadow Flicker)).

Interaction of Shadow Flicker and Population and Human Health has been discussed under section 18.2.1 above.

18.3.7 Material Assets

No significant interactions with other environmental factors were identified in the Chapter 11 (Material Assets) assessment.

Interactions between Material Assets and Air Quality and Climate have the potential to occur. Waste management measures will be put in place to minimise the amount of waste entering landfill, which has higher associated embodied carbon emissions than other waste management such as recycling. Where possible materials will be reused on site or removed for recycling.

Waste management for the project is discussed in Chapter 11 (Material Assets) and the CEMP in Appendix 2-6 of this EIAR. The effect of the interactions between waste and climate are not significant.

The potential interaction of Material Assets and Human Health has been discussed under Section 18.2.1 above.

18.3.8 Noise and Vibration

The potential interaction between noise and vibration and other specialist chapters in the EIAR is primarily limited to Chapter 5 (Population & Human Health), Chapter 6 (Biodiversity), Chapter 7 (Ornithology) and Chapter 16 (Traffic and Transportation). The Noise and Vibration

assessment (Chapter 12 (Noise and Vibration)) has been prepared in consideration of and in conjunction with the relevant elements of these chapters.

Interactions with Noise and Vibration that have been identified as having the potential to occur during the construction, operation and/or decommissioning phases of the proposed project have been discussed in the following sections of this chapter:

- Section 18.2.1 Interactions of Population and Human Health
- Section 18.2.2 Interactions of Biodiversity
- Section 18.2.3 Interactions of Ornithology

18.3.9 Landscape and Visual

No significant interactions with other environmental factors were identified in the landscape and visual assessment.

The following interactions with landscape and visual have been identified as having the potential to occur during the construction, operation and decommissioning phases of the proposed project.

Interactions with Landscape and Visual Impact that have been identified as having the potential to occur during the construction, operation and/or decommissioning phases of the proposed project have been discussed in the following sections of this chapter:

- Section 18.2.1 Interactions of Population and Human Health
- Section 18.2.4 Interactions of Land, Soils and Geology

18.3.10 Air Quality and Climate

No significant interactions with other environmental factors were identified in Air Quality assessment (Chapter 14 (Air Quality and Climate)).

Interactions with Air Quality and Climate mainly relate to an increase in emissions, particularly dust emissions through works on site or traffic. The following interactions with Air Quality and Climate have been identified as having the potential to occur during the construction, operation and decommissioning phases of the proposed project have been discussed in the following sections of this chapter:

- Section 18.2.1 - Interactions of Population and Human Health
- Section 18.2.2 - Interactions of Biodiversity
- Section 18.2.3 - Interactions of Ornithology
- Section 18.2.4- Interactions of Land, Soils and Geology
- Section 18.2.7 – Material Assets
- Section 18.2.12 - Interactions of Traffic

18.3.11 Archaeology and Cultural Heritage

No significant interactions with other environmental factors were identified in Archaeology, and Cultural Heritage assessment.

Potential interactions with Archaeology and Cultural Heritage and Land, Soils and Geology mainly relate to the possibility of finding of unrecorded archaeology during the construction phase when disturbing the soils for ground works.

This interaction is discussed above in Section 18.2.4- Interactions of Land, Soils and Geology.

18.3.12 Traffic and Transportation

No significant interactions with other environmental factors were identified in Traffic and Transportation assessment (Chapter 16 (Traffic and Transportation)).

Interactions with Traffic and Transportation mainly relate to an increase in traffic for the project. The following interactions with Traffic and Transportation have been identified as having the potential to occur during the construction, operation and decommissioning phases of the proposed project have been discussed in the following sections of this chapter:

- Section 18.2.1 - Interactions of Population and Human Health (also addressed interactions with noise and dust)
- Section 18.2.2 - Interactions of Biodiversity
- Section 18.2.3 - Interactions of Ornithology

Interactions of Climate and Traffic and Transportation

During the construction and operational phase, there is the potential for interactions between climate and traffic. Vehicles accessing the site will result in emissions of CO_2, a greenhouse gas. The effects of the proposed project on climate are assessed by reviewing the change in annual average daily traffic on roads close to the site.

In this Air Quality and Climate assessment (see Chapter 14 (Air Quality and Climate)), the effects of the interactions between traffic and climate are considered not significant in EIA terms.

Overall, with mitigation including the project Traffic Management Plan, potential effects from the interaction between Population and Human Health, Biodiversity, Ornithology, Air Quality and Climate, Noise and Vibration and Traffic and Transportation are considered not significant.

18.4 Positive Interaction of Elements

In addition to the interactions noted above, the proposed project has the potential to have positive effects on the receiving environment and positive interactions between environmental factors, including:

- The new land use, consisting of wind energy production, within the site of the proposed wind farm, will provide renewable electricity to the grid, reduce the reliance on fossil fuels and contribute to a reduction in emissions impacting climate change. This would result in an positive interaction between Material Assets (i.e., energy infrastructure), Air Quality, Climate, Population and Human Health, and Biodiversity;
- Jobs generated by the proposed project and use of local services and facilities by project personnel during all phases of the proposed project will result in a positive interaction between Material Assets (i.e. electrical infrastructure) and Population and Human Health (in terms of local economy, employment and socioeconomics);
- The Community Benefit Fund will have a positive interaction between Material Assets (i.e., energy infrastructure) and Population and Human Health (in terms of local socioeconomics, residential amenity, and tourism). See Chapter 5 (Population and Human Health) and Chapter 11 (Material Assets) for additional detail; and
- Furthermore, the development of wind farms and associated community benefit can be considered as an enhancement to an area or region, and as an environmentally friendly place to visit. As the proposed project will support projects being undertaken in the area as part of the community benefit fund, which has the potential to have an associated positive impact on tourism and health in the area (public and tourist attitudes to wind farms, amenity, and community benefit are discussed in Chapter 5 (Population and Human Health)).

18.5 Major Accidents and Natural Disasters

As described in Chapter 17 (Major Accidents and Natural Disasters) of this EIAR, there is potential for the proposed project to be a source of hazard or interact with other sources of hazard that could result in a major accident and/or disaster during its construction and operation.

Chapter 17 (Major Accidents and Natural Disasters) has assessed the potential risk of major accidents and natural disasters from the construction, operation and decommissioning phases of the proposed project. In accordance with the DoEHLG guidance (as outlined in Chapter 17), the risk of a major accident and/or natural disaster is considered 'Low'.

There is low potential for significant natural disasters to occur at the proposed wind farm site. Ireland is a geologically stable country with a mild temperate climate.

Monitoring is proposed during the construction, operation, and decommissioning phases of the proposed project to capture any change with the potential to result in an increased risk of major accident and/or natural disaster.

All monitoring proposals relating to the pre-construction and construction phases of the proposed project were set out in various sections of the EIAR, and Natura Impact Statement (NIS). The CEMP (see Appendix 2-6) groups together all of the monitoring proposals presented

in the EIAR and NIS, which can be checked and reported on during the course of the proposed project.

The operator of the proposed project will continue to assess the risk of major accidents and/or disasters on site on an on-going basis during operation. The maintenance programme, record of reported incidents, as well as general site activities will be monitored on an on-going basis to ensure risk of major accidents does not increase over time.

It is considered with the implementation of the embedded mitigation, and additional mitigation measures where proposed, as detailed in Chapters 5 to Chapter 17 in this EIAR (as referenced in Chapter 19 (Schedule of Mitigation Measures), and the measures outlined in the CEMP, are implemented and adhere to there will not be significant residual effects associated with the construction, operation and decommissioning of the proposed project.

18.6 Conclusion

All environmental factors are interrelated to some extent. However, the most common potential interactions occur between the environmental factors of population and human health, land, soils and geology, hydrology and hydrogeology, landscape and visual, noise, air quality and climate, traffic and transportation and biodiversity.

Review of the potential effects associated with interaction of environmental factors during the construction, operational and decommissioning phases has determined that significant amplification of effects is not anticipated, and additional interactions further to those described in this chapter are not predicted.

The proposed project will have some positive effects on an international, national, regional and local level, particularly in terms of helping to achieve renewable energy targets and domestic energy security, through the use of the Community Benefit Fund to support local initiatives.

Overall, the assessment of the interactions described has found they are not predicted give rise to significant effects.