

From: [Evelyn Keane](#)
To: [SIDS](#)
Subject: Proposed development: Construction of the Muingmore Wind Farm, Co. Mayo
Date: Friday 7 August 2026 15:11:10
Attachments: [image001.png](#)
[NEHS Submission-Muingmore Wind farm.pdf](#)

You don't often get email from evelyn.keane@hse.ie. [Learn why this is important](#)

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Good afternoon,

Please find attached the NEHS submission for the above application.

Kind regards,

Evelyn

Evelyn Keane

Oifigeach Sláinte Comhshaoil | FSS Seirbhís Náisiúnta Sláinte Comhshaoil

Environmental Health Officer | HSE National Environmental Health Service

FFS Seirbhís Náisiúnta Sláinte Comhshaoil, Áras Naomh Mhuire, Sean-bhóthair Chathair Na Máirt,
Caisleán an Bharraigh, Contae Mhaigh Eo/HSE National Environmental Health Service, St. Mary's HQ,
Old Westport Road, Castlebar, Mayo

094-9378545/9042105 | evelyn.keane@hse.ie



"Tá an fhaisnéis sa ríomhphost seo (ceangaltáin san áireamh) faoi rún. Baineann sé leis an té ar seoladh chuige amháin agus tá sé ar intinn go bhfaighfidh siadsan amháin é agus gurb iadsan amháin a dhéanfaidh breithniú air. Más rud é nach tusa an duine ar leis é, tá cosc iomlán ar aon fhaisnéis atá ann, a úsáid, a chraobhscaoileadh, a scaipeadh, a nochtadh, a fhoilsiú, ná a chóipeáil. Seains gurb iad tuairimí pearsanta an údar atá san ríomhphost agus nach tuairimí FSS iad.

Má fuair tú an ríomhphost seo trí dhearmad, bheadh muid buíoch dá gcuirfeá in iúl don Deasc Seirbhísí ECT ar an nguthán ag [+353 818 300300](tel:+353818300300) nó ar an ríomhphost chuig service.desk@hse.ie agus ansin glan an ríomhphost seo ded' chóras."

"Information in this email (including attachments) is confidential. It is intended for receipt and consideration only by the intended recipient. If you are not an addressee or intended recipient, any use, dissemination, distribution, disclosure, publication or copying of information contained in this email is strictly prohibited. Opinions expressed in this email may be personal to the author and are not necessarily the opinions of the HSE.

If this email has been received by you in error we would be grateful if you could immediately notify the ICT Service Desk by telephone at [+353 818 300300](tel:+353818300300) or by email to service.desk@hse.ie and thereafter delete this e-mail from your system"



National Environmental Health Service Submission Report

(as a Statutory Consultee under the Planning and Development Acts 2000 (as amended) & Regulations made thereunder)

Date: 07th August 2026

Type of consultation: Strategic Infrastructure Development (SID)
accompanied by Environmental Impact
Assessment Report (EIAR)

Report to: An Coimisiún Pleanála (ACP)
Email: sids@pleanala.ie

**Planning Case
Reference No.:** PAX16.324387 / ABP-324387-26

Our Reference No. EHIS 6011

Applicant: SLR Environmental Consulting (Ireland) Ltd on
behalf of RWE Renewables Ireland Limited

**Description of Proposed
Development:** Construction of the Muingmore Wind Farm (MWF)
Development including 13 wind turbines, with an
associated 110 kV substation, battery energy
storage system (BESS), and all associated works
on land within the townlands of Muingmore (An
Mhoing Mhór), Doolough (Dumha Locha), Tristia
(Troiste), Moneynierin (Moing an Iarainn) and
Bangor (Baingear), County Mayo.

Dear Sir/Madam,

Please find below the HSE submission report in relation to the above proposal. The following HSE departments were made aware of the consultation request for the proposed development on the 2nd June 2026:

- Emergency Planning
- National Capital Estates Office
- Director of National Health Protection
- Regional Executive Officer West & North West

1. Introduction

The HSE is a statutory consultee under Article 28 of the Planning and Development Act 2000 (as amended) and has a remit to make observations on a planning application accompanied by an EIAR with regard to any likely significant effects on Public Health. The National



Environmental Health Service (NEHS) can make observations on any planning application as a statutory consultee.

The objective of any observations by the NEHS are to inform ACP on any likely significant effects on Public Health and give an opinion on any proposed mitigation to protect Public and Environmental Health. Any observations made are to inform and assist the decision making of ACP in the planning process.

The NEHS submission report is based on an assessment of documentation submitted with the planning application, particularly the accompanying EIAR.

All commitments to future actions including mitigation and further testing have been taken as read and all data results have been accepted as accurate.

- No additional investigations/measurements were undertaken by the NEHS.
- This report refers only to those sections of the application documents that are relevant to the NEHS which have likely significant Environmental Health or Public Health Impact(s).

Criteria for Consideration of Likely Significant Effects on Public Health

The NEHS considers likely significant effects on Public Health as per the EPA issued National Guidance (known as the EIAR Guidance): Guidelines on the information to be contained in Environmental Impact Assessment Reports, 2022

https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf

Particularly section 3 of the EIAR Guidance on Human Health which is reproduced below:

Human Health

The recitals to the 1985 and 2011 Directives refer to 'Human Health' and include 'Human Beings' as the corresponding environmental factor. The 2014 Directive calls this factor 'Population and Human Health'.

While no specific guidance on the meaning of the term Human Health has been issued in the context of Directive 2014/52/EU, the same term was used in the SEA Directive (2001/42/EC). The Commission's SEA Implementation Guidance states 'The notion of human health should be considered in the context of the other issues mentioned in paragraph (f)'. (Paragraph (f)⁴⁷ lists the environmental factors including soils, water, air etc). This is consistent with the approach set out in the 2002 EPA EIS Guidelines where health was considered through assessment of the environmental pathways through which it could be affected, such as air, water or soil, namely:

'The evaluation of effects on these pathways is carried out by reference to accepted standards (usually international) of safety in dose, exposure or risk. These standards are in turn based upon medical and scientific investigation of the direct effects on health of the individual substance, effect or risk. This practice of reliance upon limits, doses and thresholds for environmental pathways, such as air, water or soil, provides robust and reliable health protectors [protection criteria] for analysis relating to the environment.'

In an EIAR, the assessment of impacts on population & human health should refer to the assessments of those factors under which human health effects might occur, as addressed elsewhere in the EIAR e.g. under the environmental factors of air, water, soil etc... The Advice Notes provide further discussion of how this can be addressed.

Assessment of other health & safety issues are carried out under other EU Directives, as relevant. These may include reports prepared under the Industrial Emissions, Waste Framework, Landfill, Strategic Environmental Assessment, Seveso III, Water Framework Directive, Floods or Nuclear Safety Directives⁴⁸. In keeping with the requirement of the amended Directive, an EIAR should take account of the results of such assessments without duplicating them.



The NEHS therefore considers likely significant effects within a population and Human Health context that uses a source – pathway- receptor model, based on emissions through environmental media and population exposure. The exposure of populations, if any, is then considered against recognised health protection criteria.

Whilst EIAR Guidance recognises the requirement to identify sensitive receptors within the assessment process, ACP should be clear that it is within a Population health approach.

A Population Health approach to the sensitivity of receptors would not consider individual specific sensitivity of a human receptor, but the sensitivity of the established land use or service provision. For example, a school would be considered a sensitive receptor within a Population Health approach, but an individual student who was particularly sensitive to noise attending the school would not be specifically considered in the assessment criteria. The exception would be a health care facility that provided services for people with recognised noise sensitivity would be considered in its entirety as a particular noise sensitive location.

The Population Health approach therefore has important differences in how likely significant effects on Population and Human Health are considered in EIA. The assessment should consider established land development and use and service provision and activities within communities and not individual members of communities.

It is recommended that the An Coimisiún Pleanála (ACP) also follows this method when consider Public Health in their decision-making.

The NEHS scoping submission on the 15th May 2024 (EHIS 3932) are still applicable to this application.

This report only comments on Environmental Health impacts of the proposed development as outlined in the EIAR and the adequacy of the EIAR from the Environmental Health viewpoint. The NEHS has made observations and submissions on the following specific environmental health areas.

- Public Consultation and the Non-Technical Summary (NTS)
- Population and Human Health
- Noise and Vibration
- Shadow Flicker
- Soils and Geology
- Hydrology & Hydrogeology
- Food Safety and Environmental Compliance
- Construction Environmental Management Plan (CEMP) Technical Appendix 2-1



The comments below are not exhaustive but serve to capture key points of the proposed development.

2. Description of the Project and Physical Environment

The applicant has submitted an EIAR on the proposed development including 13 wind turbines and all associated infrastructure, is located within the townlands of Muingmore (An Mhoing Mhór) and Doolough (Dumha Locha) in County Mayo, approximately 0.5 km north of the village of Gweesalia.

Proposed Development:

The Proposed Development will consist of:

- Construction of 13 no. wind turbines (Nordex N149, Vestas V150 or Nordex N163), each with an overall blade tip height between 179-180m inclusive, rotor diameter between 149-163m inclusive, hub height between 98.5-105m inclusive, in two clusters.
- Battery energy storage system (BESS) compound to include control building with welfare facilities, all associated plant and equipment, security fencing and gates, underground cabling, and all ancillary structures, drainage works, as well as storage and parking.
- Construction of crane hardstands, laydown areas and turbine foundations.
- Construction of permanent internal site access roads including passing bays and all associated drainage infrastructure.
- Construction of a permanent 110 kV onsite electricity substation and onsite IPP (Independent Power Producer) substation to include control buildings with welfare facilities, all associated electrical plant and equipment, security fencing and gates, all associated underground cabling, wastewater holding tanks, and all ancillary structures and works.
- Construction of 33kV underground electricity cabling and communications cabling, including joint bays and ancillary works, to connect the windfarm and battery energy storage system to the proposed onsite substation.
- Construction of two temporary construction compounds with associated temporary site offices, parking areas, welfare facilities and security fencing.
- Development of an internal site drainage network and sediment control systems.
- Temporary works as part of road improvements to facilitate the delivery of abnormal loads and turbine component deliveries from Killybegs Port to site, to include 3 no. over-run areas along the turbine delivery route, (No. 1 in the townland of Tristia onto the
- L1206, No. 2 in the townland of Moneynierin at the junction of the N59 and the R312, and, No. 3 in the townland of Bangor off the R313).



- Construction of 1 no. new site entrance and the construction/ upgrade of 2 no. additional site entrances (all off local road L5252, west of the L1206),
- Ancillary forestry felling to facilitate construction of the development.
- All associated site development works including landscaping, lighting, soil management and the ongoing maintenance and management of the biodiversity measures in accordance with the Habitat Management Plan and the Peat Restoration Plan.
- The replacement of felled trees with the planting of new trees, and;
- The erection of a permanent meteorological mast 100m in height.

A 10-year planning permission and 35-year operational life from the date of commissioning of the entire Wind farm except the substation is being sought. The Proposed Grid Connection Route (GCR) and onsite substation to the national grid connection at Bellacorick 110 kV substation is assessed as part of EIAR but is not the subject of this planning application and does not form part of the Proposed Development. According to Chapter 2 of EIAR, this will be the subject of a later application.

The Proposed Development is situated within cutover lowland blanket bog, with areas of commercial forest plantation, farmland, worked and unworked peatlands, open moorland areas interspersed with one-off housing. The Muingmore Wind Farm (MWF) covers an area of approximately 454 ha. It is located on low-lying terrain, ranging from 3 m AOD at the southern end to 33 m AOD at the north-eastern portion. It is comprised of two turbine clusters north and south of local road L5252. The nearest residential property is located 740 m from the nearest wind turbine (T10). There are 109 residential located within 1km of MWF. There are 282 residential properties within 500m of the GCR, which will comprise of approx. 25.5 km long underground cabling which runs eastwards to the Bellacorick Substation.

The construction of the whole development is estimated to take approximately 18-24 months to complete.

A full description of the Proposed Development is provided in Non-Technical Summary (NTS) and Chapter 2 in more detail.

3. Comments from the Local Environmental Health Service

The Local Environmental Health Mayo office was contacted; in relation to this application. Ms Evelyn Keane Environmental Health Officer (EHO), whom provided the following observations and carried out a site visit.

The proximity of the site to sensitive receptors and Condition of access roads around the development site



- There are ~15/20 houses located within 2km of the proposed site with an additional ~20 houses within 5km.
- The site is located ~12km from the nearest town of Bangor Erris in which there are 7 food premises and a pharmacy.
- There is also a National School located in the town.
- Oweninny Wind Farm is located 28km from the proposed site.

Location of private wells and proximity to watercourses, including streams, rivers or lakes

- The proposed windfarm and surrounds are in an area covered by Public Water supplies.
- Doolough beach is located ~6km from the proposed site.
- The Owenmore river runs through Bangor Erris along the school boundary.

Any other industries in the locality

- Ballycroy Visitor Centre/Wild Nephin national Park is located within 17km of the proposed site. This is a very popular attraction for tourists and hill walkers.

Any local concerns regarding the proposed development

- Received email from local community group and provided a response.
- At this time, on National Environmental Health Information System (EHIS) no complaints have been logged.

Condition of access roads around the development site,

- Main/major roads leading to the area appear to be in reasonably good condition.
- The minor roads leading into the site (on which there are approximately 15/20 houses located) is only wide enough for one car and appears to be used as a back road between two main/major roads i.e. between L1206 and L1205. I myself had to pull in 6 times while using L5252 road.

4. Public Consultation and Non-Technical Summary (NTS)

The NEHS is satisfied that the NTS provides an adequate description of the proposed project.

The EIAR does demonstrate the link between public consultations and details how they have influenced the decision-making process in the EIA for this MWF in Co. Mayo. This was outlined in Chapter 3, Appendix 3-3 Scoping Report and Appendix 3-7 Community Consultation Report. The scoping consultation stage



was carried out in April 2024. The Applicant adapted their approach to community consultation based on feedback, with many residents expressing a preference for one-to-one or small group meetings over large public gatherings.

NEHS notes that this MWF has a dedicated Community Liaison Officer (CLO) since 26th June 2023 along with dedicated phone line and email address. The Public were informed of this Project through three resident's letter's dated 26th June 2023, October 2025 and 22nd January 2026 including project brochures, door-to-door visits to local residents in the vicinity of the proposed development. The Applicant reached out to local community groups and third parties associated and/or interested in the Proposed Development.

Example of feedback from the public included that some felt intimidated by large groups and felt that their questions and concerns would not be heard in larger groups. In response to this feedback the applicant circulated resident letter 22nd January 2026 which included an invitation to Drop-in clinic by appointment on the 28th. This Drop-in Clinic was held in the Broadhaven Hotel, Belmullet on Wednesday 28th January 2026 from 8am until 8pm. Availability to meet was also offered for the evening before and the morning after the Clinic day.

NEHS notes from the Chapter 4 that a community benefit fund will be established under the RESS programme for 15 years. It is NEHS perspective that this should not reduce the Public health protection measures for all those living near this proposed development.

Opportunities for Health Gain

NEHS recommends that the community fund should facilitate infrastructure for everyone and not only funding existing organizations. Consideration should be given to opportunities for health gain from the proposed development. This would include opportunities to create recreational spaces, opportunities to increase physical exercise through walking and cycle routes. Where possible, pedestrian areas should be accessible to wheelchairs, pushchairs and mobility vehicles in order that all ages and all levels of mobility can access the improved recreational amenities.

5. Population Health and Human Health

The NEHS has considered chapter 4 of the EIAR which assesses the impacts of the Proposed Development on population and human health during the phases of Construction, Operations and Decommissioning. The most relevant aspects highlighted draws upon findings of other chapters notable:

- **Chapter 6:** Land, Soils and Geology;
- **Chapter 7:** Water (Hydrology and Hydrogeology);
- **Chapter 8:** Air and Climate;



- **Chapter 9:** Noise and Vibration;
- **Chapter 11:** Shadow Flicker;
- **Chapter 13:** Material Assets, including Telecommunications and Aviation;
- **Chapter 14:** Traffic and Transportation; and
- **Chapter 15:** Major Accidents and Disasters.

Consideration of Population and Human Health should be done in a proportionate manner that is specific to the proposed development and any likely significant effects the proposal might have on Population Health.

Particularly:

- Any likely significant effect from exposure to noise during construction and operation,
- Any likely exposure to shadow flicker during operation,
- Any likely significant reduction in air quality during construction, particularly dust and emissions,
- Protection of ground and surface water during construction activities from contamination with hydrocarbon spillages or sedimentary run off.

It is the opinion of the NEHS that the EIA has identified these areas for assessment, and they are reported in the EIAR.

The NEHS recommends An Coimisiún Pleanála (ACP) consider Chapter 4 in the context of our previous recommendations in this submission, i.e. emissions into the environment and exposure of populations to the emissions and an evaluation against recognised health protection standards.

6. Noise and Vibration

Project Specific Guidance for Wind Energy Development

The current Guidelines for Wind Energy Development (GWED) are: Wind Energy Development Guidelines (2006)

<https://www.gov.ie/en/publication/f449e-wind-energy-development-guidelines-2006/>

It is recognised that the nature of wind energy development has significantly changed since the publication of these Guidelines. Particularly the size of the turbines and the proximity to centres of populations and the cumulative effects with other wind energy development.

A revision of the 2006 GWED commenced in 2013 and Draft Revised Wind Energy Development Guidelines (WEDG) were issued in December 2019.



<https://www.gov.ie/en/publication/9d0f66-draft-revised-wind-energy-development-guidelines-december-2019/> These are yet to be adopted, however they are on the Department's website.

The draft Revised WEDG 2019 states *'the revised guidelines will provide greater consistency of approach in planning for onshore wind energy development, as well as providing greater certainty and clarity to the planning system, to the wind industry and to local communities.'*

The NEHS would consider the most appropriate criteria for assessing significance of the predicted noise would be consideration of the ENVIRONMENTAL NOISE GUIDELINES for the European Region, 2018 The 2018 WHO Guidance set health protection levels from environmental noise.

<https://iris.who.int/bitstream/handle/10665/279952/9789289053563-eng.pdf?sequence=1>

The NEHS is aware of the High Court decision in **Webster/Rollo V Meenaclogher (Wind) Limited (2024 IEHC 136) 8th March 2024**, and details of the judgement. The judgement that the noise from the wind farm was a Private Nuisance is a predominately health based assessment, in that the elements that were deemed to create the nuisance were directly related to health effects on the complainants. It is the understanding of the NEHS that assessment of compliance with health protection conditions set in the consent process was not a material consideration in the judgement. The judge did state that she could consider nuisance irrespective of any compliance with consent conditions, particularly in the absence of up to date national Policy and Guidance in the area. The Draft 2019 (WEDG) Guidelines is still on the Department's website as of the date of this submission.

Nuisance from noise is fundamentally a subjective assessment based on 'reasonable' perception and reaction of the effects of the noise exposure. This perception and reaction depends on situational specific conditions and land use. This was recognised in the Judgement after 51 days of evidence and consideration of the specific facts. It also the understanding of the NEHS that the Judgement did not make an order as to the level or characteristic of the noise that would abate the nuisance.

If ACP are now considering that they are under a duty to incorporate the likelihood of a Private Nuisance into their decision making, then they should consider the judgement in **Webster/Rollo V Meenaclogher (Wind) Limited (2024 IEHC 136) 8th March 2024**. This judgement identified, in the absence of Irish Guidance, the usefulness of UK Guidance in the investigation of wind farm noise as a statutory nuisance. This is, of course, a reactionary methodology where specific noise exposure is known and not a predictive methodology for the likelihood of a Private Nuisance.



<https://docs.wind-watch.org/IRE-2024 IEHC 136.pdf>

<https://assets.publishing.service.gov.uk/media/5a795184e5274a3864fd5f82/pb-13584-windfarm-noise-statutory-nuisance.pdf>

NEHS notes the most recent development in the Case below.

Nagle View Turbine Aware Group v An Bord Pleanála, and Coom Green Energy Park Limited (2024 IEHC 603) 1st November 2024. The Office of Planning Regulator key takeaways on page 20 included the below screen shot:

- In the context of Section 28 guidelines, it is in principle lawful to have regard to draft guidelines as part of the evolving scientific context or in "*illuminating what amounts to best practice*", particularly where the extant guidelines are potentially viewed as outdated.

https://publications.opr.ie/storage/publications/HKpLQPHtDmvqiveTUIpHqYeoNVmt99rqGKgEai2J.pdf?_gl=1*1uukl22*_ga*MjA0MTE1MDM0Ny4xNzcwNzI1OTAx*_ga_J58VT3XFH2*czE3NzA3MjU5MDAkbzEkZzEkdDE3NzA3MjYxMDgkajQzJGwwJGgw

The noise and vibration impacts of MWF, substation, BESS and Grid Connection route during construction, operation and decommissioning phases are addressed in Chapter 9 of the EIAR. Whilst sections 9.4, 9.10, 9.46 and 9.52 of the EIAR does not accept the above position of the NEHS; the use of the 2006 Guidance with regards to noise exposure, and in particular the '*balance between development and protection of public health*' stated in ETSU R-97 are resulting in a significant volume of complaints from communities exposed to noise from wind turbines post development. This position that the absolute noise exposure limits set in the 2006 Guidance do not necessarily protect Public Health in specific development situations is now supported by Judgements of the Irish Courts, as reference previously in this submission.

NEHS notes from Appendix 9-3 that 7 noise measurement locations were utilised to gather the current noise baseline as "*described as fairly typical for rural amenity influenced by wind disturbed vegetation, distant road traffic, and natural noises such as birds and livestock.*" In table 9-13 concludes the background noise levels as a quiet area. The limits proposed by the applicant is the following:

- 9.104 In summary, the operational noise limits proposed for the Proposed Project are:
- 40 dB LA90 for daytime windspeeds where the typical background noise is less than 30 dB LA90;
 - 45 dB LA90 for daytime windspeeds where the typical background noise is greater than 30 dB LA90 or a maximum increase of 5 dB(A) above background noise (whichever is the higher); and
 - 43 dB LA90 for night-time periods or a maximum increase of 5 dB(A) above background noise (whichever is the higher).

NEHS notes there are 20 Noise Sensitive Receptors (NSR) from MWF as per figure 9-1 and table 9-1. In figure 9-1 the Orange Circular Line denotes the 35



dB LA90 Study Area Noise Contour i.e. it predicted outer geographic limit where noise from the turbines might reach a level of 35 decibels.

The Draft 2019 (WEDG) Guidelines propose a noise limit, referred to as a Relative Rated Noise Limit (RRNL) in the range of 35 – 43 dB(A), while not exceeding the background noise level by more than 5dB(A) with an upper limit of 43 dB(A). These limits are recommended by NEHS in the interest of protecting Public Health, particularly to prevent sleep disturbance.

In relation to substation and BESS, section 9.109 and table 9-8 provides mitigation measures such as the barrier effects modelled in accordance with ISO 9613-2. In section 9.156 notes that one dwelling will be exposed to construction noise above 75 dB LAeq, at maximum level of 82 dB LAeq. The mitigation measure proposed is: *"A temporary 2.5 m high solid close-boarded wooden fence, or equivalent noise barrier, will be installed on the north section of Over-run Area 1, where it joins the local road, which will reduce noise from construction activity taking place closest to this area by up to 10 dB."*

NEHS recommends that this barrier mitigation measure is installed and be a condition to the planning permission.

Construction activities may result in temporary increases in noise levels, vibration, and amenity disturbance. The combined effects of construction traffic, narrow rural roads particularly L5252 and nearby activities from other projects as per table 2-5 may increase the perceived noise environment for some receptors.

The NEHS recommends that, if permission is granted, the following measures are secured:

- a) Implementation of a construction noise management and curtailment strategy.
- b) Construction hours restricted to:
 - **Monday–Friday: 07:00–19:00**
 - **Saturday: 08:00–13:00**
 - **Sundays/Public Holidays: No noisy works permitted.**
- c) Noise and vibration monitoring at sensitive receptor locations.
- d) Restrictions on working hours near schools and community facilities where feasible.
- e) Consideration of cumulative noise impacts, including nearby wind farm operations.
- f) Maintenance of safe access to residential and community receptors.
- g) Implementation of a complaints management procedure with a dedicated CLO.



These measures would assist in protecting residential amenity and community wellbeing during construction.

7. Shadow Flicker

The NEHS has considered chapter 11 of the EIAR which assesses Shadow Flicker. Three different scenarios were completed to reflect the three versions of wind turbines Nordex N149, Vesta V150 and Nordex N163. When taking into account the most likely scenario from 2006 GWED threshold i.e. 30 hours of shadow flicker per annum. Section 11.84 states: *"The Proposed Project would therefore have the potential to cause **significant** shadow flicker effects upon six receptors under Scenario 1 and 2, and eight receptors under Scenario 3, prior to the implementation of mitigation."* NEHS concludes that the applicant has flexibility in implementing draft WEDG 2019 Guidelines as per section 11.85.

The draft (WEDG) 2019 Guidelines is still available on the Department's website as of the date of this submission and should be implemented.

The draft 2019 Guidelines proposed a planning condition of:

The adopted DoEHLG 2006 Guidelines are currently under review. The Draft DoEHLG 2019 Guidelines recommend local planning authorities and/or An Bord Pleanála impose conditions to ensure that:

"no existing dwelling or other affected property will experience shadow flicker as a result of the wind energy development subject of the planning application and the wind energy development shall be installed and operated in accordance with the shadow flicker study submitted to accompany the planning application, including any mitigation measures required"

The Draft DoEHLG 2019 Guidelines are based on the recommendations set out in the 'Proposed Revisions to Wind Energy Development Guidelines 2006 - Targeted Review' (December 2013) and the 'Review of the Wind Energy Development Guidelines 2006 - Preferred Draft Approach' (June 2017).

In the interest of the protection of Public Health, the condition in the Draft (WEDG) 2019 Guidelines should be implemented if consent is given for the development. The technology has advanced since the publication of the 2006 Guidance and it is a reasonable health protection measure to be included in any conditioning of a wind farm development. The mitigation measures that will eliminate exposure to shadow flicker are technologically robust and established. This mitigation measure should be implemented irrespective of whether the current guidance is updated.

8. Soils and Geology

The NEHS has considered chapter 6 of the EIAR. MWF site is mainly flat and consists of mixture of bog, farmland and scattered dwellings. There is a small concentration of houses near Gweesalia, c. 500 m south of MWF. Ground Investigation (GI) (Technical Appendix 6-1) was carried out across MWF which



found peat thicknesses of between 1 and 5.6 metres below ground level (mbgl).

The Proposed Grid connection route (GCR) is between MWF and the existing substation at Bellacorick east of Banger Erris. The land for GCR comprises of existing road network with grass margins and/or hedgerows and treelines adjacent to the road margins. NEHS notes that the Grid Connection route is not expected to interact with underlying bedrock due to shallow nature cable trenching.

The main concerns from Public Health perspective is landslides, soil and ground contamination during rock extraction e.g. contaminated by tar, hydrocarbons, accumulation of spills of fuels, lubricants on plant/vehicles and oil used to cool the transformer(s) in the substation and in each turbine, and the potential risk of fires at the BESS compound.

In section 6.70 of chapter 6 of the EIAR its states *"One area of "moderately high" landslide susceptibility is located within the Main Wind Farm Development Site adjacent to the existing access track leading to T10 and T11."* In section 6.71 notes that 4 out of the 32 trail pits recorded *"spalling or collapsing indicating predominantly stable soil conditions within the exploratory locations."* A Peat Landslide Hazard Risk Assessment (PLHRA) (Technical Appendix 6-2) was carried out and a Peat Management Plan (Technical Appendix 6-3) is proposed in providing mitigation measures such as utilising *"a floating or piled foundation solution which removes the requirement for significant peat excavations."*

In Section 5 and 6 of CEMP (Technical Appendix 2-1) provides mitigation measures for Environmental Incident and Emergency Response Plan (EIERP) in regards to soil and ground contamination.

NEHS has considered the mitigation measures for Construction, Operational and Decommissioning phases in section 6.127 – 6.142 of Chapter 6, section 5 and 7 of the (Technical Appendix 6-3) Peat Management Plan and section 5 and 6 of CEMP of the EIAR. **NEHS recommends if consent is given for this development the mitigation measures described above and in more detail in Chapter 6 on Soils and Geology, Appendix 6-3 and CEMP are adopted for construction, operations and decommission phases should be included as a condition of consent.**

NEHS recommends that a geologist engineer and Ecological Clerk of Works (ECoW) are employed to maintain a detailed log of the actual volumes of peat excavated and reused i.e. Geotechnical Risk Register and to undertake additional Ground Investigation to confirm assumptions made in analysis in EIAR.



9. Hydrology & Hydrogeology

The NEHS has considered chapter 7 of the EIAR which sets out to assess the potential impacts of the development on the water environment (surface and groundwater). MWF is located within the boundary Blacksod-Broadhaven Catchment. The northern peat drains are discharging into the Doolough stream and An Mhoing Mhor Stream, whilst the central and southern peat drains into the Atlantic Ocean.

NEHS notes from figure 7-2 that the historical flooding occurred northwest of MWF turbines T1, T2 and T3 and the source was the Doolough Stream. A Stage 1 Flood Risk Assessment has been undertaken and concluded that the impact was low for both MWF and GCR.

NEHS notes from section 7.213 to 7.273 of the EIAR details Avoidance, Prevention and Reduction, Good Practices, Reuse and Remediation Mitigation Measures for each phase of the development. While no direct human health impacts are anticipated, there is potential for indirect effects during construction through sediment runoff, spills, or disturbance of drainage pathways.

The NEHS recommends strict adherence to the CEMP and mitigation measures in section 7.213 to 7.273 of Chapter 7, with particular emphasis on:

- **Surface water protection,**
- **Spill prevention and,**
- **Management of excavated material.**

10. Food Safety and Environmental Compliance

The development itself will bring level of employment in the construction phase. Should welfare facilities in any of the temporary construction compounds become a commercial kitchen/canteen or food preparation area, then it operates as a food business. The NEHS require that registration be undertaken in accordance with Article 6(2) of Regulation (EC) No. 852/2004, and that early engagement with the appropriate registering authority be undertaken to ensure compliance with food hygiene legislation.

Where smoking shelter(s) are provided if any within temporary construction compounds, they shall comply with Section 47 of the Public Health (Tobacco) Act 2004 (as amended). NEHS recommends that early engagement with the appropriate registering authority is undertaken to ensure compliance with Tobacco legislation.



11. Construction Environmental Management Plan (CEMP)

The NEHS has considered the CEMP and is of the opinion that there will be adequate protection of Public and Environmental Health during the construction phase providing the following items are adhered to:

- The mitigation and controls are implemented in full.
- The effectiveness of environmental controls are monitored and reviewed and increased mitigation/corrective action is taken where required.
- All drinking water and water used for the preparation of food in the temporary construction compounds should meet the requirements of S.I. No. 99/2023 - European Union (Drinking Water) Regulations 2023 (as amended).
- There should be no direct emission to ground or surface water of any foul waste water. All waste water should be contained and taken off site to a licensed treatment facility.
- Site drainage should ensure the protection of surface and ground water during the construction phase.
- The dust monitoring is a monthly average standard. Compliance with standard can incorporate short periods of very high levels of dust deposition followed by low levels and still be compliant. It is therefore important that dust minimisation is continually implemented and any complaints are investigated and responded to.
- A pest/vector management control plan should be developed into a specific pest/vector management programme for protection of nearby sensitive receptors. Construction activities should ensure that drains and sewers are not damaged or left open, in order to prevent rodent access and infestation.
- That the Construction Traffic Management Plan in (Technical Appendix 14-4) is implemented in full. This relates to section 3 of this submission in regards to the current condition of the back road L5252 i.e. *"is only wide enough for one car."* Figure 14-3 shows that the proposed development has 3 access points (AP1, AP2 and AP3) on L5252 therefore a design considered appropriate for a single carriageway according to Table 5.1 of the TII May 2023 guidance on the Geometric Design of Junctions should be utilised.



If you have any queries regarding this submission, the initial contact is Jennifer Shorten Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours Sincerely,

A handwritten signature in cursive script that reads 'Jennifer Shorten'.

Jennifer Shorten

Oifigeach Sláinte Comhshaoil, Príomhaí | FSS Seirbhís Náisiúnta Sláinte
Comhshaoil | Leaba Greine NSU

Principal Environmental Health Officer | HSE National Environmental Health
Service | Sunbeds NSU

Áras Naomh Mhuire, Sean-bhothair Chathair Na Mairt, Caisleán an Bharraigh,
Contae Mhaigh Eo.

St. Mary's, Old Westport Road, Castlebar, County Mayo

Email: Mayo.PEHO@hse.ie

A handwritten signature in cursive script that reads 'Lorraine Dempsey'.

Lorraine Dempsey
Environmental Health Officer,
Environment Network Support Unit