MERCURY RENEWABLES (CARROWLEAGH) LIMITED

FIRLOUGH WIND FARM, CO. MAYO AND HYDROGEN PLANT, CO. SLIGO

THIRD RESPONSE TO THIRD PARTY SUBMISSIONS AND OBSERVATIONS PLANNING APPLICATION REFERENCE ABP-317560-23

July 2024

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DOCUMENT APPROVAL

PROJECT	Firlough Wind Farm and Hydrogen Plant	
CLIENT / JOB NO	Mercury Renewables (Carrowleagh) Limited	6129
DOCUMENT TITLE	Third Response to Submissions Received	

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6129/403/1/SJ

FIRLOUGH WIND FARM AND HYDROGEN PLANT
RESPONSE TO SUBMISSIONS RECEIVED

CONTENTS

1 INTRODUCTION AND BACKGROUND TO REPORT

This document provides a response to the Third Party Submissions made on the Significant Additional Information furnished to the Board on 21st March 2024 in relation to the Strategic Infrastructure Development Application Reference ABP-317560-23 made to An Bord Pleanála by Mercury Renewables (Carrowleagh) Limited, for the construction of a wind farm and hydrogen plant and related works.

The Significant Additional Information included**:**

- Response to Inspector Question No. 1 EIA classifications
- Updated Quantitative Risk Assessment (QRA) Report
- Response to Inspector Question No. 3b Sligo Traffic Policy
- Response to Inspector Question No 8a Worst Case Scenario
- Letter from insurance broker.
- Letter to Grace Dempsey
- Response to Mayo County Council's submission.
- Property Over View Table
- Letter to ABP re BEMP
- Drawing No 4a 410135-1000-G3000
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- Figure 1.3 - Hydrogen Plant Site House Locations Map
- Updated Noise Chapter
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- Wind Farm Cumulative Contour Map Existing Noise
- Submissions Response Document
- Response to Second Round of Submissions
- Aine McCann Submission Response

The Significant Additional Information was re-advertised, and Site notices erected from 19th April until 24th May 2024 advising that submissions or observations in relation to the Significant Additional Information may be made only to An Bord Pleanála.

This document addresses the submissions received from the Board on 14th June 2024 in relation to the Significant Additional Information.

There have been two previous submissions responses from the Applicant;

- 1st Submissions Response in November 2023
- 2nd Submissions Response in March 2024
    - Response to Aileen McCann in April 2024 (part of second round of submissions).

A number of the submissions received are related to the same topics. For this reason, this response is arranged by topic. The two previous responses to submissions have already addressed a number of topics raised in this third round of submissions. The location of these responses has been provided in this document, these will not be readdressed in this response.

2 RESPONSE TO INLAND FISHERIES IRELAND (IFI)

IFI's Submission is as follows:

In addition to IFI's earlier submission and having reviewed the submission response to third party submissions and observations provided IFI is satisfied with the response in most regards but remains concerned in relation to the following:

1; The tributary of the Newtown River named the South Corbally Stream has been identified by IFI for a habitat enhancement project which will include significant investment. It is imperative that the flow regime in this stream is not impacted by the proposed abstraction.

The Groundwater Supply Assessment: Section 12. States reductions in flow at local springs (SP1 and SP2) were noted. These springs are the source of the South Corbally Stream. It is recommended in 3.3.6 that at a minimum SP1 And SP2 should be monitored to obtain baseline flow data and monitored. Trigger levels must be set which form the link between monitoring and mitigation. The trigger level must be set high enough to ensure the viability of the downstream fisheries habitat. IFI request

consultation prior to the identification of trigger levels for mitigation as this will have a direct impact on the South Corbally Stream habitat enhancement project and fish populations downstream. A mechanism to ensure abstraction can be stopped in case of damage to fisheries habitat must be put in place.

Response;

SP1 and SP2 were identified in the Ground water supply assessment submitted with the EIAR as being the source of the South Corbally Stream. These will be monitored as part of the ongoing monitoring during construction and operation of the Hydrogen Plant. The IFI will be consulted and trigger levels will be identified. A mechanism to stop abstraction has been built into the design of the Hydrogen Plant in the event that trigger levels are reached. This was outlined in the 1st Submissions Response Section 4.5.1.

This blending of source waters to maximise the use of rainwater and the associated overall reduction of groundwater concentrations in wastewaters is a form of mitigation and will be used to manage the Site in terms of ensuring sustainable use of groundwater and discharging under favourable conditions.

Working back from worst case scenario whereby during extended drought conditions groundwater levels are low, and rainwater volumes are low, and the sustainable use of groundwater is not achievable, mitigation includes the following:

1. Cease operation of the Hydrogen Plant Site, specifically, cease abstraction of groundwater, and if required cease operations fully until such time as raw water sources are replenished.
2. The use of mains water as source water for the Hydrogen Plant Site. This is only anticipated under extreme conditions and will only be permitted where mains supply is adequate and with approval of appropriate stakeholders.

The two scenarios outlined above are unlikely to occur. This is because predicted high wind production seasons (when it is windy) and therefore peak groundwater demand for hydrogen production, is in line with predicted higher periods of rainfall which replenish the groundwater resources and volume of harvested rainwater.

2; IFI request consultation in relation to the ongoing flow monitoring and assimilative capacity calculations for the discharge into the Newtown River.

Response;

The Applicant agrees to consult with the IFI in relation to ongoing flow monitoring and assimilative capacity calculations. It should be noted that the Hydrogen Plant discharges to the Dooyeaghny (or Cloonloughan) river as per the EPA. The Newtown River is located to the north of the Hydrogen Plant. See figure 1 below. The Applicant will adhere to any planning conditions in relation to monitoring at the Newtown River.

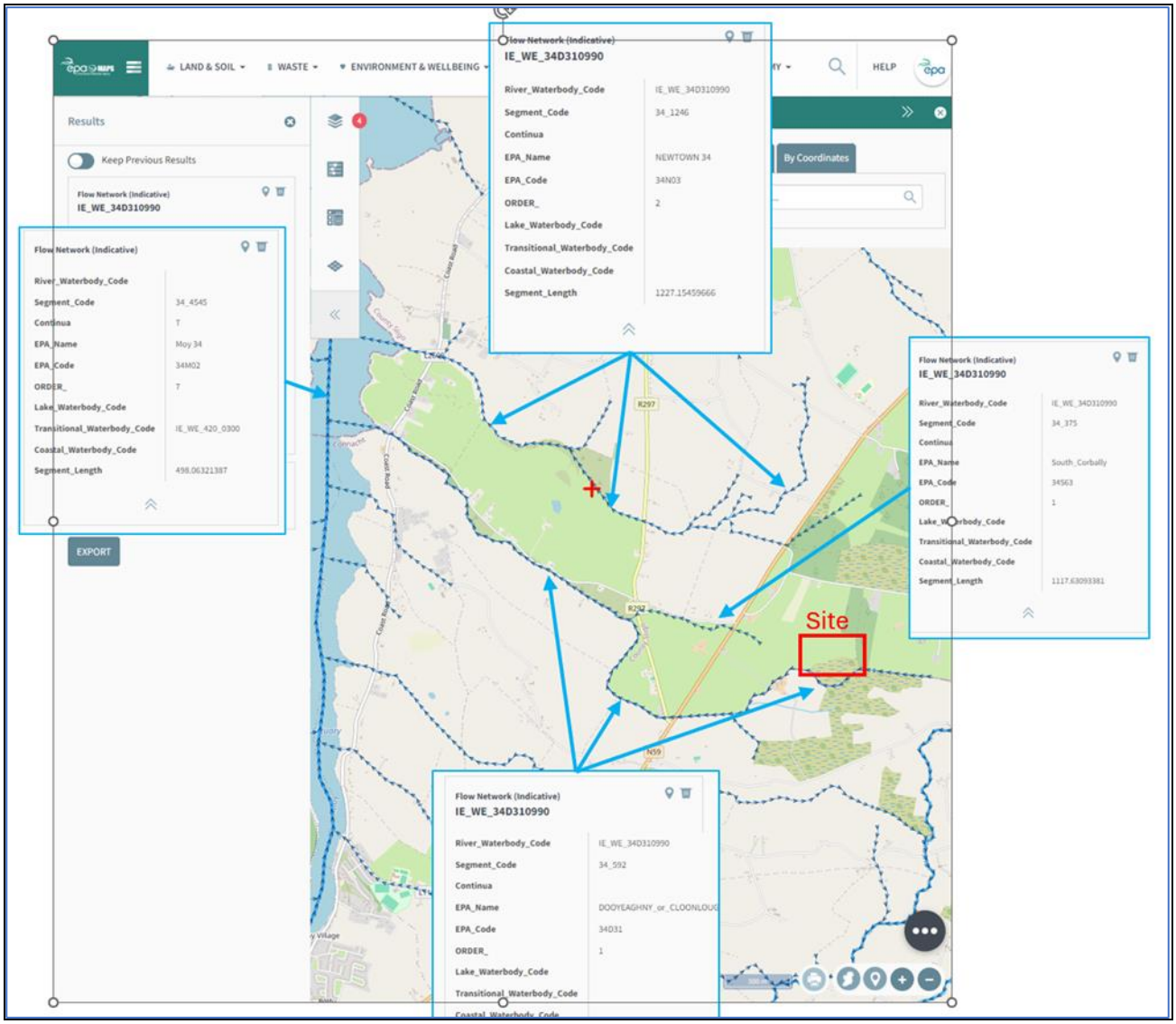

Figure 1; Surface water network in the vicinity of the Hydrogen Plant; Extract from the EPA mapping service.

3 RESPONSE TO SUBMISSIONS

The following topics have been addressed in the previous submissions responses, significant further information or in the EIAR.

Topic	Location of Response Provided Previously
Devaluation of property.	2nd Submissions Response Section 3.6.
Traffic movements at the Hydrogen Plant vehicle numbers.	1st Submissions Response Section 4.2.2.
Traffic movement at the Hydrogen Plant time restrictions.	1st Submissions Response Section 4.11.
Tube trailer pressure and vehicle specifications including weight.	1st Submissions Response Section 4.2.2. 2nd Submissions Response Section 3.2.
Traffic during construction; impact on farm work, people's livelihoods, inconvenience and driver delay.	1st Submissions Response Section 4.6.3. 2nd Submissions Response Section 3.6, 3.16 and 3.23.
Traffic during construction; impact on other road users; emergency services, elderly.	1st Submissions Response Section 4.6.3. 2nd Submissions Response Section 3.8, 3.14, 3.20.
Traffic during construction; capacity of roads to accommodate, methodology of road surveys.	EIAR Chapter 15; Traffic and Transport Section 15.3.5; Existing Traffic Volumes and Section 15.5.3 Predicted Additional Traffic on Roads During Construction Phase. 1st Submissions Response Sections 4.6.2 and 4.6.3.
Traffic impacts to air quality.	1st Submissions Response Section 4.7.1.1.
Traffic impacts to animals on haul route.	1st Submissions Response Section 4.11.
Operational traffic; volume of traffic, danger of accidents at junctions.	1st Submissions Response Section 4.2.2. 2nd Submissions Response Section 3.2. 1st Submissions Response Section 4.6.2.
Traffic during operation of Hydrogen Plant; impact on other road users.	1st Submissions Response Section 4.6.3.
Construction traffic; suitability of diversion route.	EIAR Appendix 2.1 CEMP; Management Plan 7; Traffic Management Plan. 1st Submissions Response Section 4.6.3

Topic	Location of Response Provided Previously
Cycling impacts/ euro velo route.	1st Submissions Response Section 4.6.3.
Consent for turbines, hardstands, passing bays, works in the road.	1st Submissions Response Section 4.12.4. 2nd Submissions Response Section 3.16 and 3.5.
Turbary rights; access to plots during construction, operation and decommissioning.	1st Submissions Response Section 4.13.1.
Strategic Environmental Assessment (SEA).	1st Submissions Response Section 4.12.6.
Archaeology; solar alignments and megalithic tombs.	1st Submissions Response Section 4.8.1.
Archaeology; impacts from traffic on roads, construction of roads.	1st Submissions Response Section 4.8.2. EIAR Chapter 14; Cultural Heritage Section 14.5.2.
Archaeology; impacts to undiscovered artifacts.	EIAR Chapter 14; Cultural Heritage Section 14.5.1.
Can the grid accept the full capacity of the Wind Farm.	1st Submissions Response Section 4.1.1.
Personal information being included.	1st Submissions Response Section 4.13.15.
Personal information being redacted.	2nd Submissions Response Section 1.1.
Consultations; not personally consulted.	1st Submissions Response Section 4.1.
Consultations: letters being delivered in person (would prefer the postal service).	1st Submissions Response Section 4.1.
Carbon footprint of the project, off set of construction phase, carbon payback.	1st Submissions Response Section 4.7.3.
Noise/vibration from vehicles and structural concerns with buildings.	1st Submissions Response Section 4.11. 2nd Submissions Response Section 3.2.
Noise impacts from other wind farms.	EIAR Chapter 11 Section 11.14.7 Cumulative Effects.

Topic	Location of Response Provided Previously
Trimming of vegetation at junctions.	2nd Submissions Response Section 3.12.
Community benefit fund.	1st Submissions Response Section 4.1. 2nd Submissions Response Section 3.17.
Impacts to the landscape of the wind farm including peat extraction for foundations.	EIAR Chapter 12; Landscape and Visual Impact.
Drawings include land boundary of neighbours.	2nd Submissions Response Section 3.12.
Population count methodology, including children in population count.	1st Submissions Response Section 4.13.13. Children are included in the Census Data.
Future planning permissions along haul route.	The Applicant cannot comment on any future potential planning applications. These will be assessed by the relevant authority having regard to the relevant planning policy set out in the County Development Plan. 2nd Submissions Response Section 3.2.
Utilities effected by cables in road.	1st Submissions Response Section 4.13.12.
Ecology impacts to the peatland on the wind farm.	1st Submissions Response Section 4.9.2.7.
Timing of bird surveys and methods.	1st Submissions Response Section 4.9.2.2.
Timing of bat surveys and methods.	1st Submissions Response Section 4.9.2.1.
Ecology of springs; impact of water abstraction.	1st Submissions Response Section 4.6.9 and 4.5.1. NIS submitted with Planning Application.
Ecology salmon and fisheries impact of water abstraction and water discharge.	1st Submissions Response Section 4.6.9, 4.5.1.2, 4.5.3 and 4.6.9.
Ecology; 'no mention of cuckoo, buzzards or frogs'.	Cuckoo and Buzzard; EIAR Chapter 7 Ornithology Section 7.3.4. 7.2.3. Frogs; EIAR Chapter 5 Terrestrial Ecology Section 5.2.7.2 and 5.3.4.
Need for the project 'not assessed'.	EIAR Chapter 1; Introduction Section 1.6; Need for the Development.
Savings of CO_2 'not assessed'.	1st Submissions Response Section 4.7.3.

Topic	Location of Response Provided Previously
An EIA is needed for hydrogen plant.	Response to Inspector Question No. 1; EIA classifications. EIA has been done for the Hydrogen Plant as this is part of the Project.
Qualifications of EIA authors.	EIAR Chapter 1; Introduction. 1st Submissions Response Section 1.3.
Method of water treatment to remove minerals present in ground water.	EIAR Chapter 2; Project Description Section 2.6.6.5.
Cleaning of water treatment equipment; chemicals required.	EIAR Chapter 2; Project Description Section 2.6.6.5.
Suitability of aquifer to provide water for Hydrogen Plant.	1st Submissions Response Section 4.5.1.
Tourism and fishing tourism.	1st Submissions Response Section 4.13.11. 1st Submissions Response Section 4.6.9.
Water abstraction; impact on wells and monitoring.	1st Submissions Response Section 4.5.1. Zone of contribution Figure 3 in 2nd Submissions Response.
Water abstraction; impact on river levels/flow.	1st Submissions Response 4.5.1.
Hydrology; water abstraction impact on wetlands.	1st Submissions Response Section 4.5.1.2.
Hydrology; water abstraction impact on gardens.	1st Submissions Response Section 4.5.1.
Hydrology wells; SP1 and SP2 drop in flow and monitoring.	EIAR Appendix 9.8 Ground Water Assessment Section 2.6 and 8. 1st Submissions Response Section 3.4 and 3.5.1.
Wells; private wells not captured by Geological Survey Ireland.	EIAR Appendix 9.8 Ground Water Assessment Section 2.6 and 8.
Pumping tests equipment, methodology, duration and readings.	1st Submissions Response Section 4.5.1.1. EIAR Appendix 9.8 Ground Water Assessment Section 3.
Mains water supply; feasibility of Hydrogen Plant connection.	1st Submissions Response Section 4.5.2.
Hydrology; pumping test duration.	1st Submissions Response Section 4.5.1.1.

Topic	Location of Response Provided Previously
Constructed Wetlands; located on/near peat.	Drawing No 6129-ABP OH-004 includes details for the Constructed Wetlands and the impenetrable membrane, sand and gravel between the wetlands and the soils.
Hydrogeology; type of aquifer at the Hydrogen Plant.	EIAR Chapter 9 Hydrology and Hydrogeology; Section 9.3.9 and 9.3.10.
Rainwater harvesting: Does it need filtering.	EIAR Chapter 2 Project Description Section 2.6.6.5. Yes all water is treated.
Rainwater harvesting: how much water will be supplied this way.	EIAR Chapter 2 Project Description Section 2.6.6.3. 1st Submissions Response Section 3.4.
Recharge of rainwater to aquifer at the Hydrogen Plant.	EIAR Appendix 9.3 Preliminary Discharge & Assimilative Capacity Assessment (pDACA). EIAR Chapter 9 Hydrology and Hydrogeology Section 9.3.10.
Peat spoil movement between the Wind Farm and Hydrogen Plant.	EIAR Peat and Spoil Management Plan (Management Plan 4; CEMP). Note: no spoil will be moved from the Wind Farm Site to the Hydrogen Plant Site as suggested in the submission.
Turbine Hardstands; 'not shown on drawings'.	Shown on Drawing Nos.; 6129-PL-601, 6129-PL-101, 6129-PL-102, 6129-PL-103, 6129-PL-104, 6129-PL-105, 6129-PL-106, 6129-PL-107, 6129-PL-108, 6129-PL-109, 6129-PL-110, 6129-PL-111. Hardstand details; Drawing No. 6129-PL-601. Described in EIAR Chapter 2; Project Description; Section 2.6.5 Turbine Foundation and Turbine Hardstands.
Light Pollution.	1st Submissions Response Section 4.13.2.
Job Creation.	EIAR Chapter 4; Population and Human Health Section 4.4.3. 1st Submissions Response Section 3.1 (Sligo County Council), 4.1 and 4.13.4.
Visual impact of Hydrogen Plant; reprofiling of the land, visibility of electrolyser building.	1st Submission Response Section 4.10. 2nd Submissions Response Section 3.17 and 3.20.
Hydrogen Plant location moved to Co. Sligo from Co. Mayo.	2nd Submissions Response Section 3.2. EIAR Chapter 3 Alternatives Section 3.5.2.
Hydrogen Safety; proximity of dwellings.	1st Submissions Response Section 4.4.1.

Topic	Location of Response Provided Previously
	QRA Submitted with Significant Additional Information.
Mercury: experience in hydrogen.	2nd Submissions Response Section 3.2, 3.4.
Examples of other hydrogen plants in the world.	1st Submissions Response Section 4.2.4. 2nd Submission Response Section 3.20.
Hydrogen Plant; Potassium Hydroxide/Lye/KOH and Glycol.	1st Submissions Response Section 4.9.3 and Section 4.3.
Volume of hydrogen on site/tier of COMAH (Query re Piping included in the calculations).	1st Submissions Response Section 4.2.3. 2nd Submission Response Section 3.17 and 3.20.
Pressure of hydrogen during processing, transport etc.	1st Submissions Response Section 4.2.2.
Hydrogen Plant: risks to people outside including children.	1st Submission Response Section 4.4. 2nd Submissions Response Section 3.21. QRA submitted with Significant Further Information.
Hydrogen; demand.	1st Submissions Response Section 4.2.4 and 2.1; Ireland's National Hydrogen Strategy.
Hydrogen; standards.	1st Submissions Response Section 4.2.1.
Hydrogen; "new industry to Ireland".	1st Submissions Response Section 4.2.1.
Hydrogen production taking electricity from the grid and if the hydrogen produced can be classified as 'Green'.	Addressed in the Response to Aine McCann's Submission.
Specific equipment at the Hydrogen Plant.	1st Submissions Response Section 4.4.1 and 4.11. EIAR Chapter 2 Project Description Section 2.6.6.
Pipe work at the Hydrogen Plant.	EIAR Chapter 2 Project Description Section 2.6.6.1 and 2.6.6.11. EIAR Chapter 16 Major Accidents and Natural Disasters Section 16.3.2.
Green Hydrogen production variable with wind and variable electricity supply to Hydrogen Plant.	2nd Submissions Response Section 3.20.

Topic	Location of Response Provided Previously
Diesel stored at the Hydrogen Plant.	EIAR Chapter 2 Project Description Section 2.6.6.2 and 2.6.6.6. EIAR Appendix 16.3; QRA Section 3.1.
Other substances at the Hydrogen Plant that could affect the COMAH Tier.	EIAR Chapter 2 Project Description Section 2.6.6.2 and Chapter 16: Major Accidents and Natural Disasters.
Operational Noise being higher than modelled noise.	2nd Submissions Response Section 3.17.
Location of cabling on the Wind Farm Site.	EIAR Chapter 2 Project Description; Section 2.6.11.
Access to turbary plots and use of access roads during construction.	1st Submissions Response Section 4.13.1.
Turbine Hardstands; can they be driven on?	EIAR Chapter 2 Project Description Section 2.6.5; Turbine Foundation and Turbine Hardstands.
Locational need for the hydrogen plant.	Response To Mayo County Counsil Submission. EIAR Chapter 3 Alternatives Section 3.5.2.
Passing bay locations; are these shown on drawings?	1st Submissions Response Section 4.9.7. Passing bays are all within the red line which is shown on the drawings submitted with the application.
Rainfall data used at locations distant from the Project Sites.	The methodology for rainfall data is included in the EIAR; Appendix 9.1 and 9.2 Site Specific Flood Risk Section 3.5.1 and in Appendix 9.8; Groundwater Supply Assessment in Section 2.5. Met Éireann stations with long term historical data sets are used.

4 OTHER TOPICS

This section includes responses to 3rd party submissions received in the 3rd round of submissions which have either not been raised previously or addressed in previous submissions and responses.

It was raised that the name of the Project "Firlough Wind Farm and Hydrogen Plant" is confusing due to the name of the bog being Carrowleagh. Carrowleagh is the Townland and formal address of the Wind Farm Site. Eirgrid requested that we change the name from Carrowleagh to avoid confusion with their nearby substation called "Carrowleagh". There is a small lake to the south of the Wind Farm Site called Fir Lough, which was used for the Project name. "Firlough" was selected by the windfarm site landowners who all live locally.

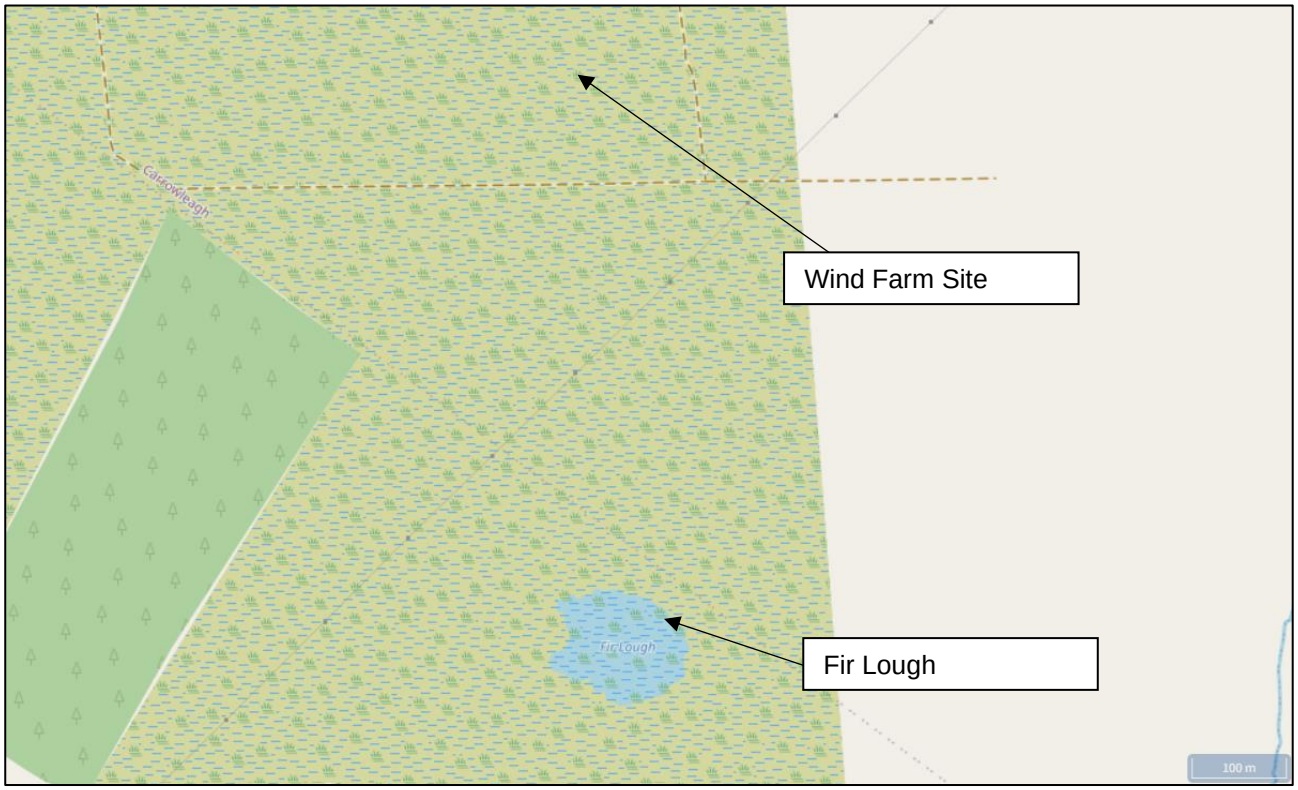

Figure 2: Fir Lough to the south of the Wind Farm Site.

An observation raised a query in relation to Planning Drawings 6129-PL-015 outlining that this drawing did not include buildings that have been constructed. To clarify, this drawing uses a standard base map published by the Ordnance Survey Ireland (OSI) which is a requirement of Planning Drawings submitted with Applications. Houses in proximity to the Wind Farm are identified in Figure 1.2 of the EIAR.

An observation queried the description of the access tracks at the Wind Farm in relation to Turbine 5. To clarify no new access track is needed to T5, it is located on an existing access track as per drawing no 6129-PL-100 and 6129-PL-101.

An observation referenced the impact assessments referring to "Short Term" impacts and querying how this is defined. The EPA's Guidelines on the information to be contained in Environmental Impact Assessment Reports (EIAR)[1] on page 51; defines the duration of impacts and classifies "Short Term" as "Effects lasting one to seven years". A separate observation queries the use of "Not Significant" in terms of impacts. Again, the EPA's guide is used to define the significance of impacts. Each chapter also sets out the methodology of the assessments and how the significance is defined in detail.

Several observations have outlined the definitions of 'turbary rights', 'free simple' and 'commonage'. These submissions suggest that the Proposed Development is infringing on Turbary rights, and that some parts of the Proposed Development do not have consents in place.

Of the approximately 600 turbary plots on the Wind Farm Site, the Applicant has consents for 97 plots. In order to map turbary plots, the Land Register maps, a historic map from the Minister of Agriculture and topographical survey data were used. There is also some evidence on site of the historic borders between the plots. Whilst there are some minor inconsistencies between these data sources, perhaps giving rise to the observations received, the layout of the Wind Farm and turbary plots controlled have been reviewed and we are fully confident that all infrastructure, including drainage for the Proposed Development, can be accommodated within the turbary plots under the control of the applicant while maintaining access to turbary plots outside of control of the Applicant. Post consent and prior to construction, the exact boundaries of the plots will be confirmed with further detailed surveys and with the involvement of the various turbary owners on the ground. The turbary right agreements are deemed to be commercially sensitive documents that contain private information and so have not been made public.

A 3rd party observation suggests that consent is required from Coillte for works in lands on the L6612. Again, all consents are in place for the Project including those for passing bays along haul routes.

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

An observation suggests that they were "intimidated by the applicant" and "lied to". As stated during the Oral Hearing, the applicant and the Project team reject these serious allegations categorically.

An observation infers that a Compulsory Purchase Order (CPO) was to be/or was suggested to be applied to a neighbouring landowner. No Compulsory Purchase Order agreements are in place for the Project, and none have been suggested to any landowners as being required. A Compulsory Purchase Order is the power afforded to public bodies to acquire identified areas of land compulsorily, for the purposes of development or to enable local authorities to perform their functions and duties. The primary reason a scheme allowing for the compulsory acquisition of land exists is to allow public infrastructure projects to proceed for the greater and common good. The Applicant does not fall under the definition of public body.

An observation raises issues with the letter included in the Significant Additional Information that was sent to the Dempseys regarding medical emergencies during construction of the Project. The letter offers the use of a dedicated phone line to communicate with the Applicant in order to suspend construction deliveries to ensure priority access for any medical personnel which was discussed at the Oral Hearing. This number can be shared with the emergency services so that they can contact the Applicant when necessary. This letter was issued in good faith in a manner that was hoped to be constructive. The Applicant is willing to engage with the Dempseys to ease any issues that arise during the construction phase of the Proposed Development.

An observation notes that diesel will be present on the Hydrogen Plant Site and this itself is a COMAH substance. This is correct. The Project includes a small diesel tank for the emergency diesel generator. It is anticipated that tube trailers, powered by zero emissions green hydrogen will be used to transport green hydrogen resulting in no CO_2 or NO_x pollutants, these vehicles only emit water vapour and heat and do not require diesel fuel tanks. However, if for any reason hydrogen powered vehicles are not available or are not commercially viable, diesel vehicles will be used. Both the emergency generator tank and the diesel vehicle fuel tanks were considered as part of the design and risk assessment of the Project.

The EIAR, Chapter 2; Project Description, Section 2.6.6 states;
"Hydrogen is the primary substance of concern, there are no other substances of quantities that would be relevant to COMAH or ATEX."

The COMAH regulations do not apply to;
"The transport of dangerous substances and directly related intermediate temporary storage by road, rail, internal waterways, sea or air outside establishments defined in Regulation 2(1), including loading and unloading and transport to and from another means of transport at docks, wharves or marshalling yards;"[2]

Which means that diesel in the fuel tanks of vehicles on site is not within the intent of the COMAH regulations and can be excluded. The storage of diesel at the Hydrogen Plant in vehicle fuel tanks does not affect the maximum quantity of hydrogen that can be stored and nor does it change the COMAH tier of the site.

Small volumes of substances also do not need to be considered; Schedule 1 Note 3 states:
"The quantities to be considered for the application of the relevant Regulations of these Regulations are the maximum quantities which are present or are likely to be present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present if their location within an establishment is such that it cannot act as an initiator of a major accident elsewhere at that establishment."

As the total amount of diesel that will ever be on site is much less than 2% (0.3% here) the regulations don't apply to the emergency generator diesel tank.

The HSA has confirmed that the Hydrogen Plant, based on the details received, will constitute a new lower tier COMAH establishment.

After receiving this submission our expert consultants in the field have reviewed the calculations and have confirmed that the methodology that has been applied in the EIAR and QRA in relation to the COMAH Tier is correct. We are happy to confirm our conclusion that the Hydrogen Plant will be classified as a Lower Tier COMAH Site.

A submission queries the qualifications of the people taking readings during pumping tests, stating that; "*A local man not employed by Minerex was taking readings from FW1 Daily. This person was not qualified to do so as per BS ISO 14686 2003 and BS 5930:1990."*

[2] https://www.hsa.ie/eng/your_industry/chemicals/legislation_enforcement/comah/intermediate_temporary_storage/intermediate_temporary_guidance_nov_2020.pdf

The Ground Water Assessment states that FW1 was subject to the same methodologies as all other boreholes associated with the assessment, that is; the use of water level sensors for continuous monitoring over the duration of the test, validated by manual water level dip readings. All manual water level dip readings were taken by Minerex Environmental Ltd. operatives or trained Mercury personnel under Minerex Environmental Ltd. supervision.

A submission raises concerns that calibration certifications were not supplied for the equipment used for the pumping tests, suggesting that the equipment used may not have met scientific or industry standards. In response, Minerex Environmental Ltd., who provided the testing have clarified that the manufacturers of the water level sensors provide information on how to maintain and check / calibrate the equipment in house. The flow meters are mechanical and similarly, subject only to maintenance and checking / calibration in house. As part of Minerex Environmental Ltd standard methodologies using these types of equipment, water level readings are checked and validated (calibrated) by means of manual water level meters, and similarly flow meter readings are checked and validated by means of manual flow measurements e.g. bucket and stopwatch. Hydro chemical sensors are sent out for service and calibration, while certificates are available for these sensors they were not required for groundwater assessment / pump testing.

5 CONCLUSION

The Proposed Development will contribute to supplying the demand for renewable energy, which in the context of the pressing climate emergency is an urgent Irish national priority that must be given significant weight considering the wealth of supporting national and international policy.

The development process adopted by the Applicant has represented a best practice approach to a renewable energy scheme design, minimising the potential impact through multiple design iterations and modifications to minimise the impact on the receiving environment, and ensuring compliance with the suite of planning policies and objectives of the International, National and Regional Policies. The EIAR submitted with the planning application was prepared in accordance with the EIA Directive as amended by the 2014 EIA Directive, as well as the national implementing legislation, in particular, the Planning Acts and the Planning Regulations as amended. The function of the EIAR is to provide information to allow the competent authority to reach a reasoned conclusion on the effects of a development and inform subsequent decisions, such as planning. The EIAR also included the conclusions of the competent and qualified experts as to the significance of any such environmental effects, to assist the competent authority to comply with Article 8a of the 2014 EIA Directive.

Environmental Impacts have been considered within the EIAR and through the process of assessment, embedded mitigation, and additional proposed mitigation outlined in the EIAR, NIS, CEMP and Habitat Enhancement Plan it has been shown that the Proposed Development can be constructed and operated without significant effects arising, demonstrating the acceptability of the proposal.

Having regard to the objections raised, the Applicant respectfully submits that these objections were addressed in the planning application submission, the 1st Response to Submissions, the 2nd Response to Submissions, during the Oral Hearing and in the Significant Further Information submitted to the Board after the Oral Hearing. We further submit the Applicant has addressed all issues separately.

Planning permission should be granted for this development for all the reasons set out above.