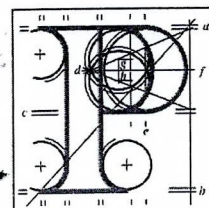


Our Case Number: ABP-317560-23

Planning Authority Reference Number:



**An
Bord
Pleanála**

Health and Safety Authority
3rd Floor
1A South Mall
Co. Cork
T12 R7WC

Date: 05 September 2023

Re: Proposed windfarm development including 13 no. wind turbines in Bunnyconnellan, Co. Mayo and hydrogen plant in Castleconnor, Co. Sligo.
Carrowleagh, Bunnyconnellan, Co. Mayo and Curraun, Castleconnor, Co. Sligo.

Dear Sir / Madam,

An Bord Pleanála has received your submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter.

The Board will revert to you in due course in respect of this matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of the local authority and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

PP EGM

Lauren Murphy
Executive Officer
Direct Line: 01-8737275

PA09

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64 Sráid Maoilbhríde
Baile Átha Cliath 1
D01 V902

64 Marlborough Street
Dublin 1
D01 V902

Niamh Hickey

From: Ita Daly <ita_daly@hsa.ie>
Sent: Friday 1 September 2023 17:24
To: SIDS
Subject: HSA response re ABP-317560-23
Attachments: PAR4171.Firlough.01.09.23.pdf

Dear Sir, Madam,

Please see attached response from the HSA in relation to case number ABP-317560-23.

Kind regards,
Ita

Ita Daly
Senior Inspector, COMAH Chemical Production & Storage

087 7538253
ita_daly@hsa.ie
www.hsa.ie

Health and Safety Authority
3rd Floor
1A South Mall
Cork
T12 R7WC
IRELAND

An tÚdarás Sláinte agus Sábháilteachta
An 3ú hUirlár
1A An Meal Theas
Corcaigh
T12 R7WC
Éire



An tÚdarás Sláinte agus Sábháilteachta
Health and Safety Authority

Ár bhFís: Saolta agus fiontair shláintiúla, shábháilte agus tháirgiúla

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An tÚdarás Sláinte agus Sábháilteachta
Health and Safety Authority

☎ 0818 289 389 ☎ landuseplanning@hsa.ie 🌐 www.hsa.ie

An Board Pleanála
64 Marlborough Street
Dublin 1

By Email to: sids@pleanala.ie

Our Ref: PAR 4171

1st September 2023

Re: Proposed windfarm development including 13 no. wind turbines in Bunnyconnellan, Co. Mayo and hydrogen plant in Castleconnor, Co. Sligo, Carrowleagh, Bunnyconnellan, Co. Mayo and Curraun, Castleconnor, Co. Sligo. SID Case Number ABP-317560-23

Dear Sir, Madam,

I am writing to you in response to a request for technical advice in relation to the above development, received from you on 8th August 2023.

The Health and Safety Authority, acting as the Central Competent Authority under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015), gives technical advice in response to a notice sent under Article 215 of the Planning and Development Regulations 2001-2021.

Under Regulation 24(2) of S.I. 209 of 2015, the technical advice on the effects of a proposed development on the risk or consequences of a major accident relates to the following types of developments within the consultation distance for an establishment:

- (a) the siting and development of new establishments;
- (b) modifications to establishments of the type described in Regulation 12(1);
- (c) new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.

The advice given is for the purposes of assessing a new development only. A full explanation of the Authority's Land-use Planning advice system can be found at:

https://www.hsa.ie/eng/Your_Industry/Chemicals/Legislation_Enforcement/COMAH/Land_Use_Planning/

Appendix 16.3 of the EIAR - *Land Use Planning QRA for the Firlough Windfarm Hydrogen Generation Facility Prepared for – Mercury Renewables* was reviewed by the Authority. The Health and Safety Authority can confirm, from the details received, that the development will constitute a new lower tier COMAH establishment.



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However, further clarifications on the land use planning QRA are required before the Authority can provide technical advice relating to this proposed development.

The items for clarification are as follows:

1. Confirmation that the individual risk contours presented in Section 4 take into account a residential population being both indoors and outdoors, as set out in Section 2.5.3 of the Authority's Guidance on technical land use planning ([TLUP](#)).
2. The following queries on assumption sheet A03:
 - a. The temperature for F2 weather conditions is not stated. TLUP Methodology states that the temperature for TLUP purposes should be 10°C for F2 weather conditions?
 - b. The split of D5 and F2 weather conditions is shown as 92.88% and 6.93%, respectively. This differs from the TLUP Methodology where 80% D5 and 20% F2 are set out in 2.5.4, to be amended.
3. The following queries on assumption sheet A05:
 - a. Outdoor fixed installations
 - i. The frequency of jet fire for 10mm pipe leak is one order of magnitude lower than that stated against Event# 073 in Table 36 of the TLUP Methodology, to be corrected.
 - ii. The frequency of flash fire for 10mm pipe leak is one order of magnitude higher than stated against Event# 075 in Table 36 of the TLUP Methodology, to be corrected.
 - b. Indoor fixed installations
 - i. The frequency of jet fire for 10mm pipe leak is two orders of magnitude lower than that stated against Event# 079 in Table 37 of the TLUP Methodology, to be corrected.
4. The following queries on assumption sheet A06:
 - a. In relation to indoor and outdoor vulnerability values, clarity is required on the thermal radiation values used. The TLUP Methodology states that a thermal radiation value of 8.02 kW/m² leads to 1% fatality and a thermal radiation value of 10.9 kW/m² leads to a 10% fatality. However, the QRA states that a thermal radiation value of >8.02 kW/m² would lead to 1% lethality and >10.9 kW/m², this appears to be correct – the level of fatality is not a step function, rather it should be a continuous probit relationship. The lethality varies from 1% to 10% between 8.02 kW/m² and 10.9 kW/m². Further clarity required here.
5. Appendix B: IS-11 states that it is assumed that 5 loading bays are in operation (with 1 in standby), whereas Appendix C mentions 7 loading arms for IS-11. Inconsistency to be resolved / justified.
6. Appendix C: Unclear how the LOC frequencies are calculated. There is no explanation, and it does not match the scenarios and frequencies described in Assumption Sheet ID A05. Further explanation required.
7. Appendix D: The overpressure values presented are not consistent with those set out in section 2.4 of the TLUP, review and amend or provide justification for differing over pressure values.
8. The report would benefit from more clarity in terms of the events which are most significant in terms of off-site risk.



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Health and Safety Authority

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If you have any queries please contact the undersigned.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Ita Daly', is written over a horizontal line.

Ita Daly
Senior Inspector,
COMAH, Chemical Production & Storage (CCPS)

Encl: Note on the Approach of the HSA to the Provision of Land-use Planning Advice



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Health and Safety Authority

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Note on the Approach of the HSA to the Provision of Land-use Planning advice.

The Authority, acting as the Central Competent Authority under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of 2015), gives technical advice in response to a notice sent by a planning authority under Part 11 of the Planning and Development Regulations 2001-2015. Under Regulation 24(2) of S.I. 209 of 2015, the technical advice on the effects of a proposed development on the risk or consequences of a major accident relates to the following types of developments within the consultation distance for an establishment:

- (a) the siting and development of new establishments;
- (b) modifications to establishments of the type described in Regulation 12(1);
- (c) new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.

The advice given is for the purposes of assessing new development only. A full explanation of the Authority's Land Use Planning advice system can be found at

https://www.hsa.ie/eng/Your_Industry/Chemicals/Legislation_Enforcement/COMAH/Land_Use_Planning/

Your attention is drawn to Regulation 24(3) of S.I. 209 of 2015:

(3) The technical advice provided by the Central Competent Authority to a planning authority pursuant to paragraph (2) may be generic or case specific in nature and shall be so formulated that it will assist the planning authority to take into account the need, in the long term—

- (a) to maintain appropriate safety distances between establishments covered by these Regulations and residential areas, buildings and areas of public use, recreational areas, and, as far as possible, major transport routes;*
- (b) to protect areas of particular natural sensitivity or interest in the vicinity of establishments, where appropriate through appropriate safety distances or other relevant measures; and*
- (c) for the operator to take additional technical measures, in the case of existing establishments, in accordance with Regulation 7, so as not to increase the risks to human health and the environment.*

In giving its advice the Authority does not deal with routine emissions. Such emissions will be subject to EPA or Local Authority scrutiny and control.

The operator of an establishment covered by S.I. 209 of 2015 is also required to take all necessary measures to prevent major accidents occurring and to limit the consequences of any such major accidents for human health and the environment