

To: Environmental Protection Agency,

From: Hydrec Environmental Consulting

Office 3 – The Station House,

North Road,

Monaghan Town,

Co. Monaghan

22/03/2023

Re: Clarification on EIAR submitted to EPA in support of Industrial Emissions Licence application for site at Corlea, Ballybay, Co. Monaghan (P1154-01)

Dear Sir / Madam,

It is understood that on the 28th November 2022, the Environmental Protection Agency (EPA) advised that additional information pertaining to IE Licence application P1154-01 was required. It is also understood that ten points in total were raised including the following request for clarification on the Environmental Impact Assessment Report (EIAR) submitted:

‘‘9. Environmental Impact Assessment Report (EIAR): With regards to the EIAR : a) Provide a description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved; and b) Provide a description of any significant adverse effects deriving from vulnerability of the project to risks of major accidents and/or disasters’’.

Having authored said EIAR, I am writing to the Agency to provide a response on the aforementioned query. For reasons of clarity, the points raised by the agency are outlined in a blue italic font with our response following directly after in black font:

- a) *Provide a description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved:*

Soils, Geology & Hydrogeology

When determining the criteria for rating the site's importance in respect to its geological / hydrogeological features, the criteria described in Table C2 of the *IGI – Guidelines for the preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements, 2013* was utilised. Similarly, the criteria to estimate the magnitude of impact on the surrounding geology / hydrogeology described in the IGI guidelines was followed.

In respect to soils & geology, the site importance was determined to be low (i.e. part gravel cover onsite thus soil fertility was deemed to be low also). Therefore, the magnitude of the impact in terms of land take is small adverse. In accordance with Table 3 'Significance Assessment Matrix' included in the submitted E.I.A.R, which is consistent with the IGI guidelines, a geological site of low importance with a small impact, results in an imperceptible effect on the environment.

When determining the criteria for rating the site's importance in respect to its hydrogeological features, the criteria described in Table C3 of the *IGI – Guidelines for the preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements, 2013* was utilised. Similarly, the criteria used to estimate the magnitude of impact on the surrounding hydrogeology described in the IGI guidelines was followed.

In respect to groundwater supply, the site importance was determined to be low (i.e. not within an inner or outer source protection area for public or private groundwater supply). Furthermore, a poorly productive bedrock aquifer is found underlying the site. Given that the groundwater resources in the proximity of the site has been classified as 'Low' and that there will be no discharges to ground from the facility (with the exception of clean stormwater), the magnitude of the impact is negligible.

Notwithstanding this, the site is located within the Keady groundwater body which is classified as being of 'Good' status. It was recognised that accidental spillage may result in a small adverse effect on the underlying aquifer, should such an event occur. Consequently, mitigation

measures were outlined in the E.I.A.R, including the placement of bunds and spill kits onsite in order to ensure that an imperceptible effect on the environment.

Hydrology

When determining the criteria for rating the site's importance in respect to local hydrological features, the criteria described in the NRA's *Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes* was utilised.

The Aghnaclogh Stream (1st Order) which is located approx. 160m to the east, is the closest watercourse to the proposed development site. Given that this watercourse is not utilised as a local potable water source (i.e. Stranooden GWS catchment boundary is included on Figure 3) nor is the stream considered an important local amenity site, the NRA guidelines would classify the watercourse of 'Low' importance. Furthermore, at the time of writing, the EIAR identified that:

'No macroinvertebrate sampling has been completed on the Aghnaclogh Stream or the Six Mile Stream (i.e. watercourse in which the Aghnaclogh Stream flows into). The closest active monitoring station on the river system is located on the Clontibret Stream at the bridge to the east of Killyneill Crossroads (Station No. RS03C011400). In 2017, a Q-value rating of Q3 was recorded at this monitoring point, representing a 'Poor' water quality status'

It is recognised that based on this classification, a 'Poor' water quality status has been extrapolated for the Aghnaclogh Stream. It is plausible that a higher water quality / ecological classification is found at the site. In recognition of such and owing to Ireland's WFD obligations, whereby a target to achieve at least 'Good' status for all waterbodies has been set, the EIAR includes a number of mitigation measures to ensure any further deterioration of this watercourse occurs.

Ecology

The site's ecological importance was determined to be low with the magnitude of the impact from the development determined to be negligible. For instance:

According to the National Biodiversity Centre there have been no protected flora or fauna species recorded within A 1km radius of the site, with the exception of the Eurasian Badger (*Meles meles*). No evidence of the presence of badgers (e.g. setts, latrines or couches) was observed within the curtilage of the site. In addition, a site inspection undertaken as part of the environmental impact assessment, concluded that in accordance with the Fossitt Habitat classification system, it was determined that the majority of the site's habitat could be categorised as a 'Buildings and Artificial Surfaces BL3' with an 'Improved Agricultural

Grassland GA1' habitat found directly to the north and east. Thus, the ecological value of the site was determined to be low.

An assessment of the air emissions from the proposed development using the SCAIL (Simple Calculation of Atmospheric Impact Limits) – Agricultural model was completed. The tool has been designed by the UK Centre for Ecology & Hydrology to specifically assess emissions from pig and poultry buildings and has been developed to evaluate the impact of NH₃ emissions on habitat sites. The SCAIL modelling assessment completed as part of this EIAR / Appropriate Assessment (AA) Screening confirms that development will not cause a deterioration in air quality in respect of the Magheraveely Marl Loughs SAC and Slieve Beagh SPA / SAC. For instance, the results of the SCAIL model demonstrate that the % critical level / loads from the proposed development for ammonia and nitrogen ranges from 0.3% - 0.8% at the respective Natura 2000 sites. Thus, given the % critical level is at or below 0.8% (i.e. worst-case scenario based on conservative meteorological conditions), the contribution of ammonia from the proposed development is deemed to be negligible

Archaeological & Cultural Heritage

Both the National Monuments Service and the National Inventory of Architectural Heritage's records were reviewed to assess whether the development will have an archaeological or cultural impact. Given the distance of the nearest archaeological heritage site to the proposed poultry unit (i.e. >400m), it is not envisaged that there will be any impact on same as a consequence. No cultural sites or their corresponding buffer zones/zones of notification are located within the boundary of the development, with the closest located approx. 830m to the east. As no development will occur outside of the site boundary, it is not envisaged that this cultural heritage site will be impacted upon and therefore the impact will be imperceptible.

Air, Noise & Climate

The SCAIL modelling tool also has the functionality to evaluate the impact of PM₁₀ emissions on human health. The closest human health receptor to the site (i.e. those outside the ownership of the applicant's family), is a community hall located approx. 110m to the east of the development. Glebe House located 430m to the north-east has also been designated as a potential receptor. Following the application of the SCAIL modelling software, it was determined that the process contribution (PC) of PM₁₀ at the edge of both receptors as a result of the proposed development equated to 3.13 PM₁₀ µg/m³ and 0.78 PM₁₀ µg/m³ respectively. Background concentrations at each receptor was determined to be 4.18 PM₁₀ µg/m³, therefore the total PM₁₀ concentration at each receptor was calculated at 7.31 PM₁₀ µg/m³ (i.e. community hall) and 4.96 PM₁₀ µg/m³ (i.e. Glebe House), post development. This value is substantially lower than the 40 µg/m³ annual mean limit stipulated in the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011).

Landscape & Visual Impact

County Monaghan contains a variety of landscapes. At local authority level, landscape character areas (LCAs) are the individual areas where more detailed landscape character types occur. Based on the Landscape Character Assessment prepared by Monaghan County Council, the proposed development site is located within the LCA 5: *Monaghan Drumlin Uplands*.

Given that it has been determined that the Monaghan Drumlin Uplands would be sensitive to certain development (i.e. top of hills), it is important that all future developments are appropriately integrated and sympathetic with the surrounding landscape. It is not envisaged that the proposed development will be intrusive on the landscape, given its lower setting (i.e. inter drumlin). The development has been located adjacent to the applicant's existing poultry unit which is in compliance with Monaghan County Council's Development Policies - AGP1 (j) and AGP 1 (l). Additionally, the development will not be visible from any scenic routes, areas of ecological designation or areas of secondary amenity value (as listed in the EIAR). Therefore, it can be concluded that the impact of the proposed development on the surrounding landscape will be imperceptible.

Material Assets

Based on the traffic assessment completed, it was calculated that a total of c. 40 additional truck movements per batch to and from the site will occur once operational. This equates to an average total of c.7 vehicular movements per week (i.e. 1 movement per day). Consequently, it is not predicated that this will cause an adverse impact on the local road infrastructure.

Population & Human Health

Population and human health are dependent on a number of other factors previously discussed (i.e. potability of water quality sources, impact from dust emissions etc). Upon completion of the development, secure full-time employment will be afforded to the applicant, as well as occasional part time work for members of the community. In addition, this enterprise will enhance job security to those offering services and working as suppliers/contractors to the farm (e.g. employees of Manor Farm, George Coulson & Son Ltd, College Proteins Ltd etc.). This represents a slight positive impact on human health and population.

b) Provide a description of any significant adverse effects deriving from vulnerability of the project to risks of major accidents and/or disasters''.

It is not envisaged that the development has a high degree of vulnerability to accidental releases of contaminants from the site. For instance, all soiled waters emanating from the wash down phase of operations will be captured by a grated channel to the front of the poultry unit and piped to an underground soiled water storage tank. This foul water infrastructure is independent to the storm water collection system designed for the site, thus foul waters cannot be accidentally diverted to any storm / surface water channels.

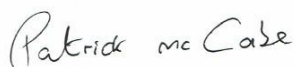
In relation to disasters, a flood risk assessment screening exercise was completed as part of the EIAR:

''As a requirement of the EU Floods Directive (2007/60/EC), the Republic of Ireland completed a National Preliminary Flood Risk Assessment (PFRA) in 2011. The country was divided into 420 map tiles for the purposes of disseminating the output of the assessment. These maps indicate the extent of the predicted 0.5% annual exceedance probability (AEP) for coastal flooding, the 0.1% AEP for fluvial flooding and the 1.0% AEP for pluvial flooding. No fluvial or pluvial flooding is demarcated to occur within the confines of the site''.

More recently, the OPW have released the findings / flood maps produced as part of the National Indicative Fluvial Mapping (NIFM), whilst the GSI have published the groundwater and surface water mapping produced as part of the GWflood Project. Neither project, identifies a flood risk to the applicant's site.

Should you have any queries in relation to this application or the material submitted with it, please do not hesitate to contact me on the below details.

Signed:

A handwritten signature in black ink that reads "Patrick McCabe".

Patrick McCabe B.Sc., M.Sc.

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