

This Report has been cleared for submission to the Board/Director by Programme Manager, Niamh O'Donoghue

Signed: 

Date: 30/10/2024



**OFFICE OF ENVIRONMENTAL
SUSTAINABILITY**

**INSPECTOR'S REPORT ON AN INDUSTRIAL EMISSIONS LICENCE
APPLICATION, LICENCE REGISTER NUMBER P0915-02**

TO: GERARD O'LEARY DIRECTOR

FROM: Brian Walsh, ICER Inspector

DATE: 25 November 2024

Applicant:	Ballyfaskin Enterprises Ltd
CRO number:	425481
Location/address:	Ballyfauskeen, Ballylanders, County Limerick.
Application date:	08 March 2022
Classes of activity (under EPA Act 1992 as amended):	6.2: The rearing of pigs in an installation where the capacity exceeds: (a) 750 places for sows, or (b) 2,000 places for production pigs which are each over 30kg.
Categories of activity under IED (2010/75/EU):	6.6(b) Intensive rearing of pigs with more than 2,000 places for production pigs (over 30kg), or 6.6(c) Intensive rearing of pigs with more than 750 places for sows.
Main CID:	CID (EU) 2017/302 (15 February 2017). Establishing (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs.
All relevant CIDs, BREF documents and legislation are listed in appendices of this report.	
Activity description/background: Expansion of an existing activity for the rearing of pigs in an installation with capacity for 1,000 sows and 4,124 production pigs.	
Additional information received:	Yes (12 April 2022, 25 November 2023, 14 June 2024)
No of submissions received:	Nine
Environmental Impact Assessment required: Yes	Stage 2 Appropriate Assessment required: Yes
Environmental Impact Assessment Report submitted (EIAR): Yes (08 March 2022)	Natura Impact Statement (NIS) submitted: Yes (08 March 2022)
Site visit: 14/08/2024	Site notice check: 15 April 2022

1. Introduction

This is an assessment of an application for an Industrial Emissions Directive (IED) licence to carry on an activity under Part IV of the Environmental Protection Agency Act 1992, as amended (hereafter referred to as the EPA Act).

Patrick Ryan, Director owns and operates a pig unit at Ballyfauskeen, Ballylanders, County Limerick (CRO number 425481). The licensee's existing licence was issued by the Agency on 10 June 2013, as a 600-sow integrated pig production unit, Reg. no. P0915-01.

The existing installation consists of 17 animal houses. Ballyfaskin Enterprises Limited has applied to the Agency for an IED licence review to allow for an increase in the numbers of sows and production pigs to be held on-site as detailed in Table 1.1 below.

Table 1.1. Application details.

	<i>Existing</i>	<i>Proposed</i>
<i>No. of animal houses</i>	17	17
<i>Pig categories</i>		
<i>Dry Sows</i>	190	725
<i>Farrowing sows</i>	410	275
<i>Boars</i>	10	5
<i>Maiden gilts</i> ^{Note 1}	150	0
<i>Weaners</i>	3,450	4,000
<i>Production pigs</i>	3,750	4,123
<i>Total no. animals</i>	7,960	9,128

Note 1: To be included under the category of production pigs.

For the purposes of the IED categorisation this equates to 1,000 sows and 4,123 production pigs.

The licensee proposes that the increase in pig numbers does not require an increase in the area of or quantity of pig housing as refurbishment works on existing pig houses, involving changes in internal partitions, re-wiring, new water, feed fixtures and some internal changes in the slats and floors, will facilitate the increased number of pigs. In addition to the above operation, there is a feed mill building on-site where feed is mixed.

The review application includes construction of an electrical substation (22 m²) which is due to be completed before the end of November 2025. This will allow an upgrade of the electricity supply to the feed mill.

The licensee has proposed additional mitigation measures which are discussed further in the odour and ammonia sections below. There will also be additional licence

conditions to bring the activity into compliance with the Commission Implementing Decision (CID)¹.

Maps of the site layout are included in Appendix 1 of this report.

2. Description of activity

The installation is located in a rural location, with most development near the installation consisting of dwelling houses and farmyards. Pig farming has been carried out on this site since the 1970s. The present enterprise employs 5 people. Employment on the site is projected to increase from 5 to 6.

The main activities at this installation occur between 07:00 and 17:00 Monday to Friday and 07:00 and 12:00 on Saturdays and Sundays. Stock inspections are carried out every day, including weekends and bank holidays and additional essential activities may be undertaken outside of core working hours. The installation currently operates in accordance with the requirements of the Department of Agriculture, Food and the Marine, the Bord Bia Pigmear Quality Assurance Scheme and the Red Tractor Food Quality Assurance Scheme.

The pig production process on this farm is typical of many other Irish units. The installation will consist of 17 pig houses sub-divided to cater for the different pig categories on-site, along with slurry collection and storage tanks, and ancillary structures and equipment necessary for the accommodation, management and husbandry of the animals, and administration of the unit. The process involves the rearing of stock specifically bred from the on-site sows for meat production. Pigs will be reared at the installation until they reach the required finishing weight of approximately 100 - 110 kg or will be sent off-site to be finished at another installation. All internal houses are cleaned out regularly.

The houses will be thermally insulated, with a computer-controlled ventilation system and artificial lighting. Automatic feeding and ventilation systems operate on a 24-hour basis. The principal inputs to the operation are bedding, feed, water, veterinary medicines and energy (electricity, diesel for back-up generator, and electricity for heating). The main by-product of pig rearing is organic fertiliser (slurry and soiled water). These are discussed in further detail below.

There is a 18 m tall feed mill building on-site with roller shutter doors. The mill building houses the feed silos and augers. Bulk feed ingredients are stored and mixed within the feed mill for low protein diet formulation.

3. Planning Status

A number of planning applications have been made by the licensee for the area within the installation boundary since 2013. An EIS was submitted with the previous licence

¹ COMMISSION IMPLEMENTING DECISION of 15 February 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs (2017/302/EU)

application (Ref P0915-01 which was granted in 2013) and the Agency carried out an assessment for the purposes of EIA.

On 29 January 2021, Limerick City and County Council granted planning permission (Ref: 19/1135) for increased capacity of the piggery from 600 sows to 1,000 sows and their progeny in addition to the construction of a new electrical substation. This development work has not yet been completed. Details of this planning permission has been provided in the application form.

The licensee has submitted the EIAR associated with planning permission ref: 19/1135. Having reviewed the planner's reports for previous planning permissions, it is considered that the EIAR submitted with the licence application, along with the licence application and the further information received, contains adequate information to inform the Agency's assessment and that the EIS relating to previous planning permissions are not required for the Agency's assessment.

The Agency has had regard to the reasoned conclusions reached by the planning authority in undertaking its environmental impact assessment of the activity.

Schedule A of the RD limits the number of animals housed on-site to 1,000 sows and 4,123 production pigs. This is the capacity that is specified in the application, in the EIAR submitted in support of the application, and in the planning permission granted for the installation.

4. Environmental Impact Assessment (EIA) Screening

In accordance with section 83(2A) of the EPA Act, the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an EIA, where the activity meets the criteria outlined in section 83(2A)(b) and 83(2A)(c).

In accordance with the EIA Screening Determination, the Agency has determined that the activities are likely to have a significant effect on the environment, and accordingly is carrying out an assessment for the purposes of EIA.

Having considered the information provided by the licensee, which satisfies the requirements of Annex II A of the EIA Directive, it has been determined that the activity is likely to give rise to significant effects on the environment by virtue of its nature, size or location. This determination has been made having regard to the following:

- 13(a) Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would:
- (i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and
 - (ii) result in an increase in size greater than –
 - 25 per cent, or
 - an amount equal to 50 per cent of the appropriate threshold, whichever is the greater.

An EIAR was submitted to the Agency as part of the application on 08 March 2022. This is addressed in the 'EIA' Section later in this report.

5. Best Available Techniques and CID

BAT for the installation was assessed against the BAT conclusions contained in Commission Implementing Decision of 15 February 2017 establishing BAT conclusions for the intensive rearing of poultry or pigs (2017/302/EU) and in any other relevant BREF documents specified in the appendices of this report. A detailed BAT assessment was carried out by the licensee and is included in section 4.7 of the application form. Additional conditions have been incorporated into the RD to address BAT Conclusions and these are detailed throughout this report. Any relevant BAT-AELs have been specified in the emissions sections of this report.

I consider that the applicable BAT Conclusion requirements are addressed through the technologies and techniques as described in the application, as well as the conditions and limits specified in the RD.

6. Emissions

6.1 Emissions to Air

This section addresses emissions to air from the installation and the environmental impact of those emissions.

6.1.1 Channelled Emissions to Air

There are no main emission points to air from the installation.

6.1.2 Fugitive Emissions

The only fugitive emissions from this sector are dust, odour and ammonia. These are discussed below. There are 40 dwellings within 1 kilometre of the installation boundary. The nearest five houses include two dwellings adjoining the installation which are owned by the licensee's family. The nearest third-party dwellings, potentially affected by fugitive emissions, are detailed below (Table 6.1).

Table 6.1: Nearest third-party residential dwellings

Distance from Site	Direction from Site
60 m and 110 m	West
290 m and 370 m	North
390 m	South

6.1.3 Dust

Dust may arise from the expulsion of warm air from ventilation systems on-site, vehicle movements, removal of organic fertiliser, feed milling, filling of meal storage bins and the loading and unloading of animals during periods of dry weather. The licensee states that feed silos and augers are completely housed in new mill building therefore

confining dust. Pigs are and will be housed on fully partially slatted floors; therefore, reducing the need for a bedding material, and consequently limiting dust from bedding. Minimal dust impact may occur locally within the installation boundary during site operations.

No complaints or submissions were received in relation to dust for this site by the Agency or by the licensee.

The licensee has stated that good housekeeping at the installation will minimise dust from the installation. The feed mill is modern unit with roller shutter doors.

The RD specifies the following to prevent the generation and emission of dust:

- To use one or a combination of the techniques listed in BAT 11 to prevent or reduce dust emissions from the animal houses (Condition 6).

Dust is not expected to be a significant issue beyond the installation boundary.

6.1.4 Odour

Odour arising from the activity could have the potential to cause impairment to those living nearby. The land in the immediate vicinity of the installation is farmland. There are 40 dwellings within one kilometre of the installation boundary. The nearest five houses include two dwellings adjoining the installation which are owned by the licensee's family. The next nearest sensitive receptors are located at 60 m and 110 m west, 290 m and 370 m north and 390 m south of the nearest pig buildings.

Twelve odour complaints were received by the Agency in 2021 and 2022 from a nearby resident. The Office of Environmental Enforcement (OEE) carried out three odour impact assessments which were compliant. The licensee was reminded, by OEE, of the requirement to comply with conditions 5.1 and 5.3 of their existing IE licence. The licensee was required to submit an odour management plan. No further complaints have been received by the Agency or the licensee since August 2022.

The licensee has provided a revised odour impact assessment for the proposed activity, including modelling, dated May 2024.

The modelling was conducted in accordance with the EPA's Air Dispersion Modelling Guidance Note (AG4) and EPA's instruction note for the assessment of odour emissions from intensive agriculture pig installations (EPA, 2022).

The licensee proposes to reconfigure the exhausts of naturally ventilated sheds at the site with mechanically ventilated chimney stacks to reduce the impact of emissions exhausted to the atmosphere at houses 1, 2, 3 and 7. These changes, along with the implementation of BAT on-site resulted in the odour modelling determining that the predicted concentrations of odour at all sensitive receptors comply with odour criterion recommended by EPA for existing pig farms of 5.0 OU_E/m³ at all modelled sensitive receptor locations (see figure 1 below).



Figure 1: Highest predicted 98th percentile 1-hour average ground-level concentrations of odour of five modelled years due to the pig farm.

In response to BAT requirements for odour (BAT 13), the licensee has stated that a combination of BAT 13b (housing system optimisation) and BAT 13c (optimisation of exhaust air from the houses) will be used. The implementation of BAT on-site will reduce odour emissions.

The pig houses will be cleaned at the end of each batch. Organic fertiliser is stored under the slatted animal houses and is directly removed by vacuum to a slurry tanker and is then taken off-site by the licensee to be delivered to recipient farmers. Agitation of the slurry will be minimised. Houses will be stocked at optimum levels and adequately ventilated, to minimise odour emissions.

The licensee has stated that the design of the buildings, adherence to good management practices, and implementation of the required mitigation measures (lower protein diets, reconfiguration of the ventilation and increased stack heights) will minimise odour from the installation. Therefore, odour is not expected to be a significant issue.

The RD specifies the following odour control conditions:

- That odour from the activity shall not result in an impairment of, or an interference with amenities or the environment beyond the installation boundary (Condition 5).
- To use a diet formulation and nutritional strategy to reduce the total nitrogen and phosphorus excreted, as per BAT 3 and BAT 4 (Condition 6). The crude protein content of the feed is limited to 14.5% for sows and boars, 17.5% for weaners and 15% for production pigs and gilts. (Condition 6 and *Schedule B.6 and C.1-2*).

- To use a combination of the techniques listed in BAT 13 to prevent/reduce odour emissions/impact from the site (Condition 6).
- That the licensee carries out an odour survey of the site operations as required by the Agency or in response to any complaint received (Condition 6).
- That the licensee prepares, maintains and implements an odour management plan, and incorporates it into the Environmental Management System (EMS) for the installation, as per BAT 12 (Condition 6).
- An odour management plan shall be submitted within three months of the date of grant of licence, outlining odour reduction/abatement measures appropriate to the site and be reviewed annually (Condition 6).
- Should odour become an issue on-site, the RD includes a condition whereby the licensee can be required to reduce stock or install abatement to reduce odour emissions (Condition 6).
- That carcasses stored on-site will be stored in covered leak-proof containers and transported off-site in covered, leak proof containers at least fortnightly (Condition 8).

6.1.5 Ammonia

The report ‘*Ireland’s Informative Inventory Report 2024*’ (EPA, 2024) identifies agriculture as the primary contributor (99.4%) of Irish ammonia emissions in 2022, emitting a total of 128.64 kilotonnes (kt) of ammonia in that year. According to that report, ammonia emissions from the pig sector in 2022 accounted for 6.1 kt. The Department of Agriculture, Food and the Marine (DAFM) has published a ‘*Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture*’³, as required by the National Emission Ceiling Directive (NECD).

This installation will emit approximately 23 tonnes of ammonia per annum.

Ammonia emissions from this activity could have the potential to impact sensitive receptors in the vicinity of the installation. The Agency screened the impact of ammonia emissions and nitrogen deposition at European sites using a screening model (SCAIL Agriculture⁴) which indicated potentially elevated ammonia emissions and nitrogen deposition. The model results indicate the potential for the pig rearing process to contribute to ammonia emissions and nitrogen deposition at European sites. The SCAIL Agriculture screening model is conservative.

The licensee submitted a full site-specific model (not a screen model), as part of the completion of a Natura Impact Statement (NIS), using more refined details in accordance with the requirements of AG4⁵ and assessed the results against the requirements of the Agency’s Ammonia and Nitrogen Assessment Guidance (EPA, 2021) for intensive agricultural installations. The results show that the worst-case

² https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/IIR_Ireland_2024v1.pdf

³ <https://www.gov.ie/en/publication/9a6c6-code-of-good-agricultural-practice-for-reducing-ammonia-emissions-from-agriculture/>

⁴ SCAIL Agriculture is a web-based screening tool available at <http://www.scail.ceh.ac.uk/>

⁵ Air Dispersion Modelling from Industrial Installations Guidance Note (AG4): <https://www.epa.ie/publications/compliance--enforcement/air/air-guidance-notes/epa-air-dispersion-modelling-guidance-note-ag4-2020.php>

cumulative impacts due to the pig farm in combination with other intensive agriculture installations are:

- 1.8% of the critical level for ammonia
- 2.1% of the critical load for nitrogen deposition.

The predicted impacts are considerably lower than the 20% threshold level defined in the Agency's guidance. Therefore, the model indicated no significant impacts on any European sites. Qualifying interests in European sites will not be affected by ammonia emissions from the installation, due to the distance between the installation and the designated sites, the type and physical characteristics of the designated sites, and associated dispersion/mitigation techniques proposed by the licensee.

This licence review is for the re-development of the site which includes upgrades which will lead to improved environmental standards and efficiencies and a reduction in ammonia emissions.

The licensee proposed the following in order to meet the requirements of BAT (BAT 3 (nutritional strategy to reduce nitrogen excretion) and BAT 30 (reduction of ammonia emissions to air from each pig house)):

- Application of nutritional techniques to reduce the amount of nitrogen, and accordingly, ammonia produced by the pigs. BAT 3 requires the licensee to employ at least one of a number of techniques to reduce nitrogen emissions from the animals.
 - The licensee has stated that they will reduce the crude protein content of the animal feed. According to the BREF document for this sectoral CID, for each 1% decrease in the protein content of animal feed, ammonia emissions can be decreased by 5-15% (Condition 6 and *Schedule C*).
 - Multiphase feed will also be used by the licensee. The BREF document details various reductions when compared to single phase feeding dependent on the number of phases, feed types and growth stage of the animals. (Condition 6).
- In order to meet the BAT 30 requirements, the licensee will use the following techniques in the animal houses:
 - The utilisation of a deep pit combined with the above combination of nutritional management techniques in the existing animal houses.

All of the above techniques have been incorporated into the ammonia modelling provided by the licensee.

The licensee has stated that the design of the buildings, adherence to good management practices, and implementation of the required mitigation measures will reduce ammonia emissions from the installation. The RD specifies the following additional ammonia minimisation conditions:

- To establish, maintain and implement an Ammonia Management Programme within three months of the date of grant of the licence and, in accordance with BAT 23, undertake an estimation/calculation of the reduction in ammonia emissions from the activity achieved by implementing BAT (Condition 5).
- To use a diet formulation and nutritional strategy to reduce the total nitrogen excreted, as per BAT 3 (Condition 6).
- As outlined above, the licensee will be using low crude protein feed and multiphase feeding. The RD limits the crude protein content of the animal feed

- to a maximum of 14.5% for all sows and boars, 17.5% for weaners, and 15% for production pigs (Condition 6).
- To use the following BAT 30 technique to reduce ammonia emissions to air from each pig house:
 - a deep pit with nutritional management techniques for existing houses (Condition 6).
- To complete an estimation of ammonia emissions from the pig houses in accordance with BAT 25 (*Schedule C: Control of Emissions*).

The emission limits in *Schedule B.1* are in accordance with those set out in the CID.

The potential for ammonia emissions from the landspreading of pig slurry is covered in the Organic Fertiliser section later in this report.

6.2 Emissions to Water and Ground

6.2.1 Emissions to Surface Waters

There are no direct process emissions to surface waters from this activity.

6.2.2 Emissions to ground/groundwater

There are no direct process emissions to ground/groundwater from this activity. The licensee states in the application that there has been no historical contamination of groundwater at the site.

6.2.3 Other emissions to ground/groundwater

There is an existing septic tank and percolation area. The RD includes a standard condition which requires the licensee to maintain a waste water treatment plant for the treatment of sanitary effluent and that the waste water treatment system and percolation area shall satisfy the criteria set out in the Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (p.e. ≤ 10), published by the EPA.

6.3 Storm water discharges

Storm water arises on-site from rainwater collected from clean yards and from the roofs of buildings. All clean storm water is diverted away from soiled areas of the site by a storm water collection system around each house and is diverted by gravity for discharge via two discharge points (SW-1 and SW-2) into a field drain on the eastern and western boundaries of the site. Both of the discharge points are required to have a silt trap installed within six months of date of grant of this licence.

The table below gives details on installation's storm water discharges to waters, the type of on-site abatement, as well as details of the receiving water.

Table 6.2: Stormwater discharge point details

Discharge Reference	Monitored parameters (monitoring frequency)	Abatement	Drainage areas	Discharging to
SW-1	Visual (weekly); COD/BOD (as required by the Agency)	Silt trap (to be installed)	Roofs and hardstanding	Field drain >> Lyre Stream >> River Aherlow

SW-2	Visual (weekly); COD/BOD (as required by the Agency)	Silt trap (to be installed)	Roofs and hardstanding	Field drain >> Lyre Stream >> River Aherlow
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The drains flow to the Lyre Stream, which joins the River Aherlow approximately 1.8 km downstream of the installation. The Lyre Stream currently has a WFD status of 'good' (waterbody code: IE_SE_16A010080). There are no identified drinking water abstraction points within 10 km downstream of the installation on the Lyre Stream or River Aherlow.

The storm water discharged from the installation should be uncontaminated and, therefore, should have no qualitative impact on receiving waters.

The only period during which there is potential for contamination of surface waters is during removal of organic fertiliser (pig slurry) and during the loading or unloading of animals. The areas around the animal houses where the loading and unloading occurs will be concreted and designed in such a way that any pig slurry will be diverted to the slurry storage tanks under the houses. All soiled water from the washing of the houses will be diverted to the organic fertiliser storage tanks under the animal houses.

The licensee has stated that the infrastructure, adherence to good management practices, and implementation of the required mitigation measures will mitigate the risk of storm water contamination.

The RD requires the following in relation to storm water management:

- That all uncontaminated storm water be diverted to the storm water drainage system (Condition 6).
- That an up-to-date site drainage map be maintained on-site, and that the storm water drainage system be inspected weekly and maintained properly at all times (Condition 6).
- That the storm water/rainwater collection and drainage system for all pig houses on-site be maintained (Condition 6).
- That inspection chambers at the outlets of the storm water drainage system be maintained. (Condition 3).
- That a silt trap be provided and maintained on all existing storm water discharge points (Condition 6).
- That the storm water discharge is visually inspected weekly and monitored for Chemical Oxygen Demand (COD) or Biological Oxygen Demand (BOD) as required by the Agency, in accordance with *Schedule B.5 Storm Water Discharge Monitoring*.

The RD contains standard conditions in relation to the storage and management of materials and wastes. The RD also requires that accident and emergency response procedures are put in place. The controls pertaining to accidents and emergencies are addressed in the Prevention of Accidents section later in this report.

6.4 Noise

The main sources of noise at the installation include the operation of equipment, ventilation systems, the back-up generator, vehicle deliveries/collections, and animals. As mentioned earlier, the nearest third-party residential dwelling is approximately 60 m away.

There has been no history of noise complaints at the installation and none have been received by the Agency, the HSE or the licensee. No submissions have been received outlining that noise is a cause for concern from the installation.

Noise emissions will primarily be minimised by implementing good management practices. Noise conditions and emission limit values, which apply at the noise-sensitive locations, have been included in the RD.

- Noise from the installation shall not exceed the limit values set out in *Schedule B.4 Noise Emissions* of the RD at the noise sensitive locations (Condition 4).
- The use of one or a combination of the techniques listed in BAT 10 to prevent/reduce noise emissions from the site (Condition 6).
- A requirement that a noise survey be carried out of the site operations, as required by the Agency (Condition 6).

7. Waste Generation

Certain wastes are generated on-site as part of the licensable activity. Waste generated on-site will mainly comprises of spent fluorescent tubes, fallen stock (animal carcasses), veterinary/chemical waste containers and general waste. The total quantities estimated to be generated are given in Table 7.1 below. The licensee will employ a number of measures at the installation for the prevention and/or minimisation of waste.

Table 7.1: Estimated waste generation

Waste Type	Estimated quantity (tonnes) per annum
Animal Carcasses	137
General Waste	1.5
Veterinary Waste	0.01
Fluorescent Light Tubes	0.01

In accordance with the hierarchy specified in the IED, waste generated at the site will, in order of priority, be minimised, be prepared for re-use, recycling, recovery or disposal. Conditions relating to waste management have been included in Condition 8 of the RD. Carcasses will be stored temporarily on-site in covered skips, before being transported to an appropriately licensed installation.

A rodent and pest control programme is in place to cover the existing installation and will be extended to cover the expanded activity. The programme as implemented will be in line with Bord Bia and Department of Agriculture, Food and The Marine requirements.

Condition 3 of the RD requires the licensee to maintain and implement a pest control programme in accordance with relevant DAFM guidelines. These guidelines take account of the requirements of the Campaign for Responsible Rodenticide Use (Ireland).

8. Organic Fertiliser

The installation will necessarily generate organic fertiliser (pig slurry, including soiled/wash water). Details are given in Table 8.1 below.

Table 8.1: Organic fertiliser

Quantity produced per annum	15,805 m ³
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Number of storage tanks/stores on-site	16
Total storage capacity on-site (ex-freeboard)	17,336 m ³
No. weeks storage on-site	57
End use off-site	Landspreading by customer farmers

The farm operates an all-in, all-out batch production system. Once the pigs are removed, the houses are washed down, with the resulting wash water being washed through the slatted floors into the tanks below, adding to the total volume of organic fertiliser produced. After washing, the houses are allowed to dry and then disinfectant applied. The wash water may contain insignificant quantities of disinfectant from the previous washing cycle.

Condition 8 of the RD requires that the licensee maintains a record of organic fertiliser sent off-site for use on land or for compost production in accordance with the requirements of the Nitrates Regulations⁶. The licensee is required under the licence to submit to DAFM by the 31st of December annually details in relation to the quantity of organic fertiliser (pig slurry) exported (Record 3 form) off-site. The record must also be maintained at the installation for inspection by the Agency, Local Authority or DAFM. DAFM may use the record of export of organic fertiliser to identify the recipient of the organic fertiliser and the quantity received.

The Animal By-product (ABP) Regulations⁷ impose legal requirements on the licensee, the 'commercial haulier' and the user of the organic fertiliser. These requirements include use of a 'commercial document' to record details required under the regulations. The licensee is required to receive a completed copy of the 'commercial document' from the transporter confirming the final destination.

There will be no landspreading of organic fertiliser conducted and/or permitted within the installation boundary, and consequently there will be no additional ammonia emissions from landspreading activities within the installation boundary. It is important to note that the IE licence relates to the site of the activity for which the licence application is made and does not extend to the lands on which organic fertiliser may be used as fertiliser. The Nitrates Regulations specify when organic fertiliser can be applied to land and the application rates, and these are enforced by the DAFM and Local Authorities.

Under the ABP Regulations, pig slurry is categorised as a category 2 Animal By-product and the options for its disposal/recovery are set out in Article 13 of Regulation 1069/2009, as amended.

The pig slurry produced by the animals is contained in the slatted tanks under each animal house. The areas around the houses will be concreted and designed such that any pig slurry produced here during animal loading and unloading is diverted to the

⁶ S.I. No. 113 of 2022 European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022.

⁷ EU Animal By-Product Regulation (EC) No. 1069 of 2009 and Regulation (EU) No. 142 of 2011, given legal effect by The European Union (Animal By-Product) Regulations 2014 (SI No. 187/2014), laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal By-Products Regulation) as amended.

slurry storage tanks under the houses. Pig slurry is removed by the licensee from the slatted tanks under each pig house directly to tanker and immediately removed off-site.

The licensee has identified 5,543 usable hectares in the surrounding area of County Limerick and County Tipperary which are available for landspreading of pig slurry. The licensee has calculated that these farms have a need for up to 55,430 m³ organic fertiliser per year based on the nitrogen and phosphorus balance for the farms. This equates to approximately 351% of the estimated volume of organic fertiliser produced on-site.

The Nitrates Regulations (Article 10(1)) require that a minimum of 26-weeks' storage capacity for organic fertiliser is provided.

The quantity of nitrogen and phosphorus generated by the activity at the proposed licence capacity is approximately:

- 71,404 kg N per year, and
- 14,727 kg P per year,

based on figures available in the Nitrates Regulations (annual nutrient excretion rates for livestock).

The RD contains the following additional requirements relating to the management of pig slurry:

- To monitor the total nitrogen and phosphorus excreted in manure annually, in accordance with BAT 24 (Condition 6).
- That slurry only be stored under the pig houses or designated manure stores (Condition 8).
- That all storage tanks are integrity assessed at least once every three years thereafter (Condition 6).
- That a combination of the techniques listed in BAT 6 be used to reduce the generation of wash water on-site (Condition 6).
- That one or a combination of the techniques listed in BAT 7 be used to reduce the emissions to water from wash water on-site (Condition 6).
- That a freeboard of at least 200 mm from the top of covered organic fertiliser storage tanks and 300 mm from the top of uncovered organic fertiliser storage tanks is maintained, as a minimum, at all times and that this is clearly indicated in the tank (Condition 6).

9. Energy Efficiency and Resource Use

The operation of the installation involves the consumption of fuel, electricity and resources. The proposed quantities to be used on-site are given below.

Table 9.1: Estimated resource usage

Resource	Quantity per annum
Electricity	590 MWh
Water (GWS/off-site well)	17,600 m ³
Water Abstraction registration required:	Yes
Feed	6,670 t
Diesel	Back-up generator only

The licensee employs a variety of technologies to maximise the efficient use of energy within the installation, including regular preventative maintenance of equipment, use of energy efficient lighting systems and thermal insulation.

The main source of water for the activity is an off-site well located approximately 0.7 km northwest of the licenced boundary. This well is piped along the road to the site. There is a rainwater harvesting tank on-site, water from this is used for power washing.

The installation is located on the Knockaskallen groundwater body (IE_SE_G_087), a poorly productive fissured bedrock, which has a WFD status of 'Good'.

In accordance with the European Union (Water Policy) (Abstractions Registration) Regulations 2018 (S.I. No. 261 of 2018) those who abstract 25 m³ of water or more per day are required to register their water abstraction with the EPA. The licensee is required to register their abstraction.

The RD specifies that the licensee undertake the following in relation to energy and resource efficiency:

- Annual maintenance of the animal house heating systems and the back-up generator (Condition 3).
- To maintain a water meter on all water supplies (Condition 3).
- To use a combination of the techniques listed in BAT 8 (efficient use of energy) and BAT 5 (efficient use of water) (Condition 7).
- To undertake an assessment of the efficient use of resources and energy in all site operations, undertake an energy audit, repeated at intervals as required by the Agency with the recommendations of the audit being incorporated into the Schedule of Environmental Objectives and Targets as outlined in Condition 2 (Condition 7).

10. Prevention of Accidents

A certain amount of accident risk is associated with the licensable activity. For this installation, potential accidents and measures for prevention/limitation of consequences are given in the table below.

Table 10.1: Potential accidents and measures for prevention/limitation of consequences

<p>Potential for an accident or hazardous/emergency situation to arise from activities at the installation</p>	<ul style="list-style-type: none"> - Surface water and/or ground/groundwater contamination during pig removal and washing. - Surface water and/or ground/groundwater contamination by spillage of organic fertiliser, fuel or other polluting materials. - Surface water and/or ground/groundwater contamination due to leaks from tanks. - Accidental diversion of wash water to storm water drainage system. - Breakdown/malfunction of the on-site wastewater treatment plant. - Accidental emissions of noise, dust or odour such as to cause nuisance outside the site boundary.
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<p>Preventative/Mitigation measures to reduce the likelihood of accidents and mitigate the effects of the consequences of an accident at the installation</p>	<ul style="list-style-type: none"> - The provision and maintenance of adequate wash water and slurry storage facilities. - The storage of potentially polluting liquids in bunded areas. - The provision of concrete aprons around wash water areas. - The protection of fuel tanks from accidental damage. - The loading and unloading of pigs occur in the enclosed concrete area outside the houses. - The separation of wash water and clean storm water with wash water diverted directly to the organic fertiliser storage tanks under the animal houses.
<p>Additional measures provided for in the RD</p>	<ul style="list-style-type: none"> - Integrity assessment and maintenance of the slurry storage tanks as required (Condition 6). - The regular visual examination and inspection of the storm water discharge points and storm water drainage system (Condition 6). - No storage of organic fertiliser on-site, other than what is under the animal houses during the pig rearing cycle at the installation (Condition 8). - The provision of more than 26-weeks organic fertiliser storage capacity (Condition 3). - Provision and maintenance of the on-site waste water treatment plant (Condition 3). - Accident prevention and emergency response procedures requirements (Condition 9). - A preventative maintenance programme (Condition 2).

The risk of accidents and their consequences, and the preventative and mitigation measures listed above, have been considered in full in the assessments carried out throughout this report. It is considered that the conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of such an event should it occur.

11. Cessation of Activity

A certain amount of environmental risk is associated with the cessation of any licensable activity (site closure). The licensee has provided a list of measures to be taken in the event of site closure/cessation of activity. These measures are listed in attachment 9.1 of the application form. Condition 10 of the RD requires the proper closure of the activity with the aim of protecting the environment.

Baseline Report

Where an activity involves the use, production or release of Relevant Hazardous Substances, and having regard to the possibility of soil and groundwater

contamination at the site of the installation, the IED requires operators to prepare a baseline report. A baseline screening assessment was undertaken by the licensee, in accordance with Stages 1 to 3 of European Commission Guidance⁸.

The screening assessment determined that, considering the type and quantity of substances used as part of the activity, the location of these substances on the site, in view of the soil and groundwater characteristics, and the measures to be taken to prevent accidents and incidents, the possibility of soil and groundwater contamination at the site of the installation is considered to be low. I am satisfied that a full baseline report (stages 4 to 8) is not required.

Nonetheless, upon cessation of the activity, Condition 10 of the RD requires the licensee to take certain measures to ensure that there is, to the satisfaction of the Agency, no remaining risk of environmental pollution at the site.

12. Fit and Proper Person

Technical Ability

The licensee has held a licence issued by the EPA since 10 June 2013, P0915-01. It is considered that the licensee has demonstrated the technical knowledge required to operate this installation.

Legal Standing

Neither the licensee nor any relevant person has relevant convictions under the EPA Act, or under any other relevant environmental legislation.

ELRA, CRAMP and Financial Provision

The licence category and proposed installation were assessed for the requirements of Environmental Liabilities Risk Assessment (ELRA), Closure, Restoration and Aftercare Management Plan (CRAMP) and Financial Provision (FP), in accordance with Agency guidance. Under this assessment it has been determined that ELRA, CRAMP and FP were not required.

Fit and Proper Conclusion

It is my view and having regard to the provisions of section 84(5) of the EPA Act and the Conditions of the RD, that the licensee can be deemed a Fit and Proper Person for the purpose of this review application.

13. Submissions

While the main points raised in the submissions are briefly summarised in the table below, the original submission should be referred to at all times for greater detail and expansion of particular points.

The issues raised in the submissions are noted and addressed in this Inspector's Report and the submissions were taken into consideration during the preparation of the Recommended Determination (RD).

⁸ European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions.

1.	Name & Position: <i>Trish Smullen, Senior Geologist</i>	Organisation: <i>Geological Survey Ireland</i>	Date received: <i>26 April 2022</i>
Issues raised: <p><i>The submission provided a number of observations in relation to geoheritage, groundwater, historic mines, and various datasets available from the GSI.</i></p> <ul style="list-style-type: none"> - <i>The submission notes a geological site, Curraghturk, approximately 2 km from the licence site was not included in the Limerick County Geological Sites.</i> - <i>The submission states that the area is classed as 'High' on the groundwater vulnerability map and the area is underlain by a 'Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones'. It provided advice regarding landspreading.</i> 			
Agency Response: <p>The Agency noted the comments included in the submission. Emissions to water and ground are discussed in the Emissions to Water and Ground section of this report.</p>			
2.	Name & Position <i>Mr Andrew Curtin, Principal Environmental Health Officer, Environmental Health Service</i>	Organisation: <i>Health Service Executive, Environmental Health Service, Limerick.</i>	Date received: <i>25 May 2022</i>
Issues raised: <p><i>The HSE submission is based on a report by Andrew Curtin, Principal Environmental Health Officer. It provides a summary of their findings. The submission makes a number of observations in relation to the licence application. The topics/issues raised include site location, water contamination, soiled water (wash water), slurry (organic fertiliser), landspreading, odour, noise and pest control and waste. The submission only comments on to those areas within the remit of the HSE.</i></p> <p><i>Specific recommendations highlighted by the HSE include:</i></p> <ul style="list-style-type: none"> • <i>That the applicant be made aware of all pig slurry and soiled water storage requirements on and off-site, certified construction work, and leak detection facilities, as well as BAT in relation to spreading and the installation of high-level indicators, a Nutrient Management Plan should be maintained by the licensee and routine microbiological and chemical analysis of slurry should be undertaken;</i> • <i>That fallen animals are removed off-site or incinerated as soon as possible and if short term carcass storage is required, storage conditions must be specified as a condition of the licence;</i> • <i>To ensure odours are minimised, minimum agitation is undertaken of the slurry/soiled water contained in the storage tanks;</i> 			

- *That an odour monitoring programme is implemented to ensure that the mitigation measures included in the Odour Management Plan are effective and that fugitive odours cannot be detected at the boundary of the facility;*
- *That the mitigation measures included in the Noise Management Plan are attached as conditions of the licence; implemented in full and are monitored to ensure that any potential for noise from the pig production facility do not create a nuisance to neighbouring residents;*
- *A pest control programme should be implemented on-site and records maintained;*
- *That compliance with land spreading requirements under the Nitrates Directive and the National Nitrates Action Programmes are conditioned in the licence.*

Agency Response:

The main issues raised in the submission are noted and addressed in the relevant sections of the Inspector’s Report.

The RD contains conditions in relation to organic fertiliser storage, BAT, tank specifications as well as high-level indicators. The landspreading of organic fertiliser is addressed in the “Organic Fertiliser” section of this report. Landspreading of organic fertiliser occurs outside of the licensed boundary and will be carried out in accordance with the Nitrates Regulations and Animal By-product Regulations. This is enforced by the DAFM and the Local Authorities.

This report, and the RD refer to the most up to date Nitrates Regulations legislation.

The RD will require the licensee to have adequate pest control and appropriate storage on-site for dead birds.

Odour are addressed in the relevant sections of this report, and odour management conditions are included in the RD.

Noise is addressed in the relevant sections of this report and noise management conditions are included in the RD.

Pest control is addressed in the Waste Generation section of this report.

3.	<p>Name & Position <i>Mr Kunal Solanky</i></p>	<p>Organisation: <i>N/A</i></p>	<p>Date received: <i>8 November 2022</i></p>
<p>Issues raised:</p> <p><i>The submission states that the applicant has miscalculated forecasted slurry figures. It states:</i></p> <p><i>"The EIS states that 600 sows currently produce 15,681 m³/annually and the proposed increase to 1000 sows will produce 15,805 m³/annually. A moment's reflection indicates that this is a gross underestimation of the true slurry output."</i></p> <p>Agency Response:</p>			

	<p>While the proposed operation will increase from 600 sows to 1,000 sows, there is a proposed decrease of finisher places from 5,236 places to 3,957 places. In addition, the licensee proposes to reduce the finisher water: feed ratio from 2.75:1 to 2.25:1 which will lead to a significant reduction in the slurry generated per finisher per year (1.77m³ per finisher per year compared to 1.46m³ per finisher per year).</p> <p>The reduction in finisher places and change to water feed ratio for finishers mitigates to a large extent the increase in slurry generated by the addition of 400 sows to the licensee's operations.</p>		
4.	<p>Name & Position</p> <p><i>M. Peter Sweetman</i></p>	<p>Organisation:</p> <p><i>Peter Sweetman and Wild Ireland Defence CLG</i></p>	<p>Date received:</p> <p><i>27 October 2022</i></p>
	<p>Issues raised:</p> <p><i>The submission states that the CJEU has found that compliance with European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2017 (S.I. 605 of 2017) cannot be considered a mitigation measure when conducting an appropriate assessment.</i></p> <p>Agency Response:</p> <p>The submission did not provide a reference to the Court of Justice of the European Union (CJEU) case to which it refers. However, the judgments of the CJEU form part of this review application assessment, as appropriate. The landspreading of organic fertilizer was considered in carrying out AA and regard was had to the regulatory systems in place, i.e. <i>European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022.</i></p>		
5.	<p>Name & Position</p> <p><i>Aislinn Byrne</i></p>	<p>Organisation:</p> <p><i>Member of the public</i></p>	<p>Date received:</p> <p><i>14 December 2022</i></p>
	<p>Issues raised:</p> <p><i>The issues raised in the submission are as follows:</i></p> <p><i>"I am objecting to the following applications on the grounds that factory farming, or intensive agriculture, is seriously damaging the environment. The systems currently in place in the respective counties of the applicants are insufficient to deal with the current level of animal agriculture. Approving licenses for additional intensive farming would be wilfully destroying the land and the environment and putting peoples health at risk.</i></p> <p><i>Separately it is cruel to farm animals in this manner. It's raises questions around the health of the animals and and therefore the end product that is being sold to humans. It is putting smaller farmers out of business".</i></p> <p><i>The submission goes on to list by Reg. No., all of the pig and poultry licence applications upon which the submission is to be made.</i></p>		
	<p>Agency response:</p>		

	<p>The assessment of this application included an examination of the submitted Environmental Impact Assessment Report (EIAR) and undertaking of an Environmental Impact Assessment (EIA) of the activity. The EIA Directive, among other things, sets down various factors to be considered during the EIA process for project categories such as intensive agriculture developments, and includes impacts on the following factors:</p> <ul style="list-style-type: none"> (a) <i>population and human health;</i> (b) <i>biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;</i> (c) <i>land, soil, water, air and climate;</i> (d) <i>material assets, cultural heritage and the landscape;</i> (e) <i>the interaction between the factors referred to in points (a) to (d).</i> <p>The Agency will not grant a licence or revised licence unless it is satisfied that emissions comply with relevant emission limit values and standards prescribed under regulations.</p> <p>The submission also mentions animal cruelty concerns and Ireland has legislation governing animal welfare, which are the responsibility of the Dept. of Agriculture, Food and the Marine (DAFM).</p> <p>The submission also mentions financial implications of intensive farming over "smaller farmers". The viability of a business, including farming, is beyond the scope of the EPA Licensing Process.</p>		
6.	<p>Name & Position Laura Broxson</p>	<p>Organisation: National Animal Rights Association</p>	<p>Date received: 19 December 2022</p>
	<p>Issues raised:</p> <p><i>The issues raised in the submission are as follows:</i></p> <ul style="list-style-type: none"> • <i>The submitter states that the application should be refused as it is "not ethically acceptable to kill or consume any living creature".</i> • <i>The submission states that "Ireland's ammonia emissions have not met EU limits for 7 out of the last 9 years" and that "almost all of Ireland's ammonia emissions come from agriculture". It states that "more than half are located in Monaghan and Cavan, counties already struggling with excess manure".</i> • <i>The submission goes on to include some of the damage that can be caused by ammonia pollution and PM2.5 to the environment and human beings.</i> 		

	<ul style="list-style-type: none"> • <i>It concludes that "for animal rights, human health and safety, and the impact it would have on the environment, these 36 applications need to be refused".</i> <p><i>The submission goes on to list by Reg. No., all of the pig and poultry licence applications upon which the submission is to be made.</i></p>		
	<p>Agency response:</p> <ul style="list-style-type: none"> • The principle of whether or not it is ethical to consume meat is beyond the remit of the EPA. • Ireland is addressing ammonia emissions from the agricultural sector through the implementation of 'Ag Climatise – A roadmap towards Climate Neutrality'. The recommendations of this document, regarding the national reduction of ammonia levels, are considered during the assessment of licence applications. • All intensive agriculture EPA licensed facilities are required to operate to the best available techniques (BAT) standard as specified in the Commission Implementing Decision (CID) for the intensive rearing of poultry or pigs. This includes the requirement to implement techniques for the reduction and control of ammonia emissions. • Due to the number of intensive agriculture applications/reviews and licences, especially in the Cavan/Monaghan, the EPA published guidance on how applicants should assess the predicted impact of air emissions. This has specific restrictions on applications in the Cavan/Monaghan area. <p>The assessment of this application included the assessment of emissions to air, including ammonia and dust emissions. It also included an Environmental Impact Assessment (EIA), an examination of the submitted Environmental Impact Assessment Report (EIAR) and undertaking of an EIA of the activity. Further information on this can be seen in the 'ammonia', 'dust' and 'EIA' sections of this report.</p>		
7.	<p>Name & Position: Caroline Rowley</p>	<p>Organisation: Ethical Farming Ireland</p>	<p>Date received: 30 December 2022</p>
	<p>Issues raised:</p> <p><i>The issues raised in the submission are as follows:</i></p> <ul style="list-style-type: none"> • <i>The submitter cites the Agency's responsibilities under Section 52(2) of the EPA Act, in relation to the Agency's need to keep itself informed of policies and objectives of public authorities, of the requirement to have regard for the need for high standard of environmental protection and the requirement to have regard to the need for precaution in relation to potentially harmful effects of emissions.</i> • <i>The submission discusses the government's targets for reducing greenhouse gas emissions under the programme for government, DAFM's 'Ag Climatise – A Roadmap towards Climate Neutrality' (Ag Climatise) and the Climate Action Plan 2023.</i> 		

- *The submission states, the Programme for Government (inter alia) commits Ireland to an average 7% per annum reduction in overall greenhouse gas emissions from 2021 to 2030 (a 51% reduction over the decade) and to achieving net zero emissions by 2050.*
- *It cites the following from the government's Ag Climatise document: "In total, approximately 80% of the agricultural GHG inventory is related directly to the number of animals and the management of the manure they produce. This roadmap is based on stabilising methane emissions and a significant reduction in fertiliser related nitrous oxide emissions, leading to an absolute reduction in the agricultural greenhouse gas inventory by 2030. Any increase in biogenic methane emissions from continually increasing livestock numbers will put the achievement of this target in doubt".*
- *The submission notes that the Climate Action Plan 2023 emphasises that agriculture is the largest source of Ireland's emissions (33.3%).*
- *The submission notes that the application documents do not appear to model chicken or pig population numbers and therefore appear to assume they remain stable.*
- *The submission states that approval of the application is likely to exacerbate Ireland's ongoing breach of its National Emission Reduction Target relating to ammonia. It again states that the relevant documents do not appear to model pig and poultry populations, and instead appear to assume the populations of these livestock types remains stable.*
- *The submission states that the increase in pig or poultry numbers proposed in the application contradicts this assumption, with the resulting increase in greenhouse gases and ammonia increasing the risk of Ireland breaching (a) the greenhouse gas emissions targets to which it has committed and (b) the exacerbating its existing non-compliance with ammonia targets. This amounts to a failure of duty by the Agency and would breach sections 52(2)(a), (b) and (c) of the EPA Act.*
- *Ethical Farming Ireland urges the Agency to reject the application.*

Agency response:

- The Agency, in conducting its licence assessments, has regard to the government's targets for reducing greenhouse gas emissions, the Ag Climatise document, and the Climate Action Plan 2023, as detailed in this report.
- Issues in relation to climate are discussed in the EIA (Climate) section of this report in terms of Government policy and the Climate Action Plan 2023. Energy efficiency is discussed in the Energy Efficiency and Resource Use section of this report.
- Ireland is addressing greenhouse gas emissions from the agricultural sector through the implementation of 'Ag Climatise – A roadmap towards Climate Neutrality'. Biogenic methane is primarily associated with ruminants, which produce methane while digesting their food, and not with pigs/poultry, which are a monogastric animal. Greenhouse gas emissions from the installation are discussed further in the EIA (Climate) section of this report.

	<ul style="list-style-type: none"> • Ammonia emissions are discussed in the Emissions to Air (Ammonia) and EIA (Air) sections of this report. Regard is given to government policy and national plans. • The EPA has published guidance on how applicants should assess the predicted impact of ammonia emissions from their proposed installation. This application has been assessed in accordance with that guidance document. The site will be required to operate in accordance with its licence requirements including BAT which will ensure minimisation of ammonia emissions. This topic is discussed further in the ammonia section and EIA sections of this report. • The Agency is satisfied that this licence assessment meets the requirements of sections 52(2)(a), (b) and (c) of the EPA Act. 						
8.	<table border="1" data-bbox="336 629 1359 750"> <thead> <tr> <th data-bbox="336 629 655 689">Name & Position:</th> <th data-bbox="655 629 975 689">Organisation:</th> <th data-bbox="975 629 1359 689">Date received:</th> </tr> </thead> <tbody> <tr> <td data-bbox="336 689 655 750">Mr Peter Sweetman</td> <td data-bbox="655 689 975 750">Peter Sweetman</td> <td data-bbox="975 689 1359 750">27 March 2023</td> </tr> </tbody> </table> <p data-bbox="336 750 1359 817">Issues raised:</p> <p data-bbox="336 817 1359 884"><i>In the submission Mr. Sweetman quotes the following from the Courts of Justice of the European Union judgement for cases C-29317 and C-29417:</i></p> <p data-bbox="336 952 1359 1310"><i>1. Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that the grazing of cattle and the application of fertilizers on the surface of land or below its surface in the vicinity of Natura 2000 sites may be classified as a 'project' within the meaning of that provision, even if those activities, in so far as they are not a physical intervention in the natural surroundings, do not constitute a 'project' within the meaning of Article 1(2)(a) of Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.</i></p> <p data-bbox="336 1332 1359 1377">Agency response:</p> <p data-bbox="336 1377 1359 1568">Organic fertiliser is something which may be distributed to farmers for use on their farms, but that ultimate use does not form part of the project in respect of which the Agency considers a licence application. Ultimately, the location on which landspreading of organic fertiliser from the installation may occur, can vary across and within any given year.</p> <p data-bbox="336 1579 1359 1758">The spreading of organic fertiliser on farms is regulated by the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2022 (S.I. 113 of 2022) which gives effect to the 5th Nitrates Action Programme (2022 to 2025), published in accordance with the Nitrates Directive.</p> <p data-bbox="336 1769 1359 2016">In 2022, the 5th Nitrates Action Programme was subject to appropriate assessment (as referred to in this Agency's Inspector's Report) and a strategic environmental assessment. In addition, the referenced Courts of Justice ruling stated that "Article 6(3) of Directive 92/43 must be interpreted as not precluding national programmatic legislation which allows the competent authorities to authorise projects on the basis of an 'appropriate assessment' within the meaning of that provision, carried out in advance and in which a</p>	Name & Position:	Organisation:	Date received:	Mr Peter Sweetman	Peter Sweetman	27 March 2023
Name & Position:	Organisation:	Date received:					
Mr Peter Sweetman	Peter Sweetman	27 March 2023					

	<p>specific overall amount of nitrogen deposition has been deemed compatible with that legislation’s objectives of protection.”</p> <p>The appropriate assessment conducted as part of this application is considered in compliance with the rulings of the Courts of Justice of the European Union judgement for cases C-29317 and C-29417.</p>		
9.	<p>Name & Position: Mr. Peter Sweetman</p>	<p>Organisation: Peter Sweetman and on behalf of Wild Ireland Defence CLG</p>	<p>Date received: 15 June 2023</p>
<p>Issues raised:</p> <p><i>The submission:</i></p> <ul style="list-style-type: none"> • States that the EPA must assess the disposal of the waste from these developments; • States that the threshold for Appropriate Assessment is set out in Kelly -v- An Bord Pleanála [2014] IEHC 400 (25 July 2014); • References four CJEU judgements in the context of Article 6 of the Habitats Directive, specifically C-323/17, C-258/11, C-293/17 and C-294/17. 			
<p>Agency response:</p> <p>The submitter’s reference to “these developments” refers to pig and poultry industrial emissions licence applications.</p> <p>I am satisfied that I have sufficient information available to complete an Appropriate Assessment Screening, in an appropriate manner, to assess in view of best scientific knowledge and the conservation objectives of the site, if the project individually or in combination with other plans or projects is likely to have a significant effect on a Natura 2000 Site.</p> <p>The Appropriate Assessment section of this report details the results of the appropriate assessment conducted as part of the licence application. The licensee has provided sufficient information regarding the wastes produced by the activities, as well as their disposal off-site. More information on waste can be found in the waste section of this report.</p> <p>The submitter quotes Case C-323/17 where the court noted that “<i>in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site</i>”.</p> <p>I am satisfied that the screening conducted as part of this application to determine whether or not an Appropriate Assessment was required was consistent with case C-323/17 and did not take into account measures that would mitigate any potential impacts on Natura 2000 sites.</p> <p>The submitter quotes Kelly -v- An Bord Pleanála [2014] IEHC 400 which references CJEU case C-258/11 where the court noted that in order for a regulatory body such as the Agency to grant approval “<i>it should be pointed out that it cannot have lacunae and must contain complete, precise and</i></p>			

definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned”.

I am satisfied that there is sufficient information available to the Agency to conclude beyond reasonable scientific doubt that emissions and discharges from the proposed project will not have any adverse effects on the integrity of any European site. The Appropriate Assessment section of this report details the results of the appropriate assessment conducted as part of the licence review. The licensee has provided sufficient information regarding the wastes produced by the activity, as well as their disposal off-site. More information on waste can be found in the waste section of this report.

The submitter quotes cases C-293/17 and C-294/17 where the court ruled *“Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that the grazing of cattle and the application of fertilisers on the surface of land or below its surface in the vicinity of Natura 2000 sites may be classified as a ‘project’ within the meaning of that provision, even if those activities, in so far as they are not a physical intervention in the natural surroundings, do not constitute a ‘project’ within the meaning of Article 1(2)(a) of Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.”*

Organic fertiliser is something which may be distributed to farmers for use on their farms, but that ultimate use does not form part of the project in respect of which the Agency considers a licence application. Ultimately, the location on which landspreading of organic fertiliser from the installation may occur, can vary across and within any given year.

The spreading of organic fertiliser on farms is regulated by the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2022 (S.I. 113 of 2022) which gives effect to the 5th Nitrates Action Programme (2022 to 2025), published in accordance with the Nitrates Directive.

I am satisfied that the appropriate assessment conducted as part of this application is considered in compliance with the rulings of the Courts of Justice of the European Union judgement for cases C-293/17 and C-294/17.

14. Consultations

14.1 Cross Office Consultation

The Industrial & Carbon Emissions Regulation (ICER) and the Office of Environmental Enforcement (OEE) routinely liaise in relation to the licensing of the intensive agricultural sector. This in part has informed the assessment of this application.

I consulted OEE Inspector Adrian Farrell in relation to this site. In general, the OEE have no significant concerns regarding the proposed changes to the licensable activity.

There are no open compliance investigations or non-compliances raised by OEE for the site. The last site visit by OEE in 2023 raised no issues or observations. At the

time of the visit, animal numbers in recorded in the stock register were in compliance with the existing licence, P0915-01.

14.2 Transboundary Consultations

There were no transboundary consultations undertaken as there were no transboundary impacts identified.

15. Appropriate Assessment

Appendix 2 lists the European sites assessed, their associated qualifying interests and conservation objectives along with the assessment of the effects of the activity on the European sites. A screening for Appropriate Assessment (AA) was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Galtee Mountains SAC (000646), Moanour Mountain SAC (002257), Lower River Suir SAC (002137), Carrigeenamronety Hill SAC (002037), Ballyhoura Mountains SAC (002036), Blackwater River (Cork/Waterford) SAC (002170), Glen Bog SAC (001430).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it cannot be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was required.

This determination has been made in light of the following reasons:

- Air emissions of ammonia from the installation (and associated nitrogen deposition) have the potential for effects on qualifying interest habitats and species in the European Sites listed above due to their proximity to the installation and qualifying interest's particular sensitivity to ammonia.
- The closest European site, Galtee Mountains SAC, is approximately 4 km from the installation boundary. A number of the qualifying interest habitats of this SAC including *Northern Atlantic wet heaths with Erica tetralix* [4010], *European dry heaths* [4030], *Alpine and Boreal heaths* [4060], *Blanket bogs (* if active bog)* [7130], *Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)* [8110] and *Siliceous rocky slopes with chasmophytic vegetation* [8220] may have lichens and/or bryophytes present which are particularly sensitive to ammonia. Information in relation to European Sites is available on www.npws.ie.
- Regard has been had to the EPA's Licence Application Guidance (Assessment of the Impact of Ammonia and Nitrogen on Natura 2000 Sites from Intensive Agriculture Installations, Version 1, May 2021) and the online screening tool SCAIL Agriculture (<http://www.scail.ceh.ac.uk>) as part of this Appropriate Assessment Screening Determination.
- Taking all of the foregoing into account it is considered that significant effects on European Sites and their qualifying interests due to emissions to air from the installation cannot be ruled out at the screening stage and based on the precautionary principle this determination is that a Stage 2 Appropriate Assessment is required.

A Natura Impact Statement was received by the Agency on 08 March 2022.

An Inspector's Appropriate Assessment has been completed and has determined, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats Directive, that the activities, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular the Galtee Mountains SAC (000646), Moanour Mountain SAC (002257), Lower River Suir SAC (002137), Carrigeenamronety Hill SAC (002037), Ballyhoura Mountains SAC (002036), Blackwater River (Cork/Waterford) SAC (002170), Glen Bog SAC (001430), having regard to their conservation objectives and will not affect the preservation of these sites at favourable conservation status if carried out in accordance with this RD and the conditions attached hereto for the following reasons:

- The installation is not located within a European site.
- The closest European site is approximately 4 km away.
- Storm water run-off from the roof and paved areas is directed into local watercourses. There will be no other direct discharge to surface waters or groundwater within the installation boundary.
- The risk of surface water or groundwater contamination because of accidental emissions during washing activities or from spillage from the slurry tanks is minimal, given the downstream distance between the activity and a European site is in excess of 15 km.
- Waste generated on-site will be handled and stored in a manner which will ensure there is no risk to European sites and will only be sent to appropriately authorised facilities.
- Slurry will be applied to farmlands in accordance with the Nitrates Regulations. The licence, if granted, relates to the site of the activity for which the licence application is made, i.e. the rearing of pigs within the installation boundary, and does not extend to the lands beyond the installation boundary on which organic fertiliser may be landspread.
- Activities which can take place within European sites are restricted by legislation. All persons must obtain the written consent from the relevant Minister before performing particular operations on, or affecting, particular habitats where they occur on lands or waters within the SACs and SPAs.
- The closest European site is approximately 4 km away from the installation boundary (The Galtee Mountains SAC) and is considered to be outside of the zone of influence of noise emissions arising at the installation.
- The installation is in a rural area where the predominant farming activities involve the rearing of livestock. There are no other licensed installations within a 5 km radius of the installation.
- The licence review is for the re-development of parts of the site. The upgrade of this site and reviewed licence will lead to improved environmental standards and efficiencies.
- The licensee has proposed a number of mitigation measures which comply with BAT to minimise emissions of ammonia and therefore, nitrogen deposition at the designated sites.

- Regard has been had to the EPA's Licence Application Guidance (Assessment of the Impact of Ammonia and Nitrogen on Natura 2000 Sites from Intensive Agriculture Installations, Version 1, May 2021) in addition to the online screening tool SCAIL Agriculture as part of this Appropriate Assessment Screening Determination.
- Air emissions were modelled by the licensee (as part of a NIS requested by the Agency) and by the Agency. The modelling concluded that process emissions from the proposed pig numbers at the installation will not contribute significantly to ammonia levels at European sites.

In light of the foregoing reasons no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of those European Sites, Galtee Mountains SAC (000646), Moanour Mountain SAC (002257), Lower River Suir SAC (002137), Carrigeenamronety Hill SAC (002037), Ballyhoura Mountains SAC (002036), Blackwater River (Cork/Waterford) SAC (002170), Glen Bog SAC (001430).

Regard has been had to the submissions received concerning Appropriate Assessment as detailed in the Submissions section of this report.

16. Environmental Impact Assessment

16.1 EIA Introduction

This assessment is being undertaken in accordance with the requirements of Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. The application was accompanied by an Environmental Impact Assessment Report (EIAR).

As part of this environmental impact assessment, I have carried out an examination, analysis and evaluation of all the information provided by the licensee (including the EIAR), the existing licence, Register Number: P0915-01, information received through consultation, the documents associated with the assessments carried out by Limerick City and County Council and its reasoned conclusion, and the issues that interact with the matters that were considered by that authority and which relate to the activity, written submissions, as well as considering any supplementary information where appropriate. All of the documentation received was examined and I consider that the EIAR complies with the provisions of Article 5 of the 2014 EIA Directive when considered in conjunction with the additional material submitted with the application.

I am satisfied that the information contained in the EIAR has been prepared by competent experts and that the environmental effects arising as a consequence of the activity have been satisfactorily identified, described and assessed.

Having specific regard to EIA, this Inspector's Report as a whole is intended to identify, describe and assess for the Agency the likely significant direct and indirect effects of the activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following environmental factors: population and human health, biodiversity, land, soil, water, air and climate, the landscape, material assets and cultural heritage.

This Inspector's Report addresses the interaction between those effects and the related development forming part of the wider project. The cumulative effects, with

other developments in the vicinity of the activities have also been considered, as regards the combined effects of emissions. In addition, the vulnerability of the activity to risks of major accidents and/or disasters has been considered. The mitigation measures proposed to address the range of predicted significant effects arising from the activity have been outlined. This Inspector's Report provides conclusions to the Agency in relation to such effects.

A summary of the submissions made by third parties has been set out above in the Submissions section of this report.

I am satisfied that the public have been given early and effective opportunity to participate in the environmental decision-making procedure.

16.2 Consultation with Planning Authorities in relation to EIA

Consultation was carried out between Limerick City and County Council and the Agency under the relevant section of the EPA Act.

Limerick City and County Council did not provide any observations to the Agency on the licence application and EIAR.

16.3 Consultation with other competent authorities

There was no consultation with other competent authorities in relation to this application.

16.4 Alternatives

The matter of alternatives is addressed in Chapter 2 of the EIAR. It examines several alternative layouts and designs, processes, mitigation measures, and management of by-products.

The proposed changes to the activity do not involve significant infrastructural changes and so it was deemed best to proceed with the existing site and site layout.

In this regard I consider that the matter of the examination of alternatives has been satisfactorily addressed.

16.5 Likely Significant Direct and Indirect Effects

The likely significant direct and indirect effects of the activity on the following factors as set out in Article 3 of the EIA Directive are considered in this section:

- (a) *population and human health;*
- (b) *biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;*
- (c) *land, soil, water, air and climate;*
- (d) *material assets, cultural heritage and the landscape;*
- (e) *the interaction between the factors referred to in points (a) to (d).*

16.5.1 Population & Human Health

Identification, Description and Assessment of Effects

Population and human health are mainly addressed in Chapter 3 of the EIAR. The potential direct and indirect effects on population and human health are associated with emissions to air, dust, odour, noise emissions, emissions to water, waste generation, and accidental emissions. Should emissions cause an exceedance of environmental quality standards, this could have implications for population and human health.

The effects identified and described above have been assessed in the following sections of the licence assessment part of this report:

- Emissions to Air;
- Emissions to Water and Ground;
- Noise;
- Waste Generation;
- Organic Fertiliser; and
- Prevention of Accidents.

There is also the potential for accidental emissions to the environment, due to human error or failure of containment infrastructure. Accidental emissions are addressed in the 'Prevention of Accidents' section of this report.

Cumulative effects of the activity in relation to population and human health have been assessed and it is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to population and human health are detailed in the following sections of this report:

- Emissions to Air;
- Emissions to Water and Ground;
- Noise;
- Waste Generation;
- Organic Fertiliser; and
- Prevention of Accidents.

Conclusions

I have examined all the information on population and human health, provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of population and human health.

16.5.2 Biodiversity

Identification, Description and Assessment of Effects

Biodiversity is mainly addressed in Chapter 4 of the EIAR. The EIAR describes the habitats and species at and in the vicinity of the installation. The proposed changes to the activity do not involve any physical expansion of the installation or significant changes to emissions from the installation.

The licensee also submitted a Natura Impact Statement (Refer to the Appropriate Assessment section of this report).

The potential direct and indirect effects on biodiversity are related to effects on aquatic flora and fauna and their habitats due to effects on water quality, disturbance to fauna due to noise emissions, and effects due to air emissions (e.g. ammonia emissions and nitrogen deposition). The effects identified and described above have been assessed in the following sections of this report:

- Emissions to Air;
- Emissions to Water and Ground;
- Storm water Discharges;
- Waste Generation;
- Noise;
- Organic Fertiliser; and
- Prevention of Accidents.

There is also the potential for accidental emissions to the environment, due to spillages or human error, which may impact on biodiversity. Accidental emissions are addressed in the Prevention of Accidents section earlier in this report. Landspreading of organic fertiliser could impact on water quality, however, this occurs outside of the licensed boundary. This must be carried out in accordance with the Nitrates Regulations and Animal By-product Regulations, which are enforced by DAFM and the Local Authorities. In addition, the Government's Food Vision 2030 was published in August 2021 and sets out four high level mission statements for the Agri-Food sector. This document proposes more targeted agri-environmental schemes under the CAP Strategic Plan to protect Ireland's habitats and species from emissions from the agricultural sector. This Agri-Food Strategy (AFS) also included an Appropriate Assessment (AA) which concluded that "the adoption of the AFS would not have significant adverse effects on the integrity of any Natura 2000 sites with the inclusion of the mitigation recommendations."

Cumulative effects of the activity in relation to biodiversity have been assessed and it is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to biodiversity are detailed in the following sections of this report:

- Emissions to Air;
- Emissions to Water and Ground;
- Storm Water Discharges;
- Waste Generation;
- Noise;
- Organic Fertiliser; and
- Prevention of Accidents

Conclusions

I have examined all the information on biodiversity, provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the

proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of biodiversity.

16.5.3 Land and Soil

Identification, Description and Assessment of Effects

Land and soil are addressed in Chapter 5 of the EIAR. No significant physical changes are proposed at the installation and there will be no expansion of the site. This area has a relatively flat to gently undulating topography similar to a significant part of Co. Limerick and surrounding areas. Any potential contamination issues are dealt with in the 'baseline report' section of this report.

The potential direct and indirect effects on land and soil are associated with emissions to air, emissions to water, and accidental emissions. Should emissions cause an exceedance of environmental quality standards, this could have implications for land and soil. The potential effects identified and described above have been assessed in the following sections of this report:

- Emissions to Air;
- Emissions to Water and Ground;
- Organic Fertiliser;
- Waste Generation;
- Prevention of Accidents; and
- Cessation of Activity.

There is also the potential for accidental emissions to the environment, due to spillages or human error, which may impact on land or soil. Accidental emissions are addressed in the 'Prevention of Accidents' section earlier in this report. Landspreading of organic fertiliser could impact on land or soil, however, this occurs outside of the licensed boundary. This must be carried out in accordance with the Nitrates Regulations and Animal By-product Regulations, which are enforced by DAFM and the Local Authorities.

Cumulative effects of the activity in relation to land and soil have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to land and soil are detailed in the following sections of this report:

- Emissions to Air;
- Emissions to Water and Ground;
- Organic Fertiliser;
- Waste Generation;
- Prevention of Accidents; and
- Cessation of Activity.

Conclusions

I have examined all the information on land and soil, provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will

be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects on land and soil.

16.5.4 Water

Identification, Description and Assessment of Effects

Water is mainly addressed in Chapter 6 of the EIAR. The site is within the Knockasallen groundwater body (IE_SE_G_087), which has a Water Framework Status of 'good' and a vulnerability ranging from 'high' to 'extreme'.

The site lies within the Suir catchment area and Suir_SC_090 sub-catchment. Storm water from the roof and yard area will discharge to a field drain, which discharges to the Lyre Stream approximately 1.2 km east of the site.

There are no emissions to water or ground from the site. The potential direct and indirect effects on water relate to storm water discharges, and sanitary facility emissions. Should the emissions/discharges cause an exceedance of Water Quality Standards in the receiving water, this could have potential effects on water quality, aquatic biodiversity and human health. The effects identified and described above have been assessed in the following sections of this report:

- Emissions to Water and Ground;
- Storm Water Discharges;
- Organic Fertiliser; and
- Prevention of Accidents.

There is also the potential for accidental emissions to water or groundwater to occur. The likelihood of accidental emissions to water is considered low in light of the measures outlined in the 'Prevention of Accidents' section above and in light of the conditions in the RD. This is addressed in Prevention of Accidents section of this report.

The site is in a rural area with most of the developments in the vicinity of the installation being dwelling houses and farmyards. There are no other intensive agriculture EPA licensed installations within 5 km of the installation and no other significant industrial developments and it is therefore considered that there will be no significant cumulative effect from emissions and storm water discharges from the activity.

Landspreading of organic fertiliser, which occurs outside of the licensed boundary, could cause pollution of surface waters or groundwater. To prevent this, the application of fertilisers to land is controlled by the Nitrates Regulations. These give legal effect in Ireland to the Nitrates Directive and to our Nitrates Action Programme (NAP) and controls the management and application of livestock manure and other fertilisers. The NAP is required to be reviewed every four years. In 2022, the Department of Housing, Local Government and Heritage undertook an Appropriate Assessment of the current NAP (5th NAP 2022-2025), which included a Natura Impact Statement (February 2022) for Irelands NAP and concluded that the NAP would not result in adverse effects on European site integrity either alone or in combination with other plans and programmes.

As mentioned earlier, the AFS sets out four high level mission statements for the sector. One of its mission statements is to become a 'Climate smart, environmentally sustainable Agri-food sector'. This target is underpinned by seven goals one of which,

to "Protect High Status Sites and Contribute to Protection & Restoration of Good Water Quality and Healthy Aquatic Ecosystems". The report identified five actions under this goal including protecting water from agricultural pollution and reduce use of agricultural pesticides. Its associated AA concluded "the adoption of the AFS would not have significant adverse effects on the integrity of any Natura 2000 sites with the inclusion of the mitigation recommendations."

The National River Basin Management Plan (2022-2027) was published in September 2024. Over the period of this river basin planning cycle, there are measures being undertaken to meet the environmental objectives of the WFD. These include measures such as implementation of the Nitrates Action Programme (Nitrates Regulations) and associated inspection regime. Targeted monitoring as envisaged under the Plan allied with multi-party enforcement (EPA/Local Authority/DAFM) provides an early warning of potential problems/improvements and of the possible need to adapt the Plan to ensure protection of our waters.

Cumulative effects of the activity in relation to water have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to water are detailed in the following sections of this report:

- Emissions to Water and Ground;
- Storm Water Discharges;
- Organic Fertiliser; and
- Prevention of Accidents.

Conclusions

I have examined all the information on water (including Storm Water, Emissions to Water and Groundwater) provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects on water.

16.5.5 Noise

Identification, Description and Assessment of Effects

Noise is mainly addressed in Chapter 1 of the EIAR. The installation is located in a rural area, with the only developments in the locality being farms and once-off residential developments. The potential direct and indirect effects of noise associated with the operation of the activity is the potential to cause nuisance for those living near the activity or to affect noise sensitive species near the site. The effects have been assessed in the 'noise' section of this report.

There is also the potential for accidental noise emissions. This is addressed in the 'Prevention of Accidents' section of this report.

Cumulative effects of the activity in relation to noise have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity

and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to noise are detailed in the 'Noise' section of this report.

Conclusions

I have examined all the information on noise provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of noise.

16.5.6 Air

Identification, Description and Assessment of Effects

Air is mainly addressed in Chapter 7 of the EIAR. The potential direct and indirect effects on air are associated with emissions to air of ammonia, dust and odour from the pig housing, and dust from the installation yard. Should emissions cause an exceedance of air quality standards or critical levels/loads, this could have implications for air quality, human health and biodiversity within and beyond the site boundary. General site dust and odour emissions have the potential to impact human health and cause nuisance.

The effects identified and described above have been assessed in the following sections of this report:

- Emissions to Air;
- Organic Fertiliser; and
- Prevention of Accidents.

There is also the potential for accidental emissions to the environment. This is addressed in the 'Prevention of Accidents' section of this report.

In relation to cumulative effects, it is noted that there are no EPA-licensed intensive agriculture installations or other EPA licensed activities within 5 km of the installation.

As stated previously, the Agency has issued a guidance document to assist applicants in undertaking an assessment of the impacts of ammonia and nitrogen, including cumulative assessments, titled "Assessment of the impact of ammonia and nitrogen on Natura 2000 sites from intensive agriculture installations" (EPA, March 2021).

Modelling of odour emissions was undertaken by the licensee and concluded that there should be no impacts on any odour-sensitive locations nearby. In addition, site specific modelling of the ammonia emissions from the installation was undertaken, which took into account the background levels of ammonia, and it is considered that there is not likely to be a significant cumulative effect on sensitive receptors, with the controls in place and controls recommended in the RD, as a result of the ammonia emissions from the installation and those generated by other activities/developments in the area.

According to 'Ireland's Informative Inventory Report 2023' (EPA 2023), which contains the most recent data, ammonia emissions in 2021 from the pig sector were 6.4 kt (or 5.1% of Ireland's National emissions). This installation will emit 23 tonnes per annum. In December 2020, the Government issued 'Ag Climatise – A Roadmap towards Climate Neutrality'. This is a roadmap of actions for agriculture to cut GHG emissions as well as ammonia emissions significantly over the next decade, and up to 2050. The road map lists actions aiming to reduce the cumulative impact of ammonia emissions from the sector as a whole.

As mentioned earlier, the AFS sets out four high level mission statements for the sector one of which is to become a 'Climate smart, environmentally sustainable Agri-food sector'. Another of its seven goals is to develop a climate neutral food system by 2050 and improve air quality. As stated, its associated AA concluded "the adoption of the AFS would not have significant adverse effects on the integrity of any Natura 2000 sites with the inclusion of the mitigation recommendations."

As detailed previously in the 'Emissions to Air' section of this report, Ireland is addressing ammonia emissions (including emissions from landspreading) in accordance with the NECD and S.I. No. 232/2018, European Union (National Emission Ceilings) Regulations 2018. The Code of Good Agricultural Practice as referred to earlier in this report contains guidelines on topics including *inter alia* low emission spreading and fertiliser management, as well as animal feed and housing.

Approximately 3.8% of the ammonia emissions that originate from landspreading in Ireland come from the pig sector. This equates to 1.1% of Ireland's total ammonia emissions. The organic fertiliser generated by the activity represents a negligible quantity relative to the total quantity of organic fertiliser arising from the livestock sectors in Ireland (cattle, sheep, pigs and poultry).

Cumulative effects of the activity in relation to air have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to air, including ammonia, dust and odour, are detailed in the following sections of this report:

- Emissions to Air;
- Organic Fertiliser; and
- Prevention of Accidents.

Conclusions

I have examined all the information on Air (including ammonia, dust and odour) provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of Air (including ammonia, dust and odour).

16.5.7 Climate

Identification, Description and Assessment of Effects

Chapter 8 of the EIAR addresses Climate. Climate change is a significant global issue which affects weather and environmental conditions (air, water and soil) which consequently affects population and human health, material assets, cultural heritage, the landscape and biodiversity. Climate change is caused by warming of the climate system by enhanced levels of atmospheric greenhouse gases (GHG) due to human activities. GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

The installation does not operate under a GHG Emissions Permit in accordance with the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012, (S.I. 490 of 2012 and amendments). Therefore, this site is not subject to the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012, (S.I. 490 of 2012 and amendments) (the EU ETS). It is therefore a requirement of the IED to investigate how direct emissions of CO₂ might be minimised.

Indirect emissions of CO₂ may arise due to the use of electricity from the national grid. These emissions are covered under the EU ETS at the generating plant but the licensee is also required to address electricity usage as part of energy efficiency management.

The Irish Government approved "Ireland's Climate Action Plan (CAP24)" on 21 May 2024, which is the third annual update to Climate Action Plan 2019 and the second to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021.

The potential direct and indirect effects on climate are associated with storage and spreading of organic fertiliser (litter) (nitrous oxide) and usage of fossil fuels (carbon dioxide). However, any discussion of GHG emissions must be extended to national and global climate impact. As part of the non-ETS (Emissions Trading Scheme) sector the GHG emissions from this site are covered by Ireland's commitments under the Effort Sharing Decision (Decision No 406/2009/EC) and the Effort Sharing Regulation (Regulation (EU) 2018/842) from 2021.

Given the small quantity of climate altering substances that could be released from the activity, in a national context, I consider that the impact of any emissions from the installation on climatic considerations should be minimal.

It is considered that the likelihood of accidental emissions occurring which could affect climate is low in light of the measures outlined in the 'Prevention of Accidents' section above and the proposed conditions in the RD. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to climate are detailed in the following sections of this report:

- Emissions to Air;
- Organic Fertiliser;
- Prevention of Accidents; and
- Energy Efficiency.

Conditions 2 and 7 of the RD deal with energy efficiency matters at the installation.

Conclusions

I have examined all the information on climate provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of climatic factors.

16.5.8 Material Assets, Cultural Heritage and the Landscape

16.5.8.1 Material Assets (including resource use and waste generation)

Identification, Description and Assessment of Effects

Chapter 9 of the EIAR addresses Material Assets, and include information on traffic, transport, agricultural and non-agricultural property, and resources (both natural and others) such as energy and water. Material assets such as roads and traffic and built services are dealt with in the decision of the planning authority to grant permission for the development and are not controlled by the Agency. The planning authority has considered the effect to be acceptable.

The use of natural resources by the activity will not have significant effects in terms of material assets. There are sufficient supplies of electricity and water to serve the requirements of the development. These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on-site. The production of waste by the activity is assessed in the 'Waste Generation' section of this report.

The effects identified and described above have been assessed in the following section of this report:

- Waste Generation; and
- Energy Efficiency and Resource Use.

No significant cumulative effects on material assets have been identified. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to material assets are detailed in the following sections of this report:

- Waste Generation;
- Energy Efficiency and Resource Use.

Material Assets Conclusions

I have examined all the information on material assets provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of Material Assets.

Material assets such as roads, traffic and built services are dealt with in the decision of the planning authority to grant planning permission for the developments on-site and they have considered the effects to be acceptable.

The RD does not propose to include any additional mitigation measures in relation to material assets.

16.5.8.2 Cultural Heritage

Identification, Description and Assessment of Effects

Chapter 11 of the EIAR addresses the potential direct and indirect effects on cultural heritage. Any loss of archaeological or architectural heritage could impact negatively on human beings. These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on-site and are not controlled by the Agency. The planning authority has considered the effect to be acceptable.

There are no buildings or features of architectural significance and no known archaeological features at or near the site of the installation. There are two ringforts 400 m and 500 m north of the site. It is very difficult to envisage any pathway by which emissions from the operation of the activity could impact any feature which might be present.

No significant cumulative effects on the cultural heritage have been identified. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

There are no specific mitigation measures or monitoring proposed in the RD.

Cultural Heritage Conclusions

These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on-site and are not controlled by the Agency. They have considered the effects to be acceptable.

The RD does not propose to include any additional mitigation measures in relation to cultural heritage.

16.5.8.3 The Landscape

Identification, Description and Assessment of Effects

The potential direct and indirect effects on the landscape are described in Chapter 10 of the EIAR. Any disturbance of the landscape has the potential to impact on human beings and their enjoyment of the surrounding area due to visual impacts. These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on-site and are not controlled by the Agency. The planning authority has considered the effects to be acceptable.

The installation is located in a rural, predominantly agricultural area. Emissions from the operation of the activity will not affect the agricultural landscape of the area and no significant developments are proposed on-site as part of this licence review.

No significant cumulative effects on the landscape have been identified. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

There are no specific mitigation measures or monitoring proposed in the RD.

The Landscape Conclusions

These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on-site and are not controlled by the Agency. They have considered the effects to be acceptable.

The RD does not propose to include any additional mitigation measures in relation to landscape.

16.5.8.4 Overall Conclusions for Material Assets, Cultural Heritage and the Landscape

I have examined all the information on material assets, cultural heritage and the landscape provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of material assets, cultural heritage and the landscape.

16.5.9 Interactions Between Environmental Factors

Interactions of effects are considered in Chapter 12 of the EIAR. The most significant interactions between the factors as a result of the activity are summarised below.

Population and human health, air, and biodiversity

Potential effects from emissions to air may impact on human beings, air quality and flora and fauna as demonstrated in the 'Emissions to Air' section above. As demonstrated such effects are considered not to be likely or significant.

Water, soil, and biodiversity

Accidental discharges of wash water, slurry or other substances to ground may directly and indirectly affect soil, groundwater quality, surface water quality downstream, aquatic habitats and aquatic flora and fauna. Indirect effects on soil, groundwater quality, surface water quality, habitats and flora and fauna may arise from landspreading slurry which arises from the activity. As demonstrated in the 'Emissions to Water and Ground' section above, such effects are not considered to be likely or significant.

Conclusions

I have considered the interactions between population and human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape, and the interaction of the likely effects identified throughout this report. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of the interaction between the foregoing environmental factors.

16.5.10 Vulnerability of the Project to Risks of Major Accidents and/or Disasters

Chapter 1.6 of the EIAR describes the expected effects deriving from the vulnerability of the activity to risks of major accidents and/or disasters that are relevant to the activity.

The potential risk of effects from accidents and/or disasters is limited due to the innate nature of the production system and activities on-site. There are no significant high risk/hazardous products used, produced and/or released by the proposed development which would pose a risk outside of the site boundary as a result of any accident/disaster.

The Seveso Directive⁹ and Regulations are not applicable at the installation. The risks of accidents associated with the activity are dealt with in the 'Prevention of Accidents' and 'Cessation of Activity' sections of this report. The licensee assessed the vulnerability of the project and determined that due to the nature of the processes on-site, no significant risks occur and consequently, no specific mitigation measures have been proposed in relation to these effects.

Mitigation and Monitoring

There are no specific mitigation measures proposed in relation to major accidents and/or disasters at the installation.

Conclusions

I have examined all the information on major accidents and/or disasters provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of major accidents and/or disasters.

16.6 Reasoned Conclusion on the significant effects

Having regard to the examination of environmental information contained above, and in particular to the content of the Environmental Impact Assessment Report (EIAR) and supplementary information provided by the licensee, and the submissions from other third parties in the course of the application, it is considered that the potential significant direct and indirect effects of the activity on the environment are as follows:

- emissions to air;
- noise emissions; and
- accidental leakages or spills.

Having assessed those potential effects, I have concluded as follows:

- Emissions to air will be mitigated through operation of abatement (including low protein diet and multiphase feed, utilisation of deep pit combined with the above combination of nutritional management in existing houses and the reconfiguration

⁹ Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC.

of exhaust air from the houses); imposing emission limit values to comply with the CID; and implementing monitoring, maintenance and control measures.

- Noise emissions will be mitigated through imposing daytime, evening-time and nighttime noise limits at noise sensitive locations and implementing monitoring, maintenance and control measures, and
- Accidental leakages or spills will be mitigated through inspection and maintenance of bunds and tanks and accident and emergency requirements specified in the RD.

Having regard to the effects (and interactions) identified, described and assessed throughout this report, I consider that the monitoring, mitigation and preventative measures proposed will enable the activity to operate without causing environmental pollution, subject to compliance with the RD. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

17. EPA Charges

The annual enforcement charge recommended in the RD is €3,395 which reflects the anticipated enforcement effort required and the cost of monitoring.

18. Recommendation

The Agency, in considering an application for a licence or the review of a licence, shall have regard to section 83 of the EPA Act. The Agency shall not grant a licence or revised licence unless it is satisfied that emissions comply with relevant emission limit values and standards prescribed under regulation. In setting such limits and standards, the Agency must ensure they are established based on the stricter of either, or both, the limits and controls required under BAT, and those required to comply with any relevant environmental quality standard. The Agency shall perform its functions in a manner consistent with section 15 of the Climate Action and Low Carbon Development Act 2015 as amended.

The RD specifies the necessary measures to provide that the installation shall be operated in accordance with the requirements of section 83(5) of the EPA Act and has regard to the AA and the EIA. The assessment is consistent with section 15 of the Climate Action and Low Carbon Development Act 2015 as amended. The RD gives effect to the requirements of the EPA Act and has regard to submissions made.

This report was prepared by Philip Stack, Brian Walsh and Brian Coffey.

I recommend that a Proposed Determination be issued subject to the conditions and for the reasons as drafted in the RD.

Signed



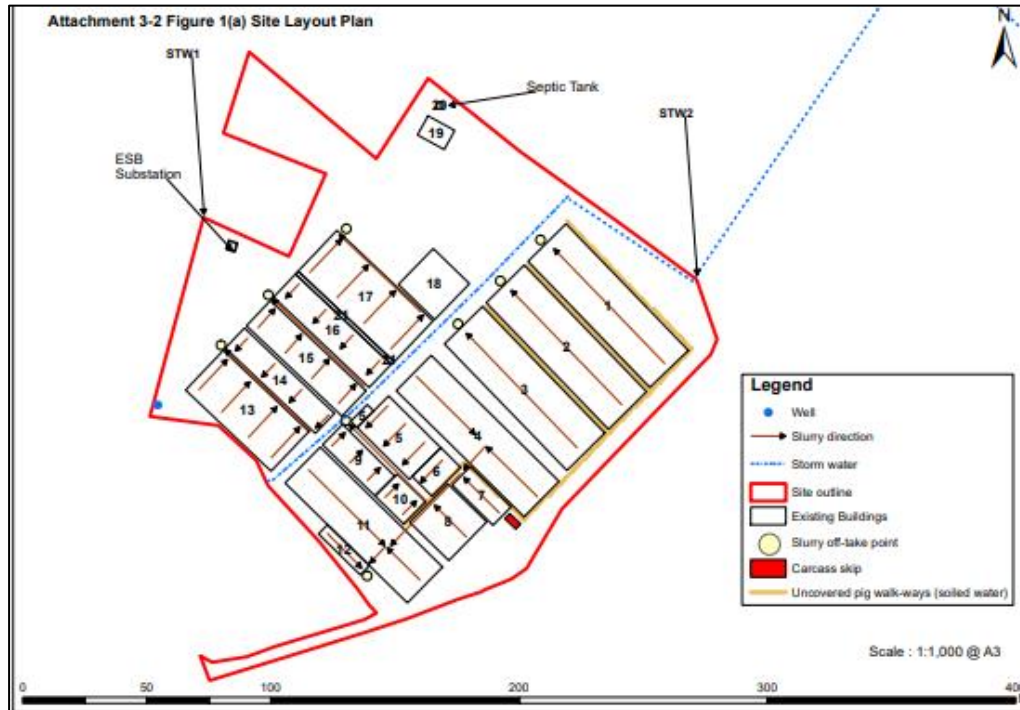
Brian Walsh, ICER Inspector

Procedural Note

In the event that no objections are received to the Proposed Determination on the application, a licence will be granted in accordance with section 87(4) of the EPA Act, as soon as may be after the expiration of the appropriate period.

Appendices

Appendix 1: Maps/Drawings



Excerpt from the drawing titled "Attachment 3-2 Figure 1(a) Site layout plan" received by the Agency in support of the application on 25 November 2023.

Appendix 2: AA table

Assessment of the effects of the activities on European sites and proposed mitigation measures.

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
000646	Galtee Mountains SAC	<p>Habitats</p> <p>4010 Northern Atlantic wet heaths with <i>Erica tetralix</i></p> <p>4030 European dry heaths</p> <p>4060 Alpine and Boreal heaths</p> <p>6230 Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)*</p> <p>7130 Blanket bogs (* if active bog)</p> <p>8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)</p> <p>8210 Calcareous rocky slopes with chasmophytic vegetation</p> <p>8220 Siliceous rocky slopes with chasmophytic vegetation</p>	<p><i>NPWS (2016)</i></p> <p><i>Conservation Objectives: Galtee Mountains SAC 000646. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</i></p>	<p>The site is located 4.0 km to the east of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interests for this European Site. Refer to section 6.1.5 of this report.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the lack of hydrological connectivity of the project site with the European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges associated with the changes to the activity from the project site will not cause an impact on the conservation objectives for this European Site.</p>
002257	Moanour Mountain SAC	<p>Habitats</p> <p>1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</p> <p>3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation</p> <p>6430 Hydrophilous tall herb fringe communities of plains and of the</p>	<p><i>NPWS (2019)</i></p> <p><i>Conservation Objectives: Moanour Mountain SAC 002257. Version 1. National Parks and Wildlife Service, Department of</i></p>	<p>The site is located 7.6 km to the northeast of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interests for this European Site. Refer to section 6.1.5 of this report.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the lack of hydrological connectivity of the project site with the European site.</p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
		<p>montane to alpine levels 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* 91J0 Taxus baccata woods of the British Isles*</p> <p>Species 1029 Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) 1092 White-clawed Crayfish (<i>Austropotamobius pallipes</i>) 1095 Sea Lamprey (<i>Petromyzon marinus</i>) 1096 Brook Lamprey (<i>Lampetra planeri</i>) 1099 River Lamprey (<i>Lampetra fluviatilis</i>) 1103 Twait Shad (<i>Alosa fallax fallax</i>) 1106 Salmon (<i>Salmo salar</i>) 1355 Otter (<i>Lutra lutra</i>)</p>	<i>Culture, Heritage and the Gaeltacht.</i>	<p>The project site is not located within the vicinity of any known breeding site for Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>), White-clawed Crayfish (<i>Austropotamobius pallipes</i>), Sea Lamprey (<i>Petromyzon marinus</i>), Brook Lamprey (<i>Lampetra planeri</i>), River Lamprey (<i>Lampetra fluviatilis</i>), Twait Shad (<i>Alosa fallax fallax</i>), Salmon (<i>Salmo salar</i>) or Otter (<i>Lutra lutra</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges associated with the changes to the activity from the project site will not cause an impact on the conservation objectives for this European Site.</p> <p>Qualifying interests may be sensitive to noise pollution. Taking into account the distance to European Sites, the absence of significant change in the noise emissions from the installation and the noise emissions limit values, it is considered that there will be no potential for disturbance due to noise from the activity. Refer to section 6.4 Noise of this report.</p>
002137	Lower River Suir SAC	<p>Habitats 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation 6430 Hydrophilous tall herb fringe</p>	<i>NPWS (2017) Conservation Objectives: Lower River Suir SAC 002137. Version 1. National Parks and Wildlife Service,</i>	<p>The site is located 8.9 km to the northwest of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interests for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to any</p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
		<p>communities of plains and of the montane to alpine levels 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* 91J0 Taxus baccata woods of the British Isles*</p> <p>Species 1029 Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) 1092 White-clawed Crayfish (<i>Austropotamobius pallipes</i>) 1095 Sea Lamprey (<i>Petromyzon marinus</i>) 1096 Brook Lamprey (<i>Lampetra planeri</i>) 1099 River Lamprey (<i>Lampetra fluviatilis</i>) 1103 Twaité Shad (<i>Alosa fallax fallax</i>) 1106 Salmon (<i>Salmo salar</i>) 1355 Otter (<i>Lutra lutra</i>)</p>	<p><i>Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</i></p>	<p>potential hydrological connectivity of the project site with the European site being in excess 8 km.</p> <p>The project site is not located within the vicinity of any known breeding site for Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>), White-clawed Crayfish (<i>Austropotamobius pallipes</i>), Sea Lamprey (<i>Petromyzon marinus</i>) Brook Lamprey (<i>Lampetra planeri</i>), River Lamprey (<i>Lampetra fluviatilis</i>), Twaité Shad (<i>Alosa fallax fallax</i>), Salmon (<i>Salmo salar</i>) or Otter (<i>Lutra lutra</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges associated with the changes to the activity from the project site will not cause an impact on the conservation objectives for this European Site.</p> <p>Qualifying interests may be sensitive to noise pollution. Taking into account the distance to European Sites, the absence of significant change in the noise emissions from the installation and the noise emissions limit values, it is considered that there will be no potential for disturbance due to noise from the activity. Refer to section 6.4 Noise of this report.</p>
002037	Carrigeenamronety Hill SAC	<p>Habitats 4030 European dry heaths</p> <p>Species 1421 Killarney Fern (<i>Trichomanes speciosum</i>)</p>	<p><i>NPWS (2021) Conservation Objectives: Carrigeenamronety Hill SAC 002037.</i></p>	<p>The site is located 10.1 km to the southwest of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interests for this European Site.</p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
			<i>Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.</i>	<p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the lack of hydrological connectivity of the project site with the European site.</p> <p>The project site is not located within the vicinity of any known breeding site for Killarney Fern (<i>Trichomanes speciosum</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges associated with the changes to the activity from the project site will not cause an impact on the conservation objectives for this European Site.</p>
002036	Ballyhoura Mountains SAC	Habitats 4010 Northern Atlantic wet heaths with Erica tetralix 4030 European dry heaths 7130 Blanket bogs (* if active bog)	<i>NPWS (2016) Conservation Objectives: Ballyhoura Mountains SAC 002036. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</i>	<p>The site is located 13.7 km to the west of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interests for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the lack of hydrological connectivity of the project site with the European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges associated with the changes to the activity from the project site will not cause an impact on the conservation objectives for this European Site.</p>
002170	Blackwater River (Cork/Waterford) SAC	Habitats 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide	<i>NPWS (2012) Conservation Objectives: Blackwater River</i>	<p>The site is located 18.2 km to the southwest of the installation.</p>

Site Code	Site Name	Qualifying Interests <i>(* denotes a priority habitat)</i>	Conservation Objectives	Assessment
		<p>1220 Perennial vegetation of stony banks 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)*</p> <p>Species 1029 Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) 1092 White-clawed Crayfish (<i>Austropotamobius pallipes</i>) 1095 Sea Lamprey (<i>Petromyzon marinus</i>) 1096 Brook Lamprey (<i>Lampetra planeri</i>) 1099 River Lamprey (<i>Lampetra fluviatilis</i>) 1103 Twaité Shad (<i>Alosa fallax fallax</i>)</p>	<p><i>(Cork/Waterford)</i> SAC 002170. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interests for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the lack of hydrological connectivity of the project site with the European site.</p> <p>The project site is not located within the vicinity of any known breeding site for Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>), White-clawed Crayfish (<i>Austropotamobius pallipes</i>), Sea Lamprey (<i>Petromyzon marinus</i>), Brook Lamprey (<i>Lampetra planeri</i>), River Lamprey (<i>Lampetra fluviatilis</i>), Twaité Shad (<i>Alosa fallax fallax</i>), Salmon (<i>Salmo salar</i>), Otter (<i>Lutra lutra</i>) or Killarney Fern (<i>Trichomanes speciosum</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges associated with the changes to the activity from the project site will not cause an impact on the conservation objectives for this European Site.</p>

Site Code	Site Name	Qualifying Interests <i>(* denotes a priority habitat)</i>	Conservation Objectives	Assessment
		1106 Salmon (<i>Salmo salar</i>) 1355 Otter (<i>Lutra lutra</i>) 1421 Killarney Fern (<i>Trichomanes speciosum</i>)		
001430	Glen Bog SAC	Habitats 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)*	<i>NPWS (2017) Conservation Objectives: Glen Bog SAC 001430. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.</i>	<p>The site is located 19.5 km to the northwest of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interests for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the lack of hydrological connectivity of the project site with the European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges associated with the changes to the activity from the project site will not cause an impact on the conservation objectives for this European Site.</p>

Appendix 3: Relevant Legislation

The following European instruments which have been transposed into Irish legislation are regarded as relevant to this application assessment and have been considered in the drafting of the Recommended Determination.
National Emissions Ceilings Directive (2016/2284)
Industrial Emissions Directive (IED) (2010/75/EU)
Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU)
Habitats Directive (92/43/EEC) as amended & Birds Directive (2009/147/EC) as amended
Water Framework Directive [2000/60/EC]
Waste Framework Directive (2008/98/EC)
Air Quality Directives (2008/50/EC and 2004/107/EC)
Groundwater Directive (80/68/EEC) and 2006/118/EC
Environmental Liability Directive (2004/35/CE)
Regulation (EC) No 1069/2009, as amended (Animal By-products Regulation) and Regulation (EC) No 142/2011
Nitrates Directive (91/676/ EEC)
Energy Efficiency Directive (2018/2002/EU)

Appendix 4: Other CIDs/BREF/BAT documents relevant to this assessment

Commission Implementing Decisions	Publication Date
COMMISSION IMPLEMENTING DECISION of 15 February 2017 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs (2017/302/EU)	February 2017
Sectoral BREF	Publication date
Reference Document on the Best Available Techniques for the Intensive Rearing of Poultry or Pigs	July 2017
Horizontal BREF	Publication date
Reference Document on the Best Available Techniques on Emissions from Storage	July 2006
Reference Document on the Best Available Techniques for Energy Efficiency	February 2009