

This Report has been cleared for submission to the Director by Programme Manager, Marie O'Connor

Signed: | 

Date: 28/02/2023



**OFFICE OF ENVIRONMENTAL
SUSTAINABILITY**

**INSPECTOR'S REPORT ON AN INDUSTRIAL EMISSIONS LICENCE
APPLICATION, LICENCE REGISTER NUMBER P0975-02**

TO: EIMEAR COTTER, DIRECTOR

FROM: Linda Cahill, ELP Inspector

DATE: 28 February 2023

Applicant:	Clondrisse Pig Farm Limited
CRO number:	557628
Location/address:	Joristown Upper, Killucan, County Westmeath
Application date:	11 June 2018
Class of activity (under EPA Act 1992 as amended):	6.2(b): The rearing of pigs in an installation where the capacity exceeds 2,000 places for production pigs which are each over 30 kg.
Category of activity under IED (2010/75/EU):	6.6(b): Intensive rearing of pigs with more than 2,000 places for production pigs (over 30 kg).
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: Licensed pig rearing activity expanding from a 625-sow breeding unit to a 625-sow integrated unit with 3,318 production pigs.	
Additional information received:	Yes (31 March 2021, 08 June 2022, 15 September 2022, 11 November 2022)
No of submissions received:	Nine.
Environmental Impact Assessment required: Yes	Stage 2 Appropriate Assessment required: Yes
Environmental Impact Assessment Report submitted (EIAR): Yes (31 March 2021)	Natura Impact Statement (NIS) submitted: Yes (08 June 2022)
Site visit: 24 May 2022	Site notice check: 06 July 2018

1. Introduction

This is an assessment of a review 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.

Clondrisse Pig Farm Limited is a pig unit located at Joristown Upper, Killucan, County Westmeath. Mr. William Murphy is a director of Clondrisse Pig Farm Limited. The installation was first licensed, by the Agency, on 22 February 2017, for a 625-sow breeding unit, Reg. no. P0975-01. That application had been for a 625-sow integrated unit with 3,318 production pigs; however, the production pigs were not permitted by the Final Determination (FD) for P0975-01, as the licensee had not demonstrated that there would be no adverse impact on the environment as a result of odour emissions from the activity.

Clondrisse Pig Farm Limited has applied to the Agency for an IED licence review to allow for the addition of production pigs on-site as detailed in Table 1.1 below.

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.

Table 1.1. Animal Numbers

	Existing	Proposed
No. of animal houses	13	13
Pig categories	Number of Animals	Number of Animals (Total 6,393)
Farrowing sows	625	256
Dry sows		244
Served gilts		125
Weaners (<30 kg weight)	Not specified.	2,450
Maiden gilts	Not specified.	Included in Production Pig numbers below.
Boars	Not specified.	Included in Production Pig numbers below.
Production pigs (growers, finishers, boars, maiden gilts)	0	3,318

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)

For the purposes of the IED categorisation, this equates to 625 sows (including farrowing sows, dry sows and served gilts) and 3,318 production pigs.

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 expanded installation will provide full-time employment for four people.

The main activities at this installation occur during normal working hours between 06:00 and 20:00. Stock inspections are and will be carried out every day, including weekends and bank holidays and additional essential activities may be undertaken outside of core working hours. The installation operates in accordance with the requirements of the Department of Agriculture, Food and the Marine, and under the Bord Bia Pig Quality Assurance Scheme (PQAS).

The pig production process on this farm is typical of many other Irish units. The installation consists of 13 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 slurry storage tanks, under the animal houses, are deep pit. However, the maximum depth of slurry in the slurry storage tanks under animal houses G1, G2, G3 and G4 will be restricted to 800 mm (as per shallow pit definition) and the slurry removed off-site frequently to reduce odour and ammonia emissions as discussed further in the odour and ammonia sections below.

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 110-120 kg. All rooms will be washed and rested after each batch of pigs is removed.

The houses are 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 feed, water, veterinary medicines and energy (electricity, diesel for back-up generator, and kerosene for hot water heating system). The main by-product of pig rearing is organic fertiliser² (slurry including soiled/wash water). These are discussed in further detail later in this report.

3. Planning Status

² Any fertiliser other than that manufactured by industrial process, and includes livestock manure, dungstead manure, farmyard manure, slurry, soiled water, silage effluent, non-farm organic substances such as sewage sludge, industrial by-products and residues from fish farms.

A number of planning applications have been made by the licensee for the area within the installation boundary. However, no new planning application have been made since the previous licence (Ref P0975-01) was granted in 2017.

The last planning permission (Ref: 11/2091), granted on 23 July 2012, permits the development to which this licence review relates, i.e. the extension of the pig rearing facilities to accommodate the extra 3,318 production pigs. This expansion work has been completed. Details of the planning permissions have been provided with the application. An Environmental Impact Statement (EIS) was submitted with the previous licence application and the Agency carried out an assessment for the purposes of EIA.

The licensee was required by the Agency to update the EIS 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 licensee submitted an EIAR addendum report to supplement the EIS. It is considered that the EIS submitted with the licence application and the EIAR addendum, along with the licence application and the further information received, contains adequate information to inform 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 those proposed in Table 1.1 above. This is the capacity that is specified in the application, in the EIS and EIAR addendum report submitted in support of the application, and in the planning permissions granted for the installation.

4. Environmental Impact Assessment (EIA) Screening

In accordance with Section 83(2A) of the EPA Act 1992 as amended, 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 activity is 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, it has been determined that the activity constitutes a project to which the EIA Directive applies and is likely to give rise to significant effects on the environment by virtue of its nature, size and location.

The changes to the activity exceed the following threshold in Part 1 of Schedule 5 of the Planning and Development Regulations 2001, as amended:

- 17(b) Installations for the intensive rearing of pigs with more than 3,000 places for production pigs (over 30 kilograms).

An EIS was submitted to the Agency as part of the application on 11 June 2018. The EIAR was requested by the Agency on the 12 December 2019 and the licensee subsequently submitted an EIAR addendum report to supplement the EIS in support

of this IED licence review application on 31 March 2021. 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 incorporated into the RD to address BAT Conclusions 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. The nearest third-party dwellings potentially affected by fugitive emissions are detailed in Table 6.1 below.

Table 6.1: Nearest third-party residential dwellings

Distance from Site (and number of dwellings)	Direction from Site
400-455 m (2)	south-east
445 m (1)	south
470 m (1)	south-west

6.1.3 Dust

Dust may arise from the expulsion of warm air from ventilation systems on-site, vehicle movements, removal of organic fertiliser, filling of meal storage bins and the loading and unloading of animals during periods of dry weather. Pigs are to be housed on fully slatted floors, therefore negating 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 were received by the Agency, HSE, or by the licensee in relation to dust from this site.

The licensee has stated that good housekeeping at the installation will minimise dust from the installation.

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

- That dust 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 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 nearest third-party residential dwellings are given in Table 6.1 above. The land in the immediate vicinity of the installation is farmland. One odour complaint was received by the Agency in 2017, from a group of nearby residents. The Agency required the licensee to undertake consultations with the residents. The licensee confirmed consultations took place, additional odour mitigation measures were put in place and no further complaints were received.

No submissions relating to odour have been received by the Agency for this licence review. Odour has not been identified as an issue by the Office of Environmental Enforcement (OEE) during any site visits.

The licensee has provided an odour impact assessment for the proposed activity based on the EPA 'Instruction note and screening tool for the assessment of odour emissions from Intensive Agriculture pig installations (2022)'³. The assessment concludes that the calculated concentration at the closest sensitive receptor (400 m) for this installation's dispersion characteristics is below the required benchmark of 5.0 OU_E/m³. The screening tool indicated that at approximately 401 m from the centre of the farm, the concentrations would be 2.21 OU_E/m³.

The implementation of BAT on-site will reduce odour emissions. Conditions in relation to BAT 3, 12, 13 and 30 are included in the RD. The licensee has provided an odour management plan which addresses the sources of odour from the existing and expanded installation, and mitigation measures to minimise odours.

The licensee has stated that the design of the buildings, adherence to good management practices, and implementation of the required mitigation measures will minimise odour from the installation. The animal houses will be cleaned at the end of each batch. Organic fertiliser is stored under the slatted animal houses. The slurry is removed from animal houses A, B, B1, C, D, E, F, G and H directly by vacuum to a slurry tanker and is then taken off-site immediately by the licensee to be delivered to recipient farmers or to nearby tillage lands owned/farmed by the director of Clondrisse

³ [Licensing & Permitting: Industrial Emission Licensing \(IED\) Publications | Environmental Protection Agency \(epa.ie\)](#)

Pig Farm Limited. Frequent slurry removal will be implemented for animal houses G1, G2, G3 and G4 with the slurry being removed frequently by vacuum tanker either for immediate use on adjoining tillage lands (owned/farmed by the director of Clondrisse Pig Farm Limited or to an off-site slurry storage tank where it will be stored until such time as it is utilised as an organic fertiliser. Houses will be stocked at optimum levels and adequately ventilated, and agitation of the slurry is to be minimised, to minimise odour emissions.

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 RD limits the crude protein content of the animal feed (Condition 6 and Schedule C).
- To use a combination of the techniques listed in BAT 13 to prevent/reduce odour emissions/impact from the site (Condition 6).
- To use a combination of the techniques listed in BAT 30 to reduce ammonia emissions to air from each pig house (Condition 6).
- That the licensee carries out an odour survey of the site operations in response to any odour complaint or as required by the Agency (Condition 6).
- That the licensee prepares, maintains and implements an odour management plan, and incorporates it into the Environment Management System (EMS) for the installation, as per BAT 12 (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 be stored on-site in covered leak-proof containers and transported off-site at least fortnightly in covered, leak proof containers (Condition 8).

6.1.5 Ammonia

The report "*Ireland's Informative Inventory Report 2022*⁴" (EPA, 2022) identifies agriculture as the primary contributor (99.4%) of Irish ammonia emissions in 2020, emitting a total of 123.41 kilotonnes (kt) of ammonia in that year. According to that report, ammonia emissions from the pig sector in 2020 accounted for 6.3 kt. The Department of Agriculture, Food and the Marine (DAFM) has published a '*Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture*⁵', as required by the National Emission Ceiling Directive (NECD).

⁴https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/Ireland-IIR-2022_mergev2.pdf

⁵ <https://www.gov.ie/en/publication/9a6c6-code-of-good-agricultural-practice-for-reducing-ammonia-emissions-from-agriculture/>

This installation will emit approximately 7.3 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 Agriculture⁶) 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 Agency has issued a guidance document to assist applicants and licensees in undertaking an assessment of the impacts of ammonia and nitrogen titled "Assessment of the impact of ammonia and nitrogen on Natura 2000 sites from intensive agriculture installations" (EPA, May 2021⁷).

The licensee submitted a full site-specific air dispersion 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 AG4⁸.

The specific running components of the ventilation system are conditioned in Schedule C of the RD. These specifications can be varied, subject to approval of the Agency, based on further air dispersion modelling.

Conditions in relation to BAT 3 and 30 are included in the RD including the requirement for low protein feed (with a maximum crude protein limit specified for all pig types except weaners) and the requirement for frequent slurry removal from animal houses G1, G2, G3 and G4. Animal houses A, B, B1, C, D, E, F, G and H, which were in operation prior to the CID 2017/302 coming into effect, will operate with deep pits combined with nutritional management techniques.

These techniques were incorporated into the ammonia modelling provided by the licensee and will significantly reduce ammonia emissions. The Agency has set the emission limits in Schedule B.1 in accordance with those set out in the CID. The ELVs applied are based on those modelled in the impact assessment and are towards the middle to upper range set out in the CID.

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 and conditioned in the RD.

The licensee has stated that the design of the buildings, adherence to good management practices, and implementation of the required mitigation measures will

⁶ SCAIL Agriculture is a web-based screening tool available at <http://www.scail.ceh.ac.uk/>

⁷ <https://www.epa.ie/publications/licensing--permitting/industrial/ied/Assessment-of-Impact-of--Ammonia-and-Nitrogen-on-Natura-sites-from-Intensive-Agriculture-Installations.pdf>

⁸ 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>

reduce ammonia emissions from the installation. The RD specifies the following additional ammonia minimisation conditions:

- To maintain and implement an Ammonia Management Programme 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. The RD limits the crude protein content of the animal feed (Condition 6 and Schedule C).
- To use the following BAT 30 techniques to reduce ammonia emissions to air from each house for pigs:
 - for animal houses A, B, B1, C, D, E, F, G and H; a deep pit with nutritional management techniques, as listed in BAT 30(a.0) (Condition 6); and
 - for animal houses G1, G2, G3 and G4; implementation of frequent slurry removal, as listed in BAT 30(a.1) (Conditions 6).
- To monitor ammonia emissions in accordance with BAT 25 (Schedule C).

The RD will permit the licensee to vary some aspect of operations (e.g. animal feed) on-site as long as there is no net increase in ammonia emissions from the activity.

The potential for ammonia emissions from the landspreading of organic fertiliser 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.

The RD requires the licensee to do the following:

- To use a combination of the techniques listed in BAT 18 to prevent emissions to soil and water from slurry collection, piping and from a store (Condition 3).
- To have a leak detection system in place for all storage tanks, container and drum storage areas that contain liquid material other than water (Condition 3).

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 provide and maintain a wastewater treatment system 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: Domestic Waste Water Treatment Systems (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 three discharge points (SW1, SW2 and SW3) near the north-western, south-eastern and northern boundaries of the installation. Table 6.2 below gives details on the installation's storm water discharges to waters/ground, 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
SW1	Visual (weekly); COD/BOD (quarterly)	Silt trap	Roofs and clean yards	Soakaway
SW2	Visual (weekly); COD/BOD (quarterly)	Silt trap	Roofs and clean yards	Soakaway
SW3	Visual (weekly); COD/BOD (quarterly)	Silt trap	Roofs and clean yards	Pond

The installation is located within the Athboy Ground Waterbody (IE_EA_G_001), which currently has a WFD status of good.

Storm water may discharge indirectly from the pond to nearby field drains which flow generally east to the River Deel located approximately 1.2 km from the installation. The River Deel flows into the River Boyne approximately 11.5km from the installation. The River Deel currently has a WFD status of good (waterbody code: IE_EA_07D010300). There are no identified drinking water abstraction points on the River Deel.

The storm water discharged through SW1, SW2 and SW3 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. Most movement of animals is via covered slatted passages and loading directly onto trailers. The areas around the animal houses, where the loading and unloading occurs, are 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 slurry storage tanks under the animal houses. This approach separates clean and soiled waters, minimises the quantity of soiled water produced and keeps yard areas clean.

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 a storm water/rainwater collection and drainage system for all animal houses on-site be provided and maintained (Condition 6).
- That inspection chambers at the outlets of the storm water drainage system be provided and maintained within three months of the date of grant of the licence for the existing discharge points (Condition 3).
- That silt traps be provided and maintained at the installation to ensure that all storm water discharges from the paved areas of the installation, pass through a silt trap in advance of discharge (Condition 6).
- That a silt trap be provided and maintained on all existing storm water discharge points within three months of the date of grant of the licence (Condition 6).
- That the storm water discharges are visually inspected weekly and monitored for Chemical Oxygen Demand (COD) or Biological Oxygen Demand (BOD) quarterly, in accordance with Schedule C.2.3 *Monitoring of Storm Water Discharges*.

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 maintained. 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 400 m away.

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

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 comprise 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 employs 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	60
General Waste	2
Veterinary Waste	0.1
Fluorescent Light Tubes	<0.1

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 are and will be stored temporarily on-site in covered skips, before being transported to an appropriately licensed installation.

A fly and rodent 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	8,112 m ³
Number of storage tanks/stores on-site	15
Total storage capacity on-site (ex. freeboard)	7,918 m ³
No. weeks storage on-site	50
End use off-site	Landspreading.

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

Soiled/wash water is generated by the activity during weekly routine washing and at the end of each batch of pigs. The farm operates an all-in all-out batch production system. Once the pigs are removed, the pens are soaked to reduce water and energy usage, followed by high power washing of the animal houses and a drying/resting period of up to 7 days where the houses remain unoccupied, before the houses are

restocked. The resulting soiled/wash water is washed through the slatted floors into the slurry tanks below, adding to the volume of organic fertiliser produced. 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 Regulations⁹. 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) Regulations¹⁰ 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 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 IED 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 manure 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.

As outlined in the 'ammonia' section earlier in this report, the licensee has stated they will comply with the requirements of BAT 30 (to reduce ammonia emissions to air from each pig house) using different techniques depending on the animal house (Deep pit with nutritional management techniques for houses A, B, B1, C, D, E, F, G and H. Frequent slurry removal for animal houses G1, G2, G3 and G4).

The slurry is removed from animal houses A, B, B1, C, D, E, F, G and H directly by vacuum to a slurry tanker and is then taken off-site immediately by the licensee to be delivered to recipient farmers or to nearby tillage lands owned/farmed by the director of Clondrisse Pig Farm Limited.

⁹ S.I. No. 113 of 2022 European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022.

¹⁰ 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.

Frequent slurry removal will be implemented for animal houses G1, G2, G3 and G4 with the slurry being removed frequently by vacuum tanker either for immediate use on adjoining tillage lands (owned/farmed by the director of Clondrisse Pig Farm Limited or to an off-site slurry storage tank where it will be stored until such time as it is utilised as an organic fertiliser.

In addition, the licensee has identified recipient farmers who are available and seeking to accept organic fertiliser from the installation as fertiliser for their farms. The licensee has calculated that these farms have a requirement for up to 16,786 m³ organic fertiliser per year based on the nitrogen balance for the farms. This is more than double the estimated volume of organic fertiliser produced on-site and excludes the 900 acres of tillage lands owned/farmed by the director of Clondrisse Pig Farm Limited.

In line with the recommendations in the associated BREF document, the RD requires the licensee to remove slurry from the tanks under houses G1, G2, G3 and G4 at least fortnightly unless the slurry levels are less than 500 mm. The requirement for frequent slurry removal, a maximum allowable slurry depth of 800 mm and level indicator alarms set for 500 mm and 750 mm will apply to each of the individual chambers of the slurry tanks under houses G1, G2, G3 and G4.

The Nitrates Regulations (Article 10(1)) and Condition 3 of the RD require that a minimum of 26-weeks' storage capacity for organic fertiliser is provided. The under-house slurry storage tanks have an estimated total capacity of 7,918 m³ (net of freeboard) or 50 weeks which is sufficient to meet the 26-week storage capacity requirement in the Nitrates Regulations. This is the storage capacity with the slurry depth restricted to a maximum of 800 mm in the slurry tanks under houses G1, G2, G3 and G4.

The quantity of nitrogen and phosphorus generated by the activity at the proposed licence capacity of 625 sows in an integrated unit is approximately 54,375 kg-N per annum and 10,625 kg-P per annum, 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 organic fertiliser:

- To monitor the total nitrogen and phosphorus excreted in manure annually, in accordance with BAT 24 (Condition 6).
- Implementation of frequent slurry removal in animal houses G1, G2, G3 and G4 (Condition 6).
- That all storage tanks are integrity assessed before utilisation for new tanks and at least once every three years thereafter for all tanks on-site (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 slurry storage tanks and 300 mm from the top of uncovered slurry 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 at the proposed 625-sow integrated unit are given below.

Table 9.1: Estimated resource usage

Resource	Quantity per annum
Electricity	350 MWh
Kerosene	20 m ³
Water (on-site well)	10,000 m ³
Water Abstraction registration required:	Yes
Feed	5,200 tonnes
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 primary source of water for the activity is an on-site well. An off-site well and a public supply is available as back-up. The RD requires the licensee to carry out monitoring of the well annually.

The installation is located on the Athboy groundwater body (IE_EA_G_001), a moderately productive bedrock only in local zones, 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 RD requires the licensee to register their abstraction.

The RD specifies that the licensee undertakes 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

Potential for an accident or hazardous/emergency situation to arise from	- Surface water and/or ground/groundwater contamination during washing and animal removal.
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activities at the installation	<ul style="list-style-type: none"> - 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 emissions of noise, dust or odour such as to cause nuisance outside the site boundary.
Preventative/Mitigation measures to reduce the likelihood of accidents and mitigate the effects of the consequences of an accident at the installation	<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 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 slurry storage tanks under the animal houses.
Additional measures provided for in the RD	<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). - The provision of more than 26-weeks organic fertiliser storage capacity (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.

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 Guidance¹¹.

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 22 February 2017, P0975-01. 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 Environmental Protection Agency Act 1992, as amended, 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 that the licensee can be deemed a Fit and Proper Person for the purpose of this review.

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.

¹¹ European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions.

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).

Table 13.1: Submissions summary

Submissions			
1.	Name & Position Mr Peter Sweetman	Organisation: Peter Sweetman & Associates	Date received: 17 July 2018
	<p>Issues raised:</p> <p><i>The submission provides a copy of judgment of the 12 April 2018 by the CJEU, in relation to Case C-323/17 and quotes the ruling from that judgment as follows:</i></p> <ul style="list-style-type: none"> <i>"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, 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>Agency Response:</p> <p>In the Appropriate Assessment section of this report, I have addressed the potential for significant effects of the project on European sites and have detailed the results of an Appropriate Assessment conducted as part of the licence review.</p> <p>There are 14 European sites within 20 km of the installation. Any European sites more than 20 km distance from the installation falls well outside of the potential zone of influence of the activity, so it was not necessary to consider them further.</p> <p>This assessment determined that the activity is not directly connected with or necessary to the management of any European site and through setting out of a set of reasons, determined that an Appropriate Assessment of the activity is required, and for this reason required the licensee to submit a NIS.</p> <p>Qualifying interests and conservation objectives of each individual site were examined as part of that assessment.</p> <p>The Appropriate Assessment section details the results of the appropriate assessment conducted as part of the licence review.</p>		
2.	Name & Position Mr Connor Rooney	Organisation: Department of Culture, Heritage, and the Gaeltacht	Date received: 23 July 2018
	<p>Issues raised:</p>		

Submissions			
	<p><i>The submission outlines the nature conservation recommendations of the Department of Culture, Heritage, and the Gaeltacht which are summarised below:</i></p> <p><i>The proposed development site is located close to the River Deel which is within the River Boyne and River Blackwater Special Area of Conservation (SAC) (site code: 002299).</i></p> <p><i>The conservation objectives for the River Boyne and River Blackwater SAC and the River Boyne and River Blackwater SPA are outlined.</i></p> <p><i>The Department is of the view that the proposed development:</i></p> <ul style="list-style-type: none"> <i>Has a potential to cause an adverse effect on a significant area of the habitats and species populations of lamprey, salmon and otter which are listed under the Annexes of the EU Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora); and</i> <i>Has a potential to cause an adverse effect on a significant area of the habitats and species populations of kingfisher which are listed under Annex I of the EU Birds Directive (Council Directive 79/409/EEC). 0</i> <p><i>This affect would be caused by siltation resulting from surface water runoff from the proposed site during construction works.</i></p> <p>Agency Response:</p> <p>The points in the submission are noted and addressed in the Appropriate Assessment section below.</p>		
3.	<p>Name & Position</p> <p>Paul McGuinness, Principal Environmental Health Officer, Environmental Health Service</p>	<p>Organisation:</p> <p>Health Service Executive (HSE) Dublin Mid-Leinster</p>	<p>Date received:</p> <p>01 August 2018</p>
	<p>Issues raised:</p> <p><i>The submission makes a number of observations in relation to the licence application. They highlighted that the EIS included in the licence application is dated November 2011, and that whilst their office has not received any complaints directly in respect of this installation, a number of third-party submissions were observed with regard to the previously granted IED Licence (P0975-01).</i></p> <p><i>The topics raised include soils, geology and hydrogeology; odour; noise; and environment management techniques.</i></p> <p><i>Specific recommendations and observations highlighted by the HSE include:</i></p> <ul style="list-style-type: none"> <i>A comprehensive assessment of the potential effects of the development and associated activities on groundwater has not been detailed. They suggest a more detailed survey of water extraction points be presented in an effort to identify the potential risk to public</i> 		

Submissions			
	<p><i>health from polluted groundwater which is abstracted for consumption presently or in future;</i></p> <ul style="list-style-type: none"> <i>Not all storm water discharge points may have been outlined in the application. All surface inspection and distribution points should be clearly identified in supporting documentation for the application;</i> <i>There were no obvious odour issues noted during their site visit;</i> <i>A more thorough assessment of the fugitive emissions which may emanate from this pig rearing facility should be detailed and their off-site impacts (if any) discussed;</i> <i>There were no obvious noise issues noted during their site visit;</i> <i>Due regard should be given to noise and some quantification (where appropriate) for noise emissions and mitigation measures (if applicable) be described as well as potential noise problems at defined Noise Sensitive Locations. Distances to noise sources, peak noise events, noise duration and times should also be discussed;</i> <i>There is limited information in the application in relation to vermin control, accident prevention measures, and house cleaning; and</i> <i>It was noted during the site visit that cleaning chemicals and associated equipment were stored in an unbunded store room and that two oil tanks appeared unbunded.</i> <p>Agency Response:</p> <p>The main issues raised in the submission are noted and addressed in the relevant sections of the Inspector's Report.</p> <p>The licensee provided additional information in relation to the storm water drainage system and discharge points. Details regarding the storm water drainage system are detailed in the 'Storm water discharges' section of this report and the RD includes monitoring of same.</p> <p>Details regarding water use are covered in the 'Energy Efficiency and Resource Use' section of this report. Emissions to ground and ground water are covered in the 'Emissions to ground/groundwater' section of this report.</p> <p>Odour, noise and accident prevention are addressed in the relevant sections of this report.</p> <p>Pest control is addressed in the 'Waste Generation' section of this report.</p> <p>House cleaning is addressed in the 'Storm water discharges' and 'Organic Fertiliser' sections of this report.</p> <p>Storage of potentially polluting liquids is dealt with in the 'Prevention of Accidents' and 'Environmental Impact Assessment' sections of this report.</p>		
4.	Name & Position	Organisation:	Date received:
	Mr Peter Sweetman	Peter Sweetman & Associates	28 January 2019
	Issues raised:		

Submissions			
	<p><i>The submission refers to CJEU case references C-258/11, C-164/17, C-323/17, C-461/17 and joined cases C-293/17 and C-294/17, and states the following:</i></p> <p><i>"Any licence granted by the EPA for the following applications must comply with the Habitats and Birds Directives and must comply with the following judgements of the CJEU."</i></p> <p>Agency response:</p> <p>The requirements of the EIA Directive (2011/92/EU as amended by 2014/52/EU) and the Habitats Directive (92/43/EC) and Birds Directive (2009/147/EC) are considered as part of the Environmental Impact Assessment and Appropriate Assessment sections of this report. In addition, the judgments of the Court of Justice of the European Union form part of this assessment, as appropriate.</p> <p>Judgment reference numbers C-293/17 and C-294/17 relate to habitat protection and the impacts from nitrogen deposition. The legislation governing ammonia emissions from livestock installations across Member States varies and is not directly comparable. The Judgment references C-293/17 and C-294/17 relate to the system in The Netherlands, where a new approach was adopted in 2015 in the form of a 'programmatic' (or integrated) approach to nitrogen/ammonia (Programmatistische Aanpak Stikstof - PAS). This approach deals with the assessment requirements of the Habitats Directive Article 6(3) at a 'programmatic' level considering general reduction trends as well as (planned) management and restoration measures with the purpose to establish a "room for development" for subsequent permits. The PAS has been successfully challenged in the courts (C-293/17 & C-294/17) on the grounds that it is not in accordance with the Habitats Directive. This approach is not used in Ireland. See also the section on appropriate assessment later in this report.</p>		
5.	Name & Position:	Organisation:	Date received:
	Mr Peter Sweetman	Peter Sweetman and on behalf of Wild Ireland Defense CLG	13 October 2020

Submissions			
<p>Issues raised:</p> <p><i>In the submission Mr. Sweetman states that "it is not possible to perform an Appropriate Assessment Screening to the standard required by Finlay J in Kelly -v- An Bord Pleanála [2014] IEHC 400 (25 July 2014). Without the full information as to the method and place of disposal of the waste.</i></p> <p><i>It is our submission that the EPA Acts as interpreted by the EPA are not in compliance with the Environmental Impact Assessment Directive Article 11."</i></p> <p>Agency response:</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 European Site. An Appropriate Assessment Screening Determination was issued on 19 May 2021, which included specific reasons for determining that a Stage 2 Appropriate Assessment was required. A NIS was submitted.</p> <p>The Appropriate Assessment section of this report details the results of the appropriate assessment screening 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.</p> <p>There is sufficient information to conclude beyond reasonable scientific doubt that the disposal of waste arising from the proposed project will not have any adverse effects on the integrity of any European site.</p> <p>I am satisfied that the EPA's interpretation of the EPA Act as amended is in accordance with Article 11 of the EIA Directive, and members of the public have access to a review procedure that is impartial, fair, equitable, timely and not prohibitively expensive. Information on the EPA's licensing process, including access to administrative and judicial review procedures, is available to the public on the EPA's website, at https://www.epa.ie/our-services/licensing/industrial/industrial-emissions-licensing-ied/industrial-emissions-licensing-process-explained/</p> <p>As part of this licence assessment process, including EIA and AA, regard has been given to all submissions received.</p>			
6.	<p>Name & Position</p> <p>Mr Peter Sweetman</p>	<p>Organisation:</p> <p>Mr Peter Sweetman</p>	<p>Date received:</p> <p>19 May 2021</p>
<p>Issues raised:</p> <p><i>In the submission Mr. Sweetman states that "In accordance with Regulation 42(8)(a) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, the EPA has made a determination that an Appropriate Assessment is required. This determination is based on where the</i></p>			

Submissions			
	<p><i>project, individually or in combination with other plans or projects is likely or is not likely to have a significant effect on a European site(s).</i></p> <p><i>THE CORRECT ONE IS TO BE FOUND IN cjeu 258/11 AND KELLY V ABP"</i></p> <p>Agency Response:</p> <p>The requirements of the EIA Directive (2011/92/EU as amended by 2014/52/EU) and the Habitats Directive (92/43/EC) and Birds Directive (2009/147/EC) are considered as part of the Environmental Impact Assessment and Appropriate Assessment sections of this report. In addition, the judgments of the Court of Justice of the European Union form part of this assessment, as appropriate.</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 European Site. An Appropriate Assessment Screening Determination was issued on 19 May 2021, which included specific reasons for determining that a Stage 2 Appropriate Assessment was required. A NIS was submitted.</p> <p>The Appropriate Assessment section of this report details the results of the appropriate assessment screening conducted as part of the licence review.</p>		
7.	<p>Name & Position:</p> <p>Ms. Trish Smullen</p>	<p>Organisation:</p> <p>Geological Survey Ireland, Department of Environment, Climate and Communications</p>	<p>Date received:</p> <p>01 June 2021</p>
	<p>Issues raised:</p> <p><i>Geological Survey Ireland would encourage use of and reference to their datasets. They attached a list of their publicly available datasets that may be useful to the environmental assessment and planning process.</i></p> <p><i>Their records show that there are no County Geological Sites (CGSs) in the vicinity of the farm.</i></p> <p><i>The Groundwater Data Viewer indicates a 'Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones'. The Groundwater Vulnerability map indicates the area covered is classified as Moderate to High Vulnerability.</i></p> <p>Agency Response:</p> <p>The main issues raised in the submission are noted and addressed in the relevant sections of the Inspector's Report.</p> <p>As per the 'Emissions to ground/groundwater' section of this report, there are no direct process emissions to ground/groundwater, and therefore no</p>		

Submissions			
	<p>chemical or microbiological threats to groundwater quality. Groundwater monitoring of the on-site well is required in the RD.</p> <p>The storm water discharged from the installation should be uncontaminated and, therefore, should have no qualitative impact on receiving waters. The RD provides for protection of surface waters and separation of soiled water and storm water.</p>		
8.	Name & Position Mr. Peter Sweetman	Organisation: Peter Sweetman and Wild Ireland Defense CLG	Date received: 27 October 2022
	<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>		
9.	Name & Position: Laura Broxson	Organisation: National Animal Rights Association	Date received: 17 December 2022
	<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> <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> 		

Submissions	
	<p><i>The submission goes on to list by Reg. No., all the pig and poultry licence applications upon which the submission is to be made.</i></p> <p>Agency response:</p> <p>The principle of whether or not it is ethical to consume meat is beyond the remit of the EPA.</p> <p>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.</p> <p>All 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.</p>

14. Consultations

14.1 Cross Office Consultation

The Environmental Licensing Programme (ELP) 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 in relation to this site. In general, OEE have no significant concerns regarding the proposed changes to the licensable activity. A remote compliance assessment by OEE in 06 May 2021 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, P0975-01.

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 River Boyne and River Blackwater SAC, River Boyne and River Blackwater SPA, Mount Hevey Bog SAC, Wooddown Bog SAC, Lough Derravarragh SPA, Lough Lene SAC, Lough Ennell SAC, Scragh Bog SAC, Lough Ennell SPA, Lough Owel SPA, Lough Owel SAC, Lough Bane and Lough Glass SAC, White Lough, Ben Loughs and Lough Doo SAC and Girley (Drewstown) Bog SAC.

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, and for this reason determined to require the licensee to submit a Natura Impact Statement.

- Air emissions have been modelled by the Agency using a screen model (SCAIL Agriculture). The model results indicated that the potential for adverse impact of emissions to air and their consequential potential impact on sensitive receptors cannot be ruled out due to elevated ammonia levels and nitrogen deposition at European sites.
- There are potential surface water pathways connecting the installation to European sites, therefore, there is potential for adverse impact of emissions to water and their consequential potential impact on sensitive receptors cannot be ruled out at European sites.

A NIS was received with the application. A revised NIS was received on 08 June 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 activity, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular River Boyne and River Blackwater SAC, River Boyne and River Blackwater SPA, Mount Hevey Bog SAC, Wooddown Bog SAC, Lough Derravarragh SPA, Lough Lene SAC, Lough Ennell SAC, Scragh Bog SAC, Lough Ennell SPA, Lough Owel SPA, Lough Owel SAC, Lough Bane and Lough Glass SAC, White Lough, Ben Loughs and Lough Doo SAC and Girley (Drewstown) Bog SAC, 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 1.17 km away.
- The storm water run-off from the roofs and paved areas will be directed into two soakaways and a pond. There will be no other direct discharge to surface waters or groundwater within the installation boundary.
- There is no surface water pathway within 4.7 km of the installation connecting the installation to any European site.
- The proposed storm water collection system includes a silt trap on all storm water lines draining paved areas prior to discharge of the storm water from the site.
- The risk of surface water or groundwater contamination because of accidental emissions during washing activities, or from spillage from the slurry storage tanks, is minimal, given the distance between the activity and a European site and given that there is no surface water pathway within 4.7 km connecting the installation with a European Site.

- 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.
- Organic fertiliser (pig slurry) is and will be used as a fertiliser on 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 used.
- 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 1.17 km east of the installation boundary (River Boyne and River Blackwater 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 two other licensed intensive pig rearing installations within a 5 km radius of the installation. These installations are each required to operate in accordance with the conditions of an EPA licence.
- 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.
- The licensee submitted a full site-specific air dispersion model as part of the completion of a NIS. The modelling concluded that process emissions from the proposed pig numbers at the installation will not contribute significantly to ammonia levels at European sites. The specific running components of the ventilation system will be controlled and conditioned in the RD as is the requirement for low protein feed (for all pig types except weaners) and frequent slurry removal from animal houses G1, G2, G3 and G4.

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 River Boyne and River Blackwater SAC, River Boyne and River Blackwater SPA, Mount Hevey Bog SAC, Wooddown Bog SAC, Lough Derravarragh SPA, Lough Lene SAC, Lough Ennell SAC, Scragh Bog SAC, Lough Ennell SPA, Lough Owel SPA, Lough Owel SAC, Lough Bane and Lough Glass SAC, White Lough, Ben Loughs and Lough Doo SAC and Girley (Drewstown) Bog SAC.

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 Statement (EIS). An EIAR was requested by the Agency on the 12 December 2019 and the licensee

subsequently submitted an EIAR addendum report to supplement the EIS in support of this IED licence application on 31 March 2021.

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: P0975-01, information received through consultation, the documents associated with the assessments carried out by Westmeath County Council 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. 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 Westmeath County Council and the Agency under the relevant section of the EPA Act 1992, as amended.

Westmeath 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 3 of the EIAR. As the installation has been located on its current site since the 1970s, the consideration of an alternative location was deemed not appropriate. The process chosen offers the licensee the best fit between proposed and existing enterprises. 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 4.3.1 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 exceed 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 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 4.3.2 of the EIAR. The EIAR describes the habitats and species at and in the vicinity of the installation. The site of the application is typical of the agricultural nature of the surrounding land. The licensee also submitted a NIS (Refer to the Appropriate Assessment section of this report). There are 14 Natura 2000 designated sites within 20 km of the application site, the closest being 1.17 km away from the installation.

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 monitored and controlled by DAFM and the Local Authorities.

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 4.3.3 of the EIAR. The installation is an existing piggery in an agricultural area. Land use in the surrounding area is mostly improved agricultural grassland.

The potential direct and indirect effects on land and soil are associated with emissions to air, emissions to water, and accidental emissions. Should emissions exceed 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;
- Storm Water Discharges;
- 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 monitored and controlled 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;
- Storm Water Discharges;

- 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 4.3.5 of the EIAR. The installation is located on the Athboy groundwater body (IE_EA_G_001), a moderately productive bedrock only in local zones, which has a WFD status of 'Good' and a vulnerability of 'High'.

The site lies within the Boyne Hydrometric Area and Catchment, and the Deel Sub-Catchment and Sub-Basin. Storm water from the roofs and yard areas discharge to two soakaways and a pond via silt traps. Storm water may discharge indirectly from the pond to nearby field drains which flow generally east to the River Deel located approximately 1.2 km from the installation.

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 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 of this report and in light of the conditions in the RD.

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 two other intensive agriculture EPA licensed installations within 5 km of the installation and no other significant industrial developments. These installations are each required to operate in accordance with the conditions of an EPA licence and none have emissions to surface water. Due to the nature of those activities and the controls in place, it is considered that there will be no significant cumulative effect from storm water discharges from the activity and from other activities/developments in the area.

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 Ireland's 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.

The National River Basin Management Plan (2018-2021) was published in April 2018. 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 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 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 Chapters 4.1.3, 4.3.1 and 4.4 of the EIAR. The installation is located in a rural, predominantly agricultural area. The nearest third-party residential dwelling is ~400 m away. 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 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 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 4.3.6 of the EIAR. The potential direct and indirect effects on air are associated with emissions to air of ammonia, dust and odour from the animal 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.

As stated previously, the Agency has issued a guidance document to assist applicants and licensees 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, May 2021).

In relation to cumulative effects, it is noted that there are two EPA-licensed intensive agriculture installations within 5 km of the installation. Emissions to air from these activities have been considered during the licensing process for each of these installations and as they are required to comply with the conditions of their licences, these installations should not have any significant emissions of odour, dust or ammonia under normal operations. In this assessment, it has already been determined that air emissions from the installation will not significantly affect local air quality.

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 2022' (EPA 2022), which contains the most recent data, ammonia emissions in 2020 from the pig sector were 6.3 kt (or 5.1% of Ireland's National emissions). This installation will emit 7.3 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 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 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 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 4.3.7 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 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.

In December 2022, the Irish Government released the 'Climate Action Plan, 2023', under the 'Climate Action and Low Carbon Development (Amendment) Act 2021', which will support Ireland's transition to Net Zero and achieve a climate neutral economy by no later than 2050.

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 air and 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 4.3.10 of the EIAR addresses Material Assets, and include information on 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 be significant. 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 sections 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 4.3.9 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 is a ballaun stone and ringfort approximately 280 m southeast 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 Chapters 4.3.4 and 4.3.8 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.

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 4.7 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 4.4 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 Directive¹² 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 EIAR and supplementary information provided by the licensee, and the submissions from third parties in the course of the application and when supplemented by my assessment as contained in this report, 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:

¹² 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.

- Emissions to air will be mitigated through: operation of abatement (including the use of low protein feed / frequent slurry removal to an external store); 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 night-time 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 €3,153, 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 1992, as amended. 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 Acts 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 1992, as amended, 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 Environmental Protection Agency Act 1992, as amended and has regard to submissions made.

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

Signed



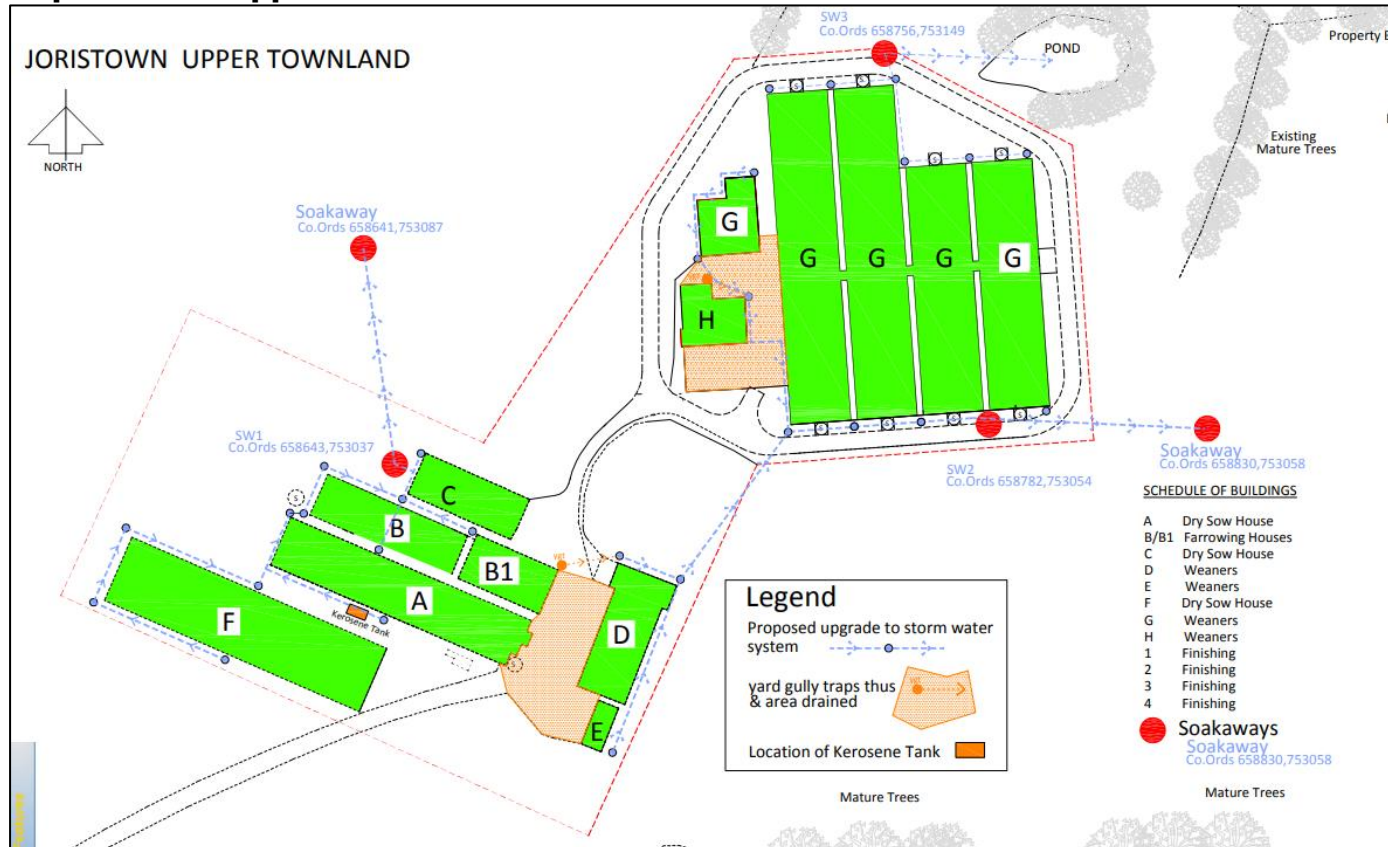
Linda Cahill, ELP Inspector

Procedural Note

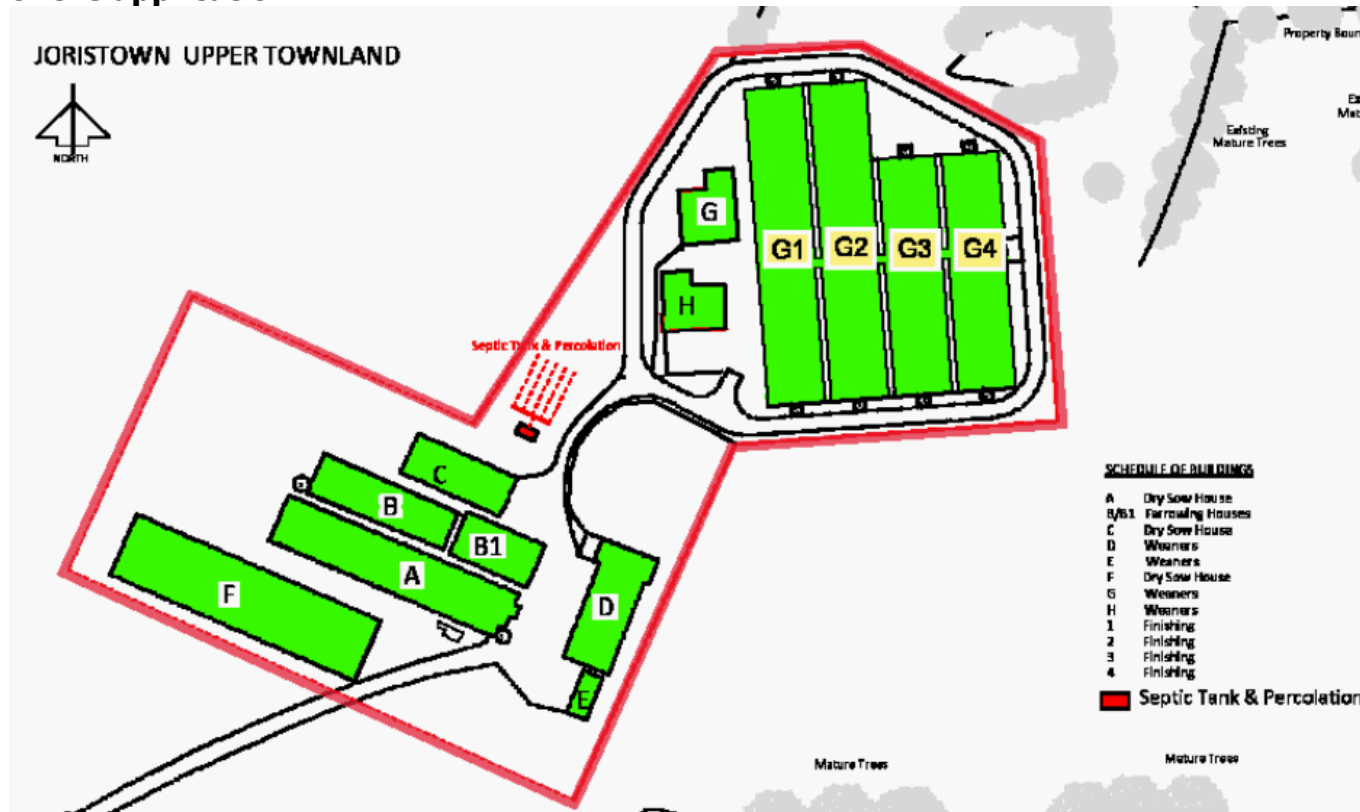
In the event that no objections are received to the Proposed Determination on the application, a licence will be granted in accordance with Section 87(4) of the Environmental Protection Agency Acts 1992 as amended, as soon as may be after the expiration of the appropriate period.

Appendices

Appendix 1(a): Excerpt from the site plan titled "Attachment E.2.2", number CPF3_R1, received on 11 November 2022 as part of the application.



Appendix 1(b): Excerpt from the site plan titled "Attachment E.3.2", number CPF4, received on 08 June 2022 as part of the application.



Appendix 2: AA table

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

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
002299	River Boyne and River Blackwater SAC	Habitats 7230 Alkaline fens 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) Species 1099 River Lamprey (<i>Lampetra fluviatilis</i>) 1106 Salmon (<i>Salmo salar</i>) 1355 Otter (<i>Lutra lutra</i>)	NPWS (2021) Conservation Objectives: River Boyne and River Blackwater SAC 002299. Version 1.0. National parks and Wildlife Service, Department of Housing, Local Government and Heritage.	<p><i>The site is located 1.17 km to the east of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the hydrological connectivity of the project site with the European site being in excess of 4.7 km.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
004232	River Boyne and River Blackwater SPA	Birds A229 Kingfisher (<i>Alcedo atthis</i>)	NPWS (2022) Conservation Objectives: River Boyne and River Blackwater SPA (004232). First Order Site-specific Conservation Objectives Version	<p><i>The site is located 1.19 km to the east of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest species for this European Site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the hydrological</i></p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
			1.0. Department of Housing, Local Government and Heritage.	<p>connectivity of the project site with the European site being in excess of 4.7 km.</p> <p>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</p>
002342	Mount Hevey Bog SAC	Habitats 7110 Active raised bogs 7120 Degraded raised bogs still capable of natural regeneration 7150 Depressions on peat substrates of the Rhynchosporion	NPWS (2016) Conservation Objectives for Mount Hevey Bog SAC (002342) Version 1. Department of Arts, Heritage and the Gaeltacht.	<p>The site is located 4.2 km to the south-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 interest habitats 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 from the project site will not cause an impact on the conservation objectives for this European Site.</p>
002205	Wooddown Bog SAC	Habitats 7120 Degraded raised bogs still capable of natural regeneration	NPWS (2022) Conservation Objectives for Wooddown Bog SAC (002205). First Order Site-specific Conservation	<p>The site is located 9.2 km to the north-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 interest habitats for this European Site.</p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
			Objectives Version 1.0. Department of Housing, Local Government and Heritage.	<p><i>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.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
004043	Lough Derravarragh SPA	Birds A038 Whooper Swan (<i>Cygnus cygnus</i>) A061 Tufted Duck (<i>Aythya fuligula</i>) A125 Coot (<i>Fulica atra</i>) A059 Pochard (<i>Aythya ferina</i>) Habitats Wetlands	NPWS (2022) Conservation Objectives for Lough Derravarragh SPA (004043). First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	<p><i>The site is located 15.3 km to the north-west of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the hydrological connectivity of the project site with the European site being in excess of 16 km.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
002121	Lough Lene SAC	Habitats 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. Species	NPWS (2021) Conservation Objectives: Lough Lene SAC 002121. Version 1.	<p><i>The site is located 15.6 km to the north-west of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
		1092 White-clawed Crayfish (<i>Austropotamobius pallipes</i>)	Department of Housing, Local Government and Heritage.	<p><i>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.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
000685	Lough Ennell SAC	Habitats 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. 7230 Alkaline fens	NPWS (2018) Conservation Objectives: Lough Ennell SAC 000685. Version 1. Department of Culture, Heritage and the Gaeltacht.	<p><i>The site is located 16.6 km to the south-west of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats for this European Site.</i></p> <p><i>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.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
000692	Scragh Bog SAC	Habitats 7140 Transition mires and quaking bogs 7230 Alkaline fens Species	NPWS (2018) Conservation Objectives: Scragh Bog SAC 000692. Version 1.	<p><i>The site is located 16.9 km to the north-west of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
		1393 Slender Green Feather-moss (<i>Drepanocladus vernicosus</i>)	Department of Culture, Heritage and the Gaeltacht.	<p><i>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.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
004044	Lough Ennell SPA	Birds A061 Tufted Duck (<i>Aythya fuligula</i>) A059 Pochard (<i>Aythya ferina</i>) A125 Coot (<i>Fulica atra</i>) Habitats Wetlands	NPWS (2022) Conservation objectives for Lough Ennell SPA [004044]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	<p><i>The site is located 16.9 km to the south-west of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the hydrological connectivity of the project site with the European site being in excess of 17.3 km.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
004047	Lough Owel SPA	Birds A125 Coot (<i>Fulica atra</i>) A056 Shoveler (<i>Anas clypeata</i>)	NPWS (2022) Conservation objectives for Lough Owel SPA [004047].	<p><i>The site is located 17 km to the north-west of the installation.</i></p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
		Habitats Wetlands	First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	<p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the hydrological connectivity of the project site with the European site being in excess of 17.7 km.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
000688	Lough Owel SAC	Habitats 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. 7140 Transition mires and quaking bogs 7230 Alkaline fens Species 1092 White-clawed Crayfish <i>(Austropotamobius pallipes)</i>	NPWS (2018) Conservation Objectives: Lough Owel SAC 000688. Version 1. Department of Culture, Heritage and the Gaeltacht.	<p><i>The site is located 17 km to the north-west of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>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.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
002120	Lough Bane and Lough Glass SAC	Habitats 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. Species 1092 White-clawed Crayfish <i>(Austropotamobius pallipes)</i>	NPWS (2021) Conservation Objectives: Lough Bane and Lough Glass SAC 002120. Version 1. Department of Housing, Local Government and Heritage.	<p><i>The site is located 17.8 km to the north of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>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.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></p>
001810	White Lough, Ben Loughs and Lough Doo SAC	Habitats 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. Species 1092 White-clawed Crayfish <i>(Austropotamobius pallipes)</i>	NPWS (2021) Conservation Objectives: White Lough, Ben Loughs and Lough Doo SAC 001810. Version 1. Department of Housing, Local Government and Heritage.	<p><i>The site is located 18.8 km to the north-west of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>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.</i></p> <p><i>The project site is not located within the vicinity of any known breeding site for qualifying interest species at this European site.</i></p>

Site Code	Site Name	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Assessment
				<i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i>
002203	Girley (Drewstown) Bog SAC	Habitats 7120 Degraded raised bogs still capable of natural regeneration	NPWS (2022) Conservation objectives for Girley (Drewstown) Bog SAC [002203]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	<p><i>The site is located 20 km to the north-east of the installation.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</i></p> <p><i>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.</i></p> <p><i>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</i></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) & Birds Directive (79/409/EC)
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)
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