This Report has been cleared for submission to the Board by Programme Manager:

Signed: ***Date: 23rd December 2020***

OFFICE OF ENVIRONMENTAL SUSTAINABILITY

INSPECTOR'S REPORT ON AN INDUSTRIAL EMISSIONS LICENCE APPLICATION, LICENCE REGISTER NUMBER P1132-01

TO: DIRECTOR

FROM: Niamh O'Donoghue, ELP Inspector	**DATE: 23rd December 2020**
Applicant:	S. Wilkin & Sons Limited
CRO number:	445476
Location/address:	Cornawall, Rockcorry, County Monaghan
Application date:	04 August 2020
Class of activity (under EPA Act 1992 as amended):	6.1(a): The rearing of poultry in installations where the capacity exceeds 40,000 places.
Category of activity under IED (2010/75/EU):	6.6(a): Intensive rearing of poultry with more than 40,000 places for poultry.
Main CID:	CID (EU) 2017/302 (15 February 2017). Establishing (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs.
All relevant CIDs, BREF documents and legislation are listed in appendices of this report.	
Activity description/background: Expansion of an activity for the rearing of poultry (broilers) in an installation with a capacity increasing from 38,950 to 85,000 birds.	
Additional information received:	Yes: 16 October 2020
No of submissions received:	Two
Environmental Impact Assessment required: Yes	Stage 2 Appropriate Assessment required: No
Environmental Impact Assessment Report submitted (EIAR): Yes (04 August 2020)	Natura Impact Statement (NIS) submitted: No
Site visit: None	Site notice check: 27 August 2020

1. Introduction

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

S Wilkin & Sons Ltd. is a poultry (broiler) unit located at Cornawall, Rockcorry, County Monaghan which is owned and operated by Mr Sammy Wilkin a director of the company.

The installation consists of two poultry houses with a capacity for 38,950 free-range birds. The applicant has applied to the Agency for a licence, to allow for an increase of 46,050 to 85,000 broiler places. This will be accomplished through an alteration in the farming system from free-range to standard. Poultry farming has been carried out on this site since 2017. The present enterprise provides part-time employment for the applicant.

The RD requires that the applicant notifies the Agency one month before the intended date of commencement of the scheduled activity.

A map of the site layout is included in Appendix 1 of this report.

2. Description of activity

The installation is in a rural location with most development near the installation being dwelling houses and farm yards.

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 applicant has been approved under the Bord Bia approval system, as per the Poultry Products Quality Assurance Scheme (PPQAS), and this will be revised upon completion of the proposed development.

The process involves the rearing of stock specifically bred for lean poultry meat production, from day old chicks delivered from the hatchery, until they are removed from site and taken to the processing installation (at approximately 5 – 7 weeks). At the end of each rearing cycle the houses are destocked, and the birds are sold for processing. Following the removal of poultry litter (also termed organic fertiliser[1]), the poultry houses are cleaned and left empty for a period of 1 – 2 weeks, to allow for complete drying after the cleaning process. The houses are then restocked.

The type of broiler house used for this activity is a simple closed building of block and timber/wood construction on an impervious concrete base. The houses are and will be thermally insulated with a computer-controlled ventilation system and artificial lighting.

[1] 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.

There is provision of pop-holes in the existing houses to facilitate the current free-range farming system. These will no longer be used once the change in production occurs and the entire site will have no free-range activity. Automatic feeding and ventilation systems operate on a 24-hour basis. The solid flooring of each broiler house is and will be bedded with wood shavings/chopped straw over its entire area immediately prior to housing each new batch brought from the hatchery. The principal inputs to the operation are bedding, feed, water, veterinary medicines and energy (electricity and gas for heating). The main by-product of poultry rearing is organic fertiliser (poultry litter and wash water). These are discussed in further detail below.

3. Planning Status

A number of planning applications have been made by the applicant for the area within the installation boundary. On 31 August 2018, Monaghan County Council granted planning permission (Ref: 17/622) for the construction of a free-range poultry unit and all ancillary site works and associated site structures to accommodate an overall capacity on the farm of 18,950 places at that time. This development was completed, and the unit is operational.

On 13 February 2020, Monaghan County Council granted planning permission (Ref: 19/440) for the construction of an additional free range poultry unit and associated works together with the retention of (a) amendments and alterations to the poultry unit, (b) detached storage shed and (c) amended site layout from that previously granted under reference number 17/622, to accommodate an overall capacity on the farm of 38,950 places. This expansion work was partially completed.

On 20 August 2020, Monaghan County Council granted planning permission (Ref: 20/153) for a development consisting of (1) installation of hygiene and sanitary facilities in existing detached storage building, (2) installation of proprietary wastewater treatment unit and percolation area, (3) alteration to the capacity of developments approved under planning Ref: 19/440 and 17/622 to permit an intensification of use (increase in bird numbers), (4) completion of all ancillary site works and associated site structures to accommodate an overall capacity on the farm of 85,000 places (standard production, not free range). This expansion work has not yet commenced. Details of this planning permission was provided in the application form.

The applicant has submitted the EIAR associated with planning permission Ref: 20/153.

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 birds housed onsite to 85,000 broilers (standard production). This is the capacity that is specified in the application, in the EIAR 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 applicant, which satisfies the requirements of Annex II A of the EIA Directive, it has been determined that the activity is likely to give rise to significant effects on the environment by virtue of its nature, size or location. This determination has been made having regard to the following:

The activity exceeds the following threshold in Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended:

- 1(e)(i) Installations for the intensive rearing of poultry not included in Part 1 of the above Schedule which would have more than 40,000 places for poultry.

An EIAR was submitted to the Agency as part of the application on 04 August 2020 This is dealt with in the EIA Section later in this report.

5. Best Available Techniques and Commission Implementing Decision (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 applicant and is included in Section 4.7 of the application form. 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 Ammonia

The report '*Ireland's Air Pollutant Emissions, 1990-2030*[2]' (EPA, June 2020) identifies agriculture as the primary contributor (99.1%) of Irish ammonia emissions in 2018, emitting a total of 119.4 kilotonnes (kt) of ammonia in that year. According to *'Ireland's*

[2]http://www.epa.ie/pubs/reports/air/airemissions/irelandsairpollutantemissions2018/EPA-Air-Pollutant-Emissions-website.pdf

Informative Inventory Report 2020[3]' (EPA, 2020), ammonia emissions from the poultry sector in 2018 accounted for approximately 5.40kt. The Department of Agriculture, Food and the Marine (DAFM) has published a '*Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture*[4]', as required by the National Emission Ceiling Directive (NECD).

This installation will emit approximately 7 tonnes of ammonia per annum. Ammonia emissions from this activity could have the potential to impact sensitive receptors in the vicinity of the installation. However, ammonia emissions and nitrogen deposition have been modelled by the applicant, and checked by the EPA, using a screen model (SCAIL Agriculture[5]) and the predicted concentration of ammonia and nitrogen deposition at European sites will not cause an impact on the designated sites (See the Appropriate Assessment section of this report).

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.

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

- To implement and maintain an Ammonia Management Programme within three months of date of grant of licence and, in accordance with BAT 23, undertake an estimation/calculation of the reduction in ammonia emissions from the activity achieved by implementing BAT (Condition 5).
- To use a diet formulation and nutritional strategy to reduce the total nitrogen excreted, as per BAT 3 (Condition 5).
- To use one or a combination of the techniques listed in BAT 32 to reduce ammonia emissions to air from each house for broilers (Condition 6).

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

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

6.1.2 Odour

Odour arising from the activity could have the potential to cause impairment to those living nearby. The nearest third-party residential dwelling to the site is approximately

[3] https://www.epa.ie/pubs/reports/air/airemissions/airpollutantemissions/iir2020/IIR_2020_Mergev2.pdf

[4] https://www.agriculture.gov.ie/media/migration/ruralenvironment/climatechange/bioenergy/codeofgoodagpracticeammoniaemissions/1CodeofGoodAgriculturalPracticeforreducingAmmoniaEmissions081119.pdf

[5] SCAIL Agriculture is a web-based screening tool available at http://www.scail.ceh.ac.uk/

160m northwest of the unit. The land in the immediate vicinity of the installation is farmland. Therefore, odour is not expected to be a significant issue.

The potential impact from removing the organic fertiliser from the houses is deemed to be minor because will be removed once in every 6-8 week (approximately seven times per annum) and takes 4-5 hours to completely remove the organic fertiliser from the houses. All organic fertiliser from the houses will be removed offsite by a registered contractor

No complaints or submissions relating to odour have been received by the Agency, the HSE, or by the applicant.

The applicant 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 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 5).
- To use one or a combination of the techniques listed in BAT 13 to prevent/reduce odour emissions from the site (Condition 6).
- That organic fertiliser shall not be stored in the open pending its collection (Condition 8).

6.1.3 Channelled Emissions to Air

There are no main emission points to air from the installation. The applicant does propose installing one 500kW boiler (gas) onsite to provide heat for the activity. As the input for the gas boiler is not greater than one megawatt the Medium Combustion Plant Directive does not apply. In addition, the emission characteristics are regarded as minor emissions to atmosphere, and are not, therefore, considered environmentally significant.

6.1.4 Dust

Dust may arise from the expulsion of warm air from ventilation systems onsite, vehicle movements, removal of organic fertiliser, filling of meal storage bins and the loading and unloading of birds during periods of dry weather. Minimal dust impact may occur locally within the installation boundary during site operations. Dust is not expected to be a significant issue beyond the installation boundary. No complaints were received in relation to dust for this site by the Agency, or by the applicant. The nearest third-party residential dwelling is 160m northwest of the installation.

The applicant has stated that good housekeeping at the installation and keeping the concrete surface in a clean condition 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).

6.2 Emissions to Water and Ground

6.2.1 Emissions to ground/groundwater

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

6.2.2 Other emissions to ground/groundwater

The applicant proposes and has received planning permission to install a septic tank and percolation area on site for the treatment of sanitary effluent. The RD includes a standard condition which requires the applicant to provide and maintain a wastewater treatment plant for the treatment of sanitary effluent and that the waste water treatment system and percolation area shall satisfy the criteria set out in the *Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (≤ 10 p.e.)* published by the EPA.

6.3 Storm water discharges

Storm water arises onsite from rain water 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 will be diverted by gravity for discharge via three discharge points (SW-1, SW-2 and SW-3(proposed)) into field drains on the south-eastern (SW-1) and north-western (SW-2) boundaries of the site and to ground via a soakaway (SW-3).

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

Stormwater discharge point details				
Discharge Reference	Monitored parameters (monitoring frequency)	Abatement	Drainage areas	Discharging to
SW-1	*Visual (weekly); COD/BOD (as required by the Agency)*	*None*	*Roofs*	*Field drain >> Rockcorry Stream*
SW-2	*Visual (weekly); COD/BOD (as required by the Agency)*	*Silt trap*	*Roofs and clean yards*	*Field drain >> Tomany Stream >> Rockcorry Stream*
SW-3 (proposed)	*Visual (weekly); COD/BOD (as required by the Agency)*	*Silt trap*	*Roofs and clean yards*	*To ground via soakaway.*

Automatic diversion in place:	*No*

SW-1 flows approximately 400m via field drains to the Rockcorry Stream. SW-2 drains via field drains to the Tomany Stream, which joins the Rockcorry Stream approximately 2.4 km downstream of the installation. The Rockcorry Stream joins the Drulama Lough which drains to the Dromore River The Rockcorry stream currently has a WFD status of 'Poor'. There are no identified drinking water abstraction points on the Rockcorry Stream.

The installation is located within the Cavan Ground Waterbody (IE_NW_G_061), which currently has a WFD status of 'Good'.

The storm water discharged through SW-1, SW-2 and SW-3 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 from the poultry houses and when the houses are washed out. All wash water will be diverted to one underground wash water storage tank.

The applicant has stated that the proposed infrastructure, adherence to good management practices, and implementation of the required mitigation measures will mitigate the risk of storm water contamination.
Condition 6 of the RD requires the following in relation to storm water management:

- That the applicant provides and maintains a storm water/rainwater collection and drainage system for all poultry houses onsite;
- That the applicant provides and maintains an inspection chambers at the outlets of the storm water drainage system, prior to commencement of the activity;
- That the applicant installs silt traps on the drainage system at SW2 & SW3, i.e. from hardstanding areas of the site prior to the commencement of the activity;
- That wash water will be diverted to the wash water storage tank prior to the commencement of poultry litter removal and washing of the houses, until such time that wash down activities are completed, and that a written procedure and records of this are maintained;
- That the storm water discharge is visually inspected weekly and monitored for Chemical Oxygen Demand (COD)/Biological Oxygen Demand (BOD) as required by the Agency, in accordance with Schedule C.2.3 *Monitoring of Storm Water Emissions.*

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

6.4 Noise

The main sources of noise at the installation include the operation of equipment, ventilation systems, the emergency generator, vehicle deliveries/collections, and animals.

As mentioned earlier, the nearest third-party residential dwellings 160m northwest. Given the nature of the operations onsite and the type of activity, noise is not expected to be an issue at or beyond the installation boundary. No submissions have been received outlining that noise is a cause for concern from the installation.

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

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

7. Waste Generation

Certain wastes are generated on site as part of the licensable activity. Waste generated on site will mainly comprises of spent fluorescent tubes, fallen stock (animal carcasses), veterinary/chemical waste containers and general waste. The total quantity estimated to be generated by the activity is approximately 8.5 tonnes of animal carcasses and 2 tonnes of general waste. The applicant will employ a number of measures at the installation for the prevention and/or minimisation of waste. The full list of wastes and waste management measures are listed in attachment 8 of the application form.

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

A fly and rodent control programme will be developed to cover the proposed development. 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 applicant to establish, 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 (poultry litter and wash water). Condition 8 of the RD requires that the applicant maintains the records of organic fertiliser that are sent offsite for use on land or for compost production in

accordance with the requirements of the Nitrates Regulations[6]. The applicant will be required under the licence to submit to DAFM by the 31st of December annually details in relation to the quantity of organic fertiliser (poultry litter and wash water) exported (Record 3 form) offsite. 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) Regulations[7] impose legal requirements on the applicant, 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 applicant will be 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 IE licence relates to the site of the activity for which the licence application is made and does not extend to the lands on which organic fertiliser may be used as fertiliser. The Nitrates Regulations specify when organic fertiliser can be applied to land and the application rates, and these are enforced by the DAFM and Local Authorities.

8.1 Poultry Litter (Organic Fertiliser)

Under the ABP Regulations, poultry litter 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. Poultry litter must be transported either by the applicant (or staff member) or by a haulier registered with the DAFM. Poultry litter will be moved offsite by an approved and registered contractor for use in mushroom compost production, and/or by other customer farmers for use as an organic fertiliser.

The DAFM provides detailed Codes of Practice for the handling and use of poultry litter, which includes, amongst other things, disease prevention (poultry litter may cause botulism in cattle on the farm on which it is spread and neighbouring farms).

At the proposed bird capacity of 85,000 broilers, annual poultry litter production is estimated at 700 tonnes. The application includes a letter from George Coulson & Sons Limited, confirming they will take poultry litter from the installation to a mushroom compost production facility in Co. Wexford and to recipient farmers for use as organic fertiliser. George Coulson & Sons Limited are a registered contractor with the DAFM for the transport of animal by-products (poultry litter), DAFM Reference No. HAC2334.

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[6] S.I. No. 605 of 2017 European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017.

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

The Nitrates Regulations (Article 11(1)) require that a minimum of 26-weeks' storage capacity for organic fertiliser is provided. The applicant is exempt from this storage period once there is a contract in place for the removal of poultry litter by a registered contractor, as set out above. Such exemption is provided in accordance with Article 14(1) of the Nitrates Regulations. Condition 3 of the RD requires compliance with the relevant articles of the Nitrates Regulations, i.e. that either such a contract or the required storage is in place.

The quantity of nitrogen and phosphorus generated by the activity (at a capacity of 85,000 broilers) is approximately 20,400 kg/N/year and 7,650 kg/P/year, based on figures available in the Nitrates Regulations (annual nutrient excretion rates for livestock).

The RD contains the following additional requirements relating to the management of poultry litter:

- To monitor the total nitrogen and phosphorus excreted in manure annually, in accordance with BAT 24 (Condition 6).
- To inspect the integrity of the floors of all deep litter houses after each wash down, repair any damaged or cracked floors as necessary, and maintain a record of inspections and any necessary remedial actions taken (Condition 6).
- That poultry litter only be stored within the poultry houses (Condition 8).
- That any organic fertiliser spilled to ground during loading, shall be collected and returned to storage or to the vehicle into which it was being loaded (Condition 8).

8.2 Wash water

Wash water will be generated by the activity every 6-8 weeks, an estimated total of 140m^3 per annum. Prior to washing, the floors will be brushed to reduce the quantity of poultry litter that could potentially enter the wash water system. After washing, the houses are allowed to dry and then disinfectant applied. The wash water may contain insignificant quantities of disinfectant from the previous washing cycle.

The wash water will be directed to one underground wash water storage tank, with an estimated total capacity of 36.5m^3 (net of freeboard), where it will be contained until it is sent offsite to be landspread as fertiliser. The wash water storage capacity will be supplemented by additional storage capacity available in the applicant's offsite bovine slurry storage tanks. The total wash water storage capacity is sufficient to meet the 26-week storage capacity requirement in the Nitrates Regulations.

The wash water is considered suitable for use on land as an organic fertiliser and such use is provided for by the Nitrates Regulations and Animal By-Product Regulations. The applicant has identified approximately 75ha of farmland on the applicant's landholding in the vicinity of the activity, outside the boundary to which this licence relates, on which the wash water will be landspread. The applicant has demonstrated in the application that the addition of wash water from the installation will result in an increase in the stocking rate from 148kg to 150kg organic nitrogen per hectare, which is under the 170kg organic nitrogen per hectare stocking rate as specified in the Nitrates Regulations.

The RD contains the following conditions relating to the management of wash water:

- That the wash water storage tank is fitted with high liquid level indicators within three months of the date of grant of this licence for existing tanks and before utilisation for new tanks (Condition 3).

- That all storage tanks are integrity assessed within three months of date of grant of this licence for existing tanks and before utilisation for new tanks, and at least once every three years thereafter (Condition 6).
- That the applicant uses a combination of the techniques listed in BAT 6 to reduce the generation of wash water onsite (Condition 6).
- That the applicant uses one or a combination of the techniques listed in BAT 7 to reduce the emissions to water from wash water onsite (Condition 6).
- That a freeboard of at least 200mm from the top of covered wash water storage tanks and 300mm from the top of uncovered wash water storage tanks is maintained, as a minimum, at all times and that this is clearly indicated in the tank (Condition 6).
- That the loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off (Condition 8).

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 are given below.

Resource	Quantity per annum
Electricity	85 MWh
Liquified Petroleum Gas	17,213 m^3
Water (GWS)	4,200 m^3
Feed	2,200tonnes
Kerosene/Diesel	Back-up generator only

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

- Annual maintenance of the animal house heating systems and the back-up generator (Condition 3).
- Efficient use of resources and energy in all site operations,
- 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).
- To install and 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).

The only source of water for the activity is the Bunnoe Group Water Scheme (GWS). The installation is located on the Cavan groundwater body (IE_NW_G_061), a poorly productive aquifer which has a WFD status of "Good". It is considered that given the limited quantities abstracted, potential effects on the environment are considered neither likely nor significant.

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.

Potential accidents and measures for prevention/limitation of consequences	
Potential for an accident or hazardous/emergency situation to arise from activities at the installation	- Surface water or ground/groundwater contamination during poultry removal and washing; - Surface water contamination by spillage of organic fertiliser, fuel or other polluting material; - Ground/groundwater contamination as a result of spillage of organic fertiliser, fuel or other polluting material; - Surface water and/or ground/groundwater contamination due to leaks from tanks; - Accidental diversion of wash water to storm water drainage system; - Breakdown/malfunction of the onsite waste water treatment plant; and - 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	- The provision and maintenance of adequate wash water storage facilities; - Onsite generator has an integrated bund; - The storage of potentially polluting liquids in bunded areas; - The concreting of yards onsite; - The provision of concrete aprons around wash water areas; - The protection of gas tanks from accidental damage; and - The separation of wash water and clean storm water including diversion of the storm water collection system to wash water holding tank during cleaning.
Additional measures provided for in the RD	- The assessment of the integrity and maintenance of the wash water network and poultry house floors as required (Condition 6); - The regular visual examination and inspection of the storm water discharge points and the storm water drainage system (Condition 6); - No storage of organic fertiliser (poultry litter) onsite, other than what is in the animal houses during the poultry rearing cycle at the installation (Condition 8); - The provision of more than 26-weeks' organic fertiliser wash water storage capacity (Condition 3); - Provision and maintenance of the onsite waste water treatment plant (Condition 3); - Accident prevention and emergency response procedures requirements (Condition 9); and - 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 applicant has provided a list of measures to be taken in the event of site closure/cessation of activity. These measures are listed in Section 9 of the application form. Condition 10 of the RD requires the proper closure of the activity with the aim of protecting the environment.

Baseline Report

Where an activity involves the use, production or release of Relevant Hazardous Substances, and having regard to the possibility of soil and groundwater contamination at the site of the installation, the IED requires operators to prepare a baseline report. A baseline screening assessment was undertaken by the applicant, in accordance with Stages 1 to 3 of European Commission Guidance[8].

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. The Agency is 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 applicant 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 applicant has run a poultry farm at this location for a number of years. It is considered that the applicant has demonstrated the technical knowledge required to operate this installation.

Legal Standing

Neither the applicant nor any relevant person has relevant convictions under the Environmental Protection Agency Act 1992, as amended, or under any other relevant environmental legislation.

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

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 applicant can be deemed a Fit and Proper Person for the purpose of this application.

13. Submissions

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

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

Submissions			
1.	**Name & Position**	**Organisation:**	**Date received:**
	Ms Kay Casey, A/Principal Environmental Health Officer, Environmental Health Service	*Health Service Executive (HSE) Dublin/North East*	*11 September 2020*
	Issues raised: *The HSE submission is based on a report by Ms. Kay Casey, A/Principal Environmental Health Officer and Mr. Thomas Mangan, Environmental Health Officer. The submission makes a number of observations in relation to the licence application. The issues raised include site location, water supply, soiled water (wash water), surface/storm water, manure (poultry litter), waste, odour, noise and pest control. The HSE also confirmed in their submission that they have not received any complaints relating to odour or noise from the installation to date. The submission refers only to those areas within the remit of the HSE.* *Specific recommendations and observations highlighted by the HSE include:* • *There are no third-party dwellings within 100 m of the development;* • *Water supply is from the Bunnoe group water scheme. The HSE recommends the applicant identify local wells, ensure water supplies are protected both from the operation of the proposed development and ensure compliance with legislation;* • *The HSE recommends that the applicant be aware of the legislative requirements and best practice for poultry manure (litter) and soiled water (wash water) storage and spreading;* • *The HSE recommends that that the applicant take all due care in ensuring that there is no discharge of contaminated waters from the*		

Submissions	
	proposed development particularly during loading and cleaning, that all discharge locations are labelled and monitored, that the baseline conditions of the groundwater in the vicinity of the site and in the landspreading areas are established and that a surface water quality monitoring scheme be put in place; • *Continual monitoring of odour from the installation;* • *Adequate storage of dead bird carcasses is required onsite and all other waste products should be removed from site in a timely manner to authorised facilities; and* • *A pest control programme should be implemented onsite.* **Agency Response:** The main issues raised in the submission are noted and addressed in the relevant sections of the Inspector's Report. Landspreading of organic fertiliser occurs outside of the licensed boundary and is and will be carried out in accordance with the Nitrates Regulations and Animal By-Product Regulations. This is monitored and controlled by the Department of Agriculture Food and the Marine (DAFM) and the Local Authorities (LAs).
2.	**Name & Position** / **Organisation:** / **Date received:** *Mr Peter Sweetman* / *Peter Sweetman and on behalf of Wild Ireland Defence CLG* / *13 October 2020* **Issues raised:** *The issues raised in the submission are as follows:* *In the submission Mr. Sweetman indicated 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.* *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."* **Agency Response:** 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 12 October 2020, which included specific reasons for determining that a Stage 2 Appropriate Assessment was not required. The Appropriate Assessment section of this report details the results of the appropriate assessment screening conducted as part of the licence application. The applicant has provided sufficient information regarding the

Submissions	
	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. 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. 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 is available to the public on access to administrative and judicial review procedures on the EPA's website, at http://www.epa.ie/licensing/industrialemissionslicensing/licensingprocessexplained/ As part of this licence assessment process, including EIA and AA screening, regard has been given to all submissions received.

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.

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. 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: Kilroosky Lough Cluster SAC (Site Code: 001786), Magheraveely Marl Loughs SAC (Site Code: UK0016621), Upper Lough Erne SPA (Site Code: UK9020071), Lough Oughter and Associated Loughs SAC (Site Code: 000007), Upper Lough Erne SAC (Site Code: UK0016614), Slieve Beagh SPA (Site Code: 004167)

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 can 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 AA of the activity was not required.

- The closest European site is approximately 14km away.
- Based on the use of the screening model, SCAIL Agriculture, ammonia

emissions from this activity are not predicted to have a significant impact on sensitive receptors within the European Sites listed above. Based on the model output, nitrogen deposition as a result of this activity will not have a significant effect on sensitive receptors within these European sites.

- There is no surface water pathway within 30km of the installation connecting the installation to any European site.
- The risk of surface water or groundwater contamination because of accidental emissions during washing activities, or from spillage from the wash water tank, is minimal given the distance between the activity and the European sites.
- The litter generated at the installation has high dry matter content.
- The litter remains within the concrete-floored covered broiler houses until all broilers are removed at the end of the batch. Therefore, there is no pathway between the litter and surface water/groundwater while the houses are stocked.
- When the houses are destocked, the litter is removed from the animal houses and taken off-site.
- Wash water is used as a fertiliser on lands that are not within the installation boundary, in accordance with the Nitrates Regulations.
- Poultry litter is transported by a contractor to composting facilities or may be used as an organic fertiliser on land 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 poultry within the installation boundary, and does not extend to the lands on which organic fertiliser may be used as fertiliser.
- 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/waters within the SACs and/or SPAs.
- Noise levels from poultry installations are very low and as the nearest European Site is approximately 14km northwest of the installation (Kilroosky Lough Cluster SAC), it is considered that noise will not impact on the qualifying interests within that, or any other European Site.
- Given the small scale of emissions associated with this activity, it is considered that the activity in combination with other plans or projects will not have a significant effect on any protected sites.

16. Environmental Impact Assessment

16.1 EIA Introduction

This assessment is being undertaken in accordance with the requirements of Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

The application was accompanied by an Environmental Impact Assessment Report (EIAR). As part of this environmental impact assessment, I have carried out an examination, analysis and evaluation of all the information provided by the applicant (including the EIAR), information received through consultation, the documents associated with the assessments carried out by Monaghan 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 when supplemented by my assessment as contained in this report.

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

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

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

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

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

16.2 Consultation with Planning Authorities in relation to EIA

Consultation was carried out between Monaghan County Council and the Agency under the relevant section of the EPA Act 1992, as amended.

Monaghan County Council confirmed that planning permission ref. 20/153 is the relevant planning permission for the activity and that an EIAR was received by them as part of the planning application assessment. They did not provide any further 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. It examines several sites, layout and design, size, processes, and management of by-products. The proposed development can be wholly contained within the structures previously permitted. Site access is available and sufficient distance from third party dwellings. The house design is in line with BAT and of a scale sufficient to cover development and operational costs.

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 addressed in Chapters 4.3.1, 4.4 and 4.7 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 the licence assessment part of this report:

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

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

Cumulative effects of the activity in relation to population and human health have been assessed and 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 the licence assessment part 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 applicant, 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 addressed in Chapters 4.3.2, 4.4 and 4.7 of the EIAR. The EIAR describes the habitats and species at and in the vicinity of the installation. The development is on an existing poultry site with surrounding land largely agricultural. An examination of the website of the National Biodiversity Data Centre revealed that there are records of the presence of one protected mammal species from within the 1 km^2 of this development. This species is the badger *Meles meles* and it is fully protected under the Irish Wildlife Acts. The assessment determined that these records do not pertain to within the application site itself. There are six Natura 2000 designated sites within 20km of the application site, the closest being Kilroosky Lough Cluster (Code 001786), which is 14km east of 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 (LAs).

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 applicant, 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 Chapters 4.3.3, 4.4 and 4.7 of the EIAR. The land use is currently an existing poultry farm on drumlin soils. Any potential contamination issues are dealt with in the baseline report section of this report.

The potential direct and indirect effects on land and soil are associated with emissions to air, emissions to water, and accidental emissions. Should emissions 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 (LAs).

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.

Conclusion
I have examined all the information on land and soil, provided by the applicant, 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 (including Waste Water and Storm Water)

Identification, Description and Assessment of Effects
Water is addressed in Chapters 4.3.5, 4.5, and 4.7 of the EIAR. and state that the site lies within the Erne catchment and Dromore sub catchment areas. The site is within the Cavan groundwater body (Ref: IE_NW_G_061) which has a Water Framework Status of 'good'. There are no emissions to water from the site.

The site of the installation itself drains via field drains to the Rockcorry Stream and onto the Drulama Lough which drains to the Dromore River. Storm water from SW-1 and SW-2 will discharge to this stream. SW-2 drains via a silt trap. Storm water from SW-3 will discharge to ground via a silt trap and percolation area. Discharge from the sanitary facilities onsite will drain to a treatment system and percolation area.

The potential direct and indirect effects on water relate to storm water discharges, and sanitary facility emissions. Should any emission/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. These are addressed in the Prevention of Accidents section. The likelihood of accidental emissions to water is considered low in light of the measures outlined in the Prevention of Accidents section above and in light of the conditions in the RD. This is addressed in Prevention of Accidents section of this report.

The site is in a rural area with most of the developments in the vicinity of the installation being dwelling houses and farm yards. There are six other intensive agriculture EPA licensed installations within 5km of the installation, the closest being 850m north west of the installation. There are no other significant industrial developments in the vicinity. 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 emissions and 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 European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017 (S.I. 605 of 2017), as amended (known as 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. The Department of Housing, Planning and Local Government have undertaken an Appropriate Assessment of the current NAP (4th NAP 2018-2021), which included a Natura Impact Statement (April 2018) for Irelands NAP in 2018, 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 will be measures undertaken to meet the environmental objectives of the WFD. These include measures such as implementation of the Nitrates Action Programme (Good Agriculture Practice Regulations) and associated inspection regime. Targeted monitoring as envisaged under the Plan allied with multi-party enforcement (EPA/LA/DAFM) will provide an early warning of potential problems/improvements and of the possible need to adapt the Plan to ensure protection of our waters.

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

Mitigation and Monitoring
Mitigation measures and monitoring in relation to water are detailed in the following sections of the licence assessment part 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 applicant, 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 addressed in Chapters 4.1.3, 4.4 and 4.7 of the EIAR. The site is in a rural location with most of the surrounding land being agricultural. The potential direct and indirect effects of noise associated with the operation of the activity are 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 and vibration have been assessed and is considered that there is not likely to be a significant cumulative effect from the

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

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

Conclusions
I have examined all the information on noise provided by the applicant, 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 (including Dust and Odour)

Identification, Description and Assessment of Effects
Air is addressed in Chapters 4.3.6, 4.4 and 4.7 of the EIAR. The potential direct and indirect effects on air are associated with emissions to air of ammonia, dust and odour from the poultry housing, and dust from the installation yard. Should emissions cause an exceedance of air quality standards or critical levels/loads, this could have implications for air quality, human health and biodiversity within and beyond the site boundary. General site dust and odour emissions have the potential to impact human health and cause nuisance.

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

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

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

In relation to cumulative effects, it is noted that there are six other EPA-licensed intensive agriculture installations within 5km 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.

A screening model (SCAIL) was used, 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 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 2020*' (EPA 2020), which contains the most recent data, ammonia emissions in 2018 from the poultry sector were 5.4kt (or 4.52% of Ireland's National emissions). This installation will emit 6.8 tonnes per

annum, which is approximately 0.1% of the total produced from the poultry sector annually, or 0.01% of the total ammonia produced nationally.

As detailed previously in the Emissions to Air section of this report, Ireland is addressing ammonia emissions (including emissions from landspreading) in accordance with S.I. No. 232/2018, European Union (National Emission Ceilings) Regulations 2018. The new 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.

Approximately 4.6% of the ammonia emissions that originate from landspreading in Ireland come from the poultry sector. This equates to 1.4% of Ireland's total ammonia emissions. The organic fertiliser generated by the activity represents a negligible quantity relative to the total quantity of organic fertiliser arising from the livestock sectors in Ireland (cattle, sheep, pigs and poultry).

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

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

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

Conclusions
I have examined all the information on Air (including dust and odour) provided by the applicant, 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 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 (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3) and sulphur hexafluoride (SF_6).

The Irish Government's Climate Action Plan includes climate mitigation practices and decarbonisation targets and contains actions relevant to the poultry sector.

The potential direct and indirect effects on climate are associated with storage and spreading of organic litter (nitrous oxide) and usage of fossil fuels (carbon dioxide).

In relation to cumulative effects, any combustion process will inevitably produce quantities of gases, including greenhouse gases (GHG), which have the potential to impact on air quality. However, it is usually the other combustion gases that negatively impact air quality as opposed to the greenhouse gases. In this assessment, it has already been determined that GHG emissions from the installation will not significantly affect local air quality, individually or cumulatively.

However, any discussion of GHG emissions must be extended to national and global climate impact. In the context of climate change, any activity which produces greenhouse gases must be regarded as contributing to the current significant cumulative global impact on climate. As part of the non-ETS (Emissions Trading Scheme) sector the GHG emissions from this site are covered by Ireland's commitments under the Effort Sharing Decision (Decision No 406/2009/EC) and the Effort Sharing Regulation (Regulation (EU) 2018/842) from 2021.

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

It is considered that the likelihood of accidental emissions occurring which could affect climate is low in light of the measures outlined in the Prevention of Accidents section above and the proposed conditions in the RD.

Mitigation and Monitoring

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

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

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

Conclusions

I have examined all the information on climate provided by the applicant, 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

Chapters 4.3.10, 4.4 and 4.7 of the EIAR address Material Assets, and include information on traffic, transport, agricultural and non-agricultural property, and resources (both natural and others) such as energy and water. Material assets such as roads and traffic and built services are dealt with in the decision of the planning authority to grant permission for the development and are not controlled by the Agency. The planning authority has considered the effect to be acceptable.

The use of natural resources by the activity will not 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 section of the licence assessment part of this report:

- Waste Generation; and
- Energy Efficiency.

No significant cumulative effects on material assets have been identified.

Mitigation and Monitoring

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

- Waste Generation;
- Energy Efficiency;
- Prevention of Accidents.

Material Assets Conclusions

I have examined all the information on material assets provided by the applicant, 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.

The planning authority has also identified, described and assessed the likely significant direct and indirect effects of the development on material assets. Their assessment concluded that:

"The Planning Authority is satisfied that there are no significant impacts on the following factors as a result of this proposal:

……

d) Material assets, cultural heritage and the landscape

e) The interaction between the factors referred to in points (a) to (d)"

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

Sections 4.3.9 and 4.4 of the EIAR addresses the potential direct and indirect effects on cultural heritage. Any loss of archaeological or architectural heritage could impact negatively on human beings. These matters are dealt with in the decision of the planning authority to grant planning permission for the developments on site and are not controlled by the Agency. The planning authority has considered the effect to be acceptable.

There are no buildings or features of architectural significance and no known archaeological features at or near the site of the installation. There are two ringforts 400m east 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
The Planning Authority has identified, described and assessed the likely significant direct and indirect effects of the development on cultural heritage. Their assessment concluded that:

"The Planning Authority is satisfied that there are no significant impacts on the following factors as a result of this proposal:

……

d) Material assets, cultural heritage and the landscape

e) The interaction between the factors referred to in points (a) to (d)"

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
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
The Planning Authority has identified, described and assessed the likely significant direct and indirect effects of the development on the landscape. Their assessment concluded that:

"The Planning Authority is satisfied that there are no significant impacts on the following factors as a result of this proposal:

……

d) Material assets, cultural heritage and the landscape

e) The interaction between the factors referred to in points (a) to (d)"

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

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 applicant, 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 Section 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 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 wash water 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

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. This is dealt with in Sections 4(4)(v) and 4(4)(vii), of the EIAR.

The Seveso Directive[9] 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' sections of this report. The applicant assessed the vulnerability of the project and determined that due to the nature of the processes onsite, no significant risks occur and consequently, no specific mitigation measures have been proposed in relation to these effects.

Mitigation and Monitoring

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

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 applicant, 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 applicant, and the submission from the planning authority and third parties in the course of the application, it is considered that the potential significant direct and indirect effects of the activity on the environment are as follows:

- Emissions to air;
- Noise emissions; and
- Accidental leakages or spills.

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

- Emissions to air will be mitigated through: 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 €2,768, 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

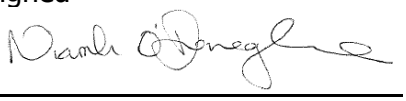
stricter of either, or both, the limits and controls required under BAT, and those required to comply with any relevant environmental quality standard.

The 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 Screening and the EIA. The RD gives effect to the requirements of the Environmental Protection Agency Act 1992, as amended and has regard to submissions made.

This report was prepared by Niamh O'Donoghue, Philip Stack, Máire Buckley, Linda Cahill and Éimer Godsil.

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

Signed



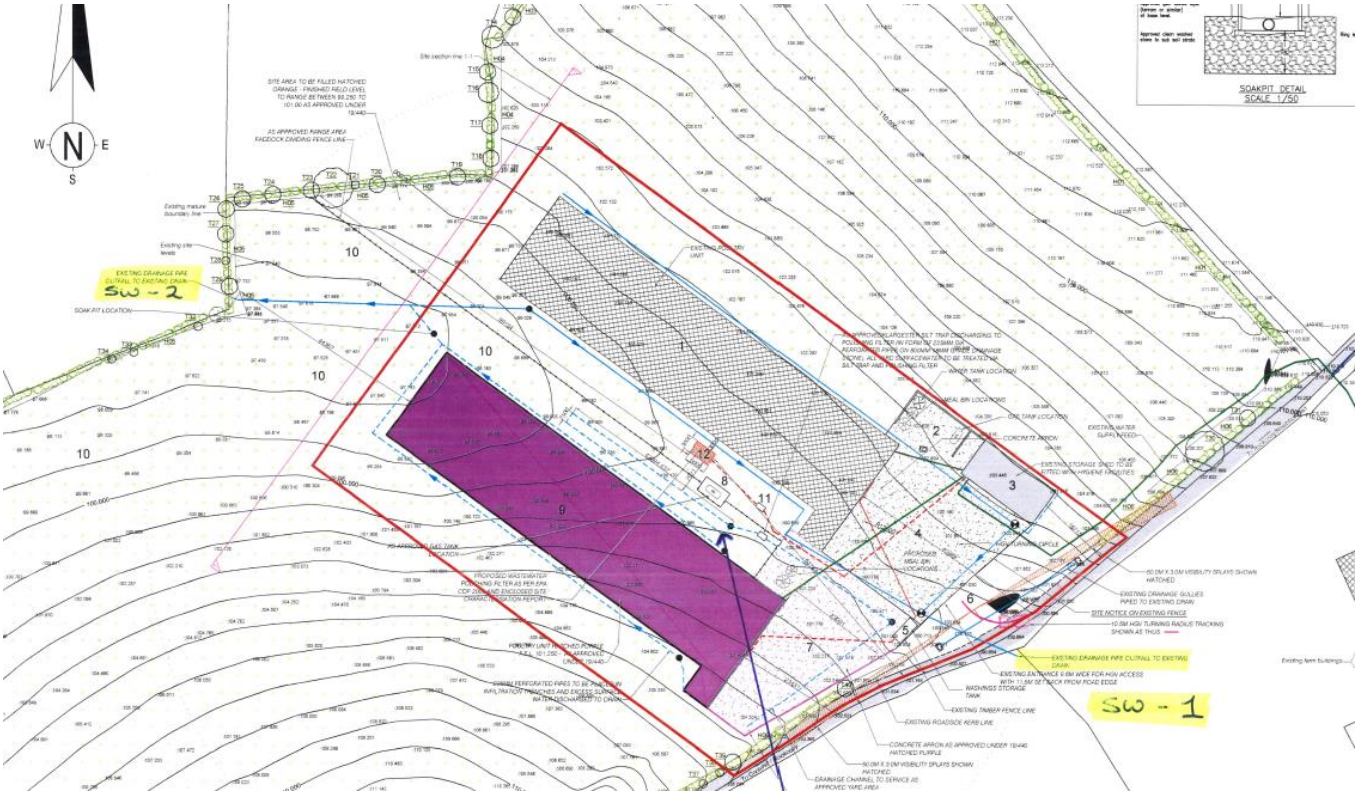
Niamh O'Donoghue, ELP Inspector

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: Site Plan (Extract from application site plan)



Appendix 2: AA Table

Appendix 2: List of European Sites assessed, their associated qualifying interests and conservation objectives.

Site Code	Site Name	Qualifying Interests *(* denotes a priority habitat)*	Conservation Objectives
001786	Kilroosky Lough Cluster SAC	**Habitats** 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. 7210 Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae** 7230 Alkaline fens **Species** 1092 White-clawed Crayfish (*Austropotamobius pallipes*)	As per NPWS (2018) Conservation objectives for Kilroosky Lough Cluster SAC (001786). Generic version 6.0. Department of Culture, Heritage and the Gaeltacht (dated 21/02/2018).
UK0016621	Magheraveely Marl Loughs SAC	**Habitats:** 3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp 7210 Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae** 7230 Alkaline fens **Species** 1092 White-clawed Crayfish (*Austropotamobius pallipes*)	As per Magheraveely Marl Loughs SAC (UK0016621) Conservation Objectives. Version 2. DAERA (dated 01/04/2015)
UK9020071	Upper Lough Erne SPA	**Species** A0038 Whooper swan (*Cygnus cygnus)*	As per Upper Lough Erne SPA (UK9020071) Conservation Objectives. Version 2. Department of Environment Northern Ireland (dated 01/04/2015)
000007	Lough Oughter and Associated Loughs SAC	**Habitats** 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation 91D0 Bog woodland* **Species** 1355 Otter (*Lutra lutra*)	As per Lough Oughter and Associated Loughs SAC (000007) Conservation Objectives. Version 7.0 Department of Culture, Heritage and the Gaeltacht (dated 07/04/2020).

Site Code	Site Name	Qualifying Interests *(* denotes a priority habitat)*	Conservation Objectives
UK0016614	Upper Lough Erne SAC	**Habitats** 3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles 91D0 Bog woodland* 91E0 Alluvial forests with *Alnus glutinosa* and Fraxinus excelsior (*Alno-Padion, Alnion incanae, Salicion alvae*) 7230 Alkaline fen 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinia caerulea)* **Species** 1355 Otter (*Lutra lutra*) 1106 Atlantic salmon (*Salmo salar*)	As per Upper Lough Erne SAC (UK0016614) Conservation Objectives. Version 2. Department of Environment Northern Ireland (dated 01/04/2015)
004167	Slieve Beagh SPA	**Birds** A082 Hen Harrier (*Circus cyaneus*)	As per NPWS (2020) Conservation objectives for Slieve Beagh SPA [004167]. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht (dated 07/04/2020).

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	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