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

Signed: Breda Farrell ***Date: 4 July 2019***

OFFICE OF ENVIRONMENTAL SUSTAINABILITY

INSPECTOR'S REPORT ON AN INDUSTRIAL EMISSIONS LICENCE APPLICATION LICENCE REGISTER NUMBER P1081-01

TO: DIRECTOR, EIMEAR COTTER

FROM: Niamh O'Donoghue	**DATE: 4 July 2019**
Applicant:	Beech Row Farm Limited
CRO number:	504494
Location/address:	Doagheys, Glaslough, Co. Monaghan
Application date:	07 June 2018
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.
European Directives/Regulations relevant to this assessment are listed in the appendix of this report.	
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.
Other relevant BREF documents & national BAT notes are listed in the appendix of this report.	
Activity description/background: Expansion of an activity for the rearing of poultry (broilers) in an installation with a capacity increasing from 22,000 to 65,000 birds.	
Notices under Regulation 10(2)(b)(ii) issued:	1. 10 September 2018 2. 13 February 2019
Notices under Regulation 10(2)(b)(ii) received:	1. 18 September 2018 2. 06 March 2019
Submissions received:	1. Peter Sweetman & Associates, 17 July 2018 2. Heath Service Executive, 30 July 2018 3. Inland Fisheries Ireland, 19 December 2018 4. Peter Sweetman & Associates, 28 January 2019
EIAR submitted: Yes: 7 June 2018	NIS submitted: No
Site visit: None	Site notice check: 28 June 2018

1. Activity description/background

Beech Row Farm Limited, is a poultry broiler unit located at Doagheys, Glaslough, Co Monaghan which is operated by Mr Brian McArdle. The site is owned by the applicant's father.

The installation currently has a capacity for 22,000 broilers within one poultry house. Poultry farming has been carried out on this site since the late 1980s. It is proposed to construct one additional broiler rearing house to increase the capacity at the installation to 65,000.

On 17 April 2018, Monaghan County Council granted planning permission (Ref: 18/68) for the construction of one new poultry house, wash water tank and meal storage bin to accommodate an overall capacity on the farm of 65,000 places. This expansion work has commenced.

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

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 the site to the processing installation (at approximately 5 – 6 weeks). At the end of each rearing cycle the houses are destocked and the birds are sold for processing. Following a period of 2 weeks to allow for the removal of poultry litter (also termed organic fertiliser[1]) and to allow for complete drying after the cleaning process, the houses are 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 thermally insulated with a computer controlled ventilation system and artificial lighting. Automatic feeding and ventilation systems operate on a 24-hour basis. The solid flooring of each broiler house is 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 feed, water, veterinary medicines and energy (electricity and gas for heating). The main by-product of poultry rearing is poultry litter (organic fertiliser). These are discussed in further detail below.

2. Consideration of Best Available Techniques (BAT) and BAT Conclusions.

Section 86A(3) of the EPA Act 1992 as amended, requires that the Agency shall apply BAT conclusions as a reference for attaching one or more conditions to an Industrial Emissions Directive (IED) licence. Therefore, BAT for the installation was assessed against the BAT conclusions contained in the relevant Commission Implementing Decision (CID) and BREF

[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.

documents specified in Appendix 3. The table below sets out a summary of how the BAT conclusions published in the CID have been considered in the licence.

The applicant submitted a review of the installation activities against the relevant BAT conclusion requirements contained in the above documents. There are 34 BATs in the CID 2017/302/EU establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council on the intensive rearing of poultry or pigs. The applicant has demonstrated that the installation will comply with the BAT conclusion requirements specified in the CID and will comply with the applicable BAT conclusions requirements contained in additional BREF documents.

The site is stocked and operating currently below licence limits; however, as this is the first licence application received from this installation, the CID which was published in February 2017, classes the activity at the installation as a new activity, and all the applicable BAT requirements apply immediately.

I consider that the applicable BAT conclusion requirements are addressed through: (i) the technologies and techniques as described in the application; (ii) the standard conditions specified in the Recommended Determination (RD); and (iii) where applicable, the inclusion of additional specific conditions (see Table 1 below).

Table 1: Specific Conditions in RD to address BAT conclusion requirements

Main applicable BAT conclusions for the activity: BAT conclusions for the Intensive Rearing of Poultry or Pigs	
Requirements	**Condition/Schedule**
The management of the installation requirements have been updated to include an Environmental Management System (EMS) and schedule of objectives and targets in line with the requirements in the BAT conclusions. (BAT 1).	Condition 2
Good housekeeping in order to prevent or reduce the environmental impact and improve overall performance of the installation. (BAT 2).	Condition 3
Ammonia control and ammonia management programme. (BAT 3).	Condition 5
Phosphorus Control (BAT 4).	Condition 5
Prevention/reduction of noise emissions. (BAT 10).	Condition 6
Odour emissions. (BAT 13).	Condition 6
Resource Use and Energy Efficiency. (BAT 5, BAT 6, BAT 7 & BAT 8).	Conditions 6, 7 & 11
Dust control. (BAT 11).	Conditions 5, 6 & Schedule C.1.
Process monitoring (ammonia and dust). (BAT 24, BAT 25	Condition 6 &

& BAT 27).	Schedule C.
Ammonia emissions from poultry houses. (BAT 25 & BAT 32).	Condition 6 & Schedule C.
A report setting out the selected technique(s) used for each BAT referenced in the applicable CIDs.	Condition 11
Monitoring total nitrogen and total phosphorus in organic fertiliser. (BAT 24).	Schedule C
Reporting on reduction of ammonia emissions. (BAT 23).	Condition 5 & Schedule D
Monitoring of process parameters (BAT 29)	Condition 11
BREF document on Energy Efficiency	
Inclusion of energy audit and use efficiency.	Condition 7
BREF document on Storage	
Inclusion of requirement for leak detection and repair programme.	Condition 3 & 6

3. Planning Permission, Environmental Impact Assessment Report (EIAR) and Environmental Impact Assessment (EIA) Requirements

3.1 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

An EIAR was submitted with the licence application to the Agency after 16 May 2017; therefore, the EIA was carried out in line with 2014 EIA Directive[2] requirements.

3.2 Planning Status

A number of planning applications have been made by the applicant for the area within the installation. Planning permission 18/68, granted on 17 April 2018 applies to this application. A previous application relates to the existing poultry shed (ref: 89/300). Details of these

[2] Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014, amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

planning applications and permissions have been provided in the application form. The applicant has submitted the EIAR associated with planning permission 18/68.

3.3 Content of EIAR and licence application

I have considered and examined the content of the licence application, the EIAR and other relevant material submitted with it, including the further information requested and received from the applicant. All of the documentation received was examined and I consider that the EIAR complies/comply with the requirements of the EPA (Industrial Emissions)(Licensing) Regulations 2013 / EPA (Integrated Pollution Control)(Licensing) Regulations 2013, when considered in conjunction with the additional material submitted with the application and when supplemented by my assessment as contained in this report.

3.4 Environmental Impact Assessment Directive

Having specific regard to EIA, this inspector's report (IR) as a whole is intended to identify, describe and assess for the Agency the likely significant direct and indirect effects of the proposed 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, climate, material assets, cultural heritage and the landscape.

This IR addresses the interaction between those effects and the related development forming part of the wider project. The significant cumulative effects, with other developments in the vicinity of the activity have also been considered, as regards the combined significant effects of emissions. The main mitigation measures proposed to address the range of predicted significant effects arising from the activity have been outlined. This IR proposes conclusions to the Agency in relation to such effects.

In preparing this IR I have considered and examined:

- the application, Register Number: P1081-01 and the supporting documentation received from the applicant;
- the EIAR;
- the submissions received; and
- the documents associated with the assessments carried out by Monaghan County Council for this installation in relation to planning permission 18/68 and the issues that interact with the matters that were considered by that authority and which relate to the activity.

While the environmental factors have been considered throughout my entire assessment, the following table identifies, for ease of reference, the sections of this report where each environmental factor has been predominantly discussed.

Table 2: Table of Environmental Factors

Environmental Factor	Addressed in the following Sections:
Population and Human Health	Emissions to Air, Discharges to Water and Ground, Noise, Waste, Accidents, Cessation, Organic Fertiliser, Other matters relating to EIA
Biodiversity	Emissions to Air, Water and Ground, Noise, Waste, Organic Fertiliser, Accidents, Cessation, Organic Fertiliser, Other

Environmental Factor	Addressed in the following Sections:
	matters relating to EIA
Land	Discharges to Water and Ground, Organic Fertiliser, Other matters relating to EIA
Soil	Discharges to Water and Ground, Accidents, Cessation, Organic Fertiliser, Other matters relating to EIA
Water	Discharges to Water and Ground, Accidents, Cessation, Organic Fertiliser, Other matters relating to EIA
Air	Emissions to Air, Accidents, Cessation, Organic Fertiliser, Other matters relating to EIA
Climate	Emissions to Air, Other matters relating to EIA
Landscape	Other matters relating to EIA
Material Assets	Use of Resources, Waste, Other matters relating to EIA
Cultural Heritage	Other matters relating to EIA

3.5 Consultation with Competent Authorities

Consultation was carried out between Monaghan County Council and the Agency under the relevant sections of the EPA Act as follows:

Consultation	Date
Notice under Section 87(1E)(a) request for observations issued:	29 June 2018
Response to Section 87(1E)(a) Notice received:	31 July 2018

Monaghan County Council did not provide any observations to the Agency on the licence application and EIAR but noted the following:

- Confirmed that planning permissions reference 89/300 was originally granted at this location to Lawrence McArdle.
- Confirmed that planning permission references 18/68 is the applicable grant of permission relating to this development.

As required by the Industrial Emissions Directive and the EIA Directive, we have considered the potential for significant effects on the environment in the territory of another Member State (UK: Northern Ireland). this installation is approximately 2km from Northern Ireland. We have concluded, based on the assessment detailed in this report (especially the section on emissions to air) that this project is unlikely have a significant effect within the territory of and/or on the environment of Northern Ireland; therefore, we have concluded that there is no necessity for transboundary consultation for this project.

4. Submissions

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

The issues raised in the submissions are noted and addressed in this IR and the submissions were taken into consideration during the preparation of the RD.

<table>
<tr><th colspan="3">Submissions</th></tr>
<tr><td>1</td><td colspan="2">Name & Position:
Mr. Peter Sweetman</td><td>Organisation:
Peter Sweetman & Associates</td><td>Date received:
17 July 2018</td></tr>
<tr><td></td><td colspan="4">Issues raised:
The submission provides a copy of judgement of the 12 April 2018 by the CJEU, in relation to Case C-323/17 and quotes the ruling from that judgement that:
"Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site."

Agency Response:
In Section 14, Appropriate Assessment, I have addressed the potential for significant effects of the project on European Sites and have detailed the results of an Appropriate Assessment screening conducted as part of the licence application.
There are four European Sites within 20 km of the installation. Any European Sites more than 20km distance from the installation have been determined to be outside of the potential zone of influence of the activity, so it was not necessary to consider them further.
Qualifying interests and conservation objectives of each individual site were detailed as part of that assessment. Section 14 details the results of the Appropriate Assessment screening conducted as part of the licence application.
This assessment determined that the poultry activity is not directly connected with or necessary to the management of any European site and, through setting out a set of reasons, determined why the activity individually or in combination with other plans or projects, can be excluded from having a stage 2 Appropriate Assessment carried out.</td></tr>
<tr><td>2</td><td colspan="2">Name & Position:
Ms Claire O'Dwyer, Principal Environmental Health Officer, Environmenal Health Service.</td><td>Organisation:
Health Service Executive, HSE Dublin/North East,</td><td>Date received:
30 July 2018</td></tr>
<tr><td></td><td colspan="4">Issues raised:
The HSE submission is based on a site visit report by Mr. Barry Coady, Environmental Health Officer and conversations with the applicant. It provides a summary of their findings. The submission makes a number observations in relation to the licence</td></tr>
</table>

Submissions			
	application. The issues raised include site location, manure (poultry litter), soiled water (wash water), surface water, water supply, waste, odour, noise, pest control and oil and chemical storage. 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:* • *The nearest neighbours are located approximately 150m from the site;* • *No manure (poultry litter) is stored onsite;* • *Soiled water (wash water) from the existing poultry house is diverted to the cattle slurry tank via a pipeline. Soiled water (wash water) from the new poultry house will have a separate tank constructed.* • *Surface water from the site currently drains to a catchment tank and from there to a drain which enters the River Blackwater.* • *The HSE recommends that care is taken during the emptying and cleaning stages of the activity, that all monitoring locations are labelled and monitored and that baseline conditions of the groundwater onsite and in the landspreading areas are established;* • *The HSE recommends that landspreading and associated storage is doe in accordance with relevant legislation;* • *The HSE recommends a groundwater protection plan is drawn up by the applicant; and* • *The HSE noted chemicals are stored currently in a coal bunker onsite which is not suitable and recommended suitable bunding arrangements are put in place.* **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 will be carried out in accordance with the Nitrates Regulations[3] and Animal by-Product Regulations[4]. This is monitored and controlled by the Department of Agriculture Food and the Marine (DAFM) and the Local Authorities (LAs).		
3	**Name & Position** *Ms Michaela Kirrane, Senior Fisheries Environmental Officer*	**Organisation:** *Inland Fisheries Ireland*	**Date received:** *19 December 2018*
	Issues raised: *The submission outlined that the site is located in the Monaghan Blackwater River catchment which has a current ecological status of moderate. It is an important fisheries*		

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

[4] Regulation (EC) No. 1069/2009 of the European Parliament and of the Council of 21 October 2019 laying down health rules as regards animal by-products and derived prodiucts not intended for human consumption ad realing Regualtion (EC) No 1774/2002 (Animal by-products Regulation.

Submissions			
	habitat that supports amongst other species, salmon, brown trout and lamprey. It is important to ensure that the proposed development does not have a negative impact on the aquatic habitat. The IFI has no objection to the development from a fisheries perspective provided that: the bird numbers must not exceed the number in the application; all wastes and soiled water (wash water) are stored in adequately sited and sized containers in watertight structures; any landspreading carried out is in accordance with the Nitrates Regulations and that only clean uncontaminated water is discharged through the storm water drainage system **Agency response:** Assessment of the installation's waste, wash water and storm water are covered in the relevant sections of the inspector's report. The RD includes conditions limiting the bird numbers, the management and where applicable, the monitoring of wastes, wash water and storm water. Landspreading of organic fertiliser occurs outside of the licensed boundary and will be carried out in accordance with the Nitrates Regulations and Animal By-Product Regulations. This is monitored and controlled by the DAFM and the Local Authorities (LAs).		
4	**Name & Position:** *Mr Peter Sweetman*	**Organisation:** *Peter Sweetman & Associates*	**Date received:** *28 January 2019*
	Issues raised: *The submission refers to CJEU case references C-258/11, C-164/17, C-323/17, C-461/17 and joined cases C-293/17 and C-294/17 and states the following:* *"Any licence granted by the EPA for the following applications must comply with the Habitats and Birds Directives and must comply with the following judgments of the CJEU."* **Response:** The requirements of the Habitats Directive (92/43/EC) and Birds Directive (2009/147/EC) are considered as part of the appropriate assessment section of the report. In addition, the judgments of the Court of Justice of the European Union form part of this assessment. See the Section on appropriate assessment, later in this report, for further details. Judgment reference number C-293/17 and C-294/17 relate to habitat protection and the impacts from nitrogen deposition. The legislation governing ammonia emissions from livestock installations across Member States varies and is not directly comparable. The Judgment references C-293/17 and C-294/17 relate to the system in The Netherlands, where a new approach was adopted in 2015 in the form of a 'programmatic' (or integrated) approach to nitrogen/ammonia (Programmatische Aanpak Stikstof - PAS). This approach deals with the assessment requirements of the Habitats Directive Art. 6(3) at a 'programmatic' level considering general reduction trends as well as (planned) management and restoration measures with the purpose to establish a "room for development" for subsequent permits. The PAS has been successfully challenged in the courts (C-293/17 & C-294/17) on the grounds that it is not in accordance with the Habitats Directive. This approach is not used in Ireland.		

5. Emissions to Air

This Section addresses the following:

- Odour

- Ammonia
- Fugitive Dust
- Climate impact

The applicant states that potential emissions to air from the activity should be limited to emissions associated with the general operation of the activity such as emissions of warm air from the ventilation system, as well as the storage and removal of organic fertiliser. Increased emissions may at times be associated with loading of birds and/or removal of organic fertiliser.

5.1 Odour

Odour arising from the activity could have the potential to cause impairment to those living nearby. However, odour is not expected to be a significant issue for the reasons detailed below.

Assessment and Mitigation:

The nearest third party residential dwelling to the site is over 80m northwest of the unit. The land in the immediate vicinity of the installation is farmland. The applicant states that no complaints regarding odour from the installation have been received. The HSE confirmed in their submission (detailed in Section 4 above) that they have not received any odour complaints in relation to the installation to date. The EPA has not received any submissions relating to odour for the existing activity.

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

The following combination of techniques, regulatory requirements and mitigation measures will reduce the likelihood of odour emissions from the installation:

- Management of activities onsite to occur at times when the effects (including odours) within / outside of the site will be minimal;
- Minimisation of the movement of organic fertiliser and bird movements, where possible, to reduce odour effects;
- Proper management of temperature and humidity controls within the houses;
- Appropriate maintenance of water, feed and ventilation systems;
- Maintaining stock density at design level;
- Operating the activity on a dry organic fertiliser basis. Provision of straw-chip bedding instead of shavings;
- The use of low protein diets. Using feed with optimum crude protein content to minimise nitrogen excretion;
- The provision of adequate organic fertiliser storage capacity (wash water);
- The adequate cleaning, disinfecting & resting of houses between restocking;
- The cleaning of houses as quickly as possible with organic fertiliser removal offsite in suitably designated and covered trucks;
- No storage of poultry litter onsite, other than what is under the animals during each poultry rearing cycle;
- The minimisation of carcasses by good flock management and regular removal of carcasses from the houses;
- The storage of carcasses in covered containers and their transportation to a rendering facility in covered, leak proof containers;

- The minimisation of the litter content of wash water by the physical cleaning of houses prior to washing;
- The proper storage of wastes onsite, with regular removal of wastes; and
- The regular cleaning of the outside areas of the installation.

Condition 5 of the RD requires that amenities, the environment and any legitimate uses of the environment beyond the installation boundary will not be impaired or interfered with by emissions, including odour, arising from the activity. BAT 13 lists techniques to prevent and/or reduce odour emissions and impacts, the RD requires implementation of this BAT.

Accidents:

Accidental odour emissions could occur during removal of the organic fertiliser. The likelihood of accidental odour emissions occurring is considered low in light of the assessment and mitigation discussed above and in-light of measures outlined in the '*Prevention of Accidents*' section below.

5.2 Ammonia

The latest report on Ireland's gas emissions under the National Emission Ceiling Directive (NECD) published by the EPA, ('Ireland's Transboundary Gas Emissions, 1990-2030', May 2019) identifies agriculture as the primary contributor (99.1%) of ammonia emissions in 2017. There was a total of 118.5 kilotonnes (kt) of ammonia released nationally in 2017. According to 'Ireland's Informative Inventory Report 2019' (EPA 2019), ammonia emissions from the poultry sector in 2017 were approximately 5.17kt.

The new NEC Directive, which entered into force in December 2016 (Directive (EU) 2016/2284, replacing 2001/81/EC) sets national emission reduction commitments for Member States for ammonia, and includes emission reduction obligations by 2020 and by 2030.

The Department of Communications, Climate Action and the Environment (DCCAE) are the principal Government Department and have transposed the National Emission Ceilings Directive (NECD), into national law (S.I. No. 232/2018, European Union (National Emission Ceilings) Regulations 2018).

The NECD requires every member state to put in place a Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture, and DCCAE assigned responsibility for this to the Department of Agriculture, Food and the Marine (DAFM).

The Code of Good Agricultural Practice for reducing ammonia emissions will be a guidance document outlining the best practice measures for removing or lowering ammonia emissions associated with agricultural activities. The measures outlined in the Code will be voluntary and aim to assist farmers to identify appropriate actions for their individual farms. The Code of Practice will include guidelines on topics such as nitrogen management, feed strategies, low emission housing, low emission storage, low emission spreading, and fertiliser management. The draft guidance document is closed for public consultation on 21 June 2019, and a finalised Code will be published in due course.

The 2019 EPA report identifies recent increases in cattle numbers (26% increase in dairy cow numbers) and fertiliser use (24% increase in nitrogen fertiliser use) as the main cause of the increase in ammonia emissions over the period 2012 to 2017.

Potential ammonia emissions from the landspreading of poultry litter is covered later in this report under the Section on Poultry Litter (Organic Fertiliser).

Assessment and Mitigation:

This installation will emit 5.2 tonnes per annum (65,000 broilers x 0.08kg ammonia/animal place/year) which based on the 2017 data is approximately 0.1% of the total produced from the poultry sector annually, or 0.004% of the total ammonia produced nationally.

Ammonia emissions from this activity could have the potential to impact sensitive receptors (e.g. lichens, bryophytes etc.) 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], http://www.scail.ceh.ac.uk/) 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 below).

The applicant has stated that they will employ the following combination of techniques, regulatory requirements and mitigation measures, which should reduce ammonia emissions from the installation:

- Management of activities to occur at times when the effects (including odours) within/outside of the site will be minimal;
- The adequate cleaning, disinfecting & resting of houses between restocking;
- Proper management of temperature and humidity within the houses;
- Appropriate maintenance of water, feed and ventilation systems;
- Good house design in relation to insulation & emissions to air;
- Good litter management by operating the activity on a dry organic fertiliser basis with the provision of chopped straw / shaved wood as bedding; and operating the activity on a dry feed and button nipple drinking system to keep the litter as dry as possible;
- Provision of adequate organic fertiliser storage capacity (wash water) and the immediate removal of organic fertiliser at the end of each batch;
- Maintaining stock density at design level;
- The transportation of organic fertiliser in suitably contained, leak proof vehicles;
- The use of feed with optimum crude protein content to minimise nitrogen excretion, this will keep ammonia emissions from ventilation systems and from organic fertiliser transportation to a minimum;
- The minimisation of the litter content of wash water by the physical cleaning of houses prior to washing;
- The proper storage of wastes onsite, with regular removal of wastes;
- The minimisation of carcasses by good herd management;
- Regular stock inspections and removal of carcasses; and
  The storage of carcasses in covered containers and their frequent transportation to a rendering facility in covered, leak proof containers.

Condition 5 of the RD requires the applicant to have an ammonia management programme in place by within three months of the date of grant of the licence, outlining ammonia reduction/prevention measures, including timeframe for implementation, appropriate to the site. The RD requires the applicant to use a diet formulation and nutritional strategy (e.g. low protein feeds) onsite and the minimisation of ammonia emissions to air from the site. The applicant must further estimate or calculate the reduction of ammonia emissions from the activity by implementing BAT in accordance with BAT 23. The ammonia management programme must be updated and reviewed annually.

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

Accidents:

It is considered that the likelihood of accidental emissions occurring, which could affect ammonia emissions from this type of operation, is very low.

5.3 Fugitive Dust

Dust may arise from the expelling 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.

Assessment and Mitigation:

Dust arising from the activity could have the potential to deposit beyond the site boundary, potentially causing impairment of amenities for those living nearby and potentially affecting habitats located close to the site boundary.

The organic fertiliser produced onsite is not dusty and minimising dust formation is mainly a function of good housekeeping at the installation.

The nearest third party residential dwelling is over 80m northwest of the installation. While 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 following combination of techniques, regulatory requirements and mitigation measures will further reduce the likelihood of an impact from dust arising onsite:

- Regular and thorough cleaning of houses between batches;
- Provision of an appropriate ventilation system;
- Regular cleaning of road and yard areas; and
- Containment of all organic fertiliser and wastes leaving the installation in appropriately designed and covered vehicles.

Condition 5 of the RD requires that dust associated with the activity does not result in an impairment of, or an interference with, amenities or the environment at the installation or beyond the installation boundary. The use of BAT to reduce dust from poultry houses is conditioned in the RD (conditions 5 and 6).

Accidents:

Accidental dust emissions could occur as a result of poor housekeeping onsite. The likelihood of accidental dust emissions occurring is considered low in light of the assessment and mitigation discussed above and in-light of measures outlined in the prevention of accidents section below.

5.4 Climate Impact

Climate disruption is a significant global issue which affects weather and environmental conditions, air, water and soil which consequently affects human resources (population and human health) and amenities, material assets and cultural heritage as well as biodiversity (habitats and flora and fauna). Climate disruption is caused by warming of the climate system by enhanced levels of atmospheric greenhouse gases (GHG) due to human activities.

In June 2019, the Irish Government released the 'Climate Action Plan, 2019'. The Plan outlines the current state of play across key sectors in Ireland including Electricity, Transport, Built Environment, Industry and Agriculture and charts a course towards

decarbonisation targets. The plan includes action items in relation to poultry, for example the use of altered crude protein to reduce methane emissions.

Assessment and Mitigation:

Table 3 below outlines the sources of GHG emissions from the activity:

Table 3

Greenhouse gas emissions	
Sources of GHG emissions from the activity	Combustion of fuels, poultry litter storage
Relevant GHG gases	Carbon Dioxide, Nitrous Oxide, Methane

With regard to reducing the climate impact from the installation under the IED, the RD requires an energy efficiency audit and an assessment of resource use efficiency to be undertaken in accordance with Condition 7, and to be addressed as part of the Resource Use and Energy Programme. Resource use efficiency is discussed further in the Use of Resources section of this report.

Poultry litter is a dry, solid material and remains in the poultry house until the end of the batch. The litter is completely removed from the installation at the end of each batch (every 6-8 weeks). With appropriate management and bedding during each batch, methane emissions from the poultry litter will be minimal. The RD requires a diet formualtion in accordance with BAT 3 and the applicant proposes a low protein diet. This will help progress the targets under the Climate Action Plan.

Electricity is used to power the equipment onsite. Heating for the poultry houses is provided by gas. A diesel back-up generator is used only in emergency situations. Emissions associated with the boiler/generator are minor. The applicant states that they will operate the installation to maximise resource efficiency.

The impact of traffic movements associated with the development is dealt with in the decision of the planning authority to grant planning permission for the poultry unit.

Accidents:

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 below and the proposed conditions in the RD.

5.5 EIA on Emissions to Air

For the purposes of EIA, the environmental factors potentially affected by emissions to air from the activity include: Population and human health, biodiversity, air and climate.

Direct and Indirect effects:

Emission levels causing an exceedance of air quality standards (AQS) could have implications for population and human health, air quality and the health status of biodiversity beyond the installation boundary. The above assessment informed by the SCAIL screening model, as well as the assessment of the installation's odour, ammonia, dust and climate altering emissions indicates that air emissions from the installation, under normal operation, are not likely to cause a significant direct effect on the above environmental

factors. The likelihood of accidental air emissions occurring is considered low in light of the measures outlined and the conditions discussed above. Indirect ammonia emissions due to landspreading are discusse in the organic fertiliser section of this report.

We are satisfied that there is not likely to be significant effects at European sites from the activity's ammonia emissions on air quality or on lichens and bryophytes, or indirectly on those species which depend on them.

We consider with the controls in place and controls recommended that there will be no significant direct or indirect effect from emissions to air from the installation.

Cumulative Effects:

In this assessment, it has already been determined that air emissions from the installation will not significantly affect local air quality. Screen modelling has taken account of the background levels of ammonia and it is considered that there is not likely to be a significant cumulative effect from ammonia emissions from the installation and other emissions generated by other activities/developments in the area.

The installation is in a rural area with most of the developments in the vicinity of the installation being dwelling houses and farm yards. Odours from agricultural activities outside the installation may occur on occasion but any odours experienced will most likely be of short duration.

It is noted that there are two other EPA licensed intensive agriculture activities (poultry rearing) within 3km of the installation that may potentially generate emissions to air. It is considered that due to the controls in place on these sites and the distance between them, a significant cumulative effect will not occur.

Dwelling houses and farm yards, in the vicinity of the installation would use modest amounts of energy and will not be significant contributors of climate altering substances. Also, all farms in the area will produce a quantity of organic fertiliser which they are individually obliged to manage and use as fertiliser in accordance with S.I. 605 of 2017, as amended (Nitrates Regulations).

The installation is unlikely to release significant quantities of dust on any area beyond the installation boundary. There are no other developments, installations or activities in the vicinity which are likely to release significant quantities of dust that could lead to likely or significant cumulative effects from dust deposition on any area beyond the installation boundary.

We consider with the controls in place and controls recommended that there will be no significant cumulative effects from emissions to air from the installation.

5.6 Overall Conclusions in relation to effects of air emissions from the activity on the environment

Based on the above assessment of the installation's emissions to air, the direct, indirect and cumulative effects have been identified, described and assessed, and are detailed above.

We are satisfied that there will not be significant effects on climate, air quality, population and human health and biodiversity.

6. Emissions & Discharges to Water and Ground

6.1 Emissions & Discharges to Ground

6.1.1 Emissions and discharges 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.

Accidents:

There could be potential for accidental emissions to groundwater as a result of spillages to ground. The RD includes requirements for bunding and storage of materials as well as requirements for accident/incident prevention which will minimise the potential for spillages that could impact on groundwater.

6.1.2 Other discharges and emissions to ground/groundwater

The applicant has stated that there is one onsite well, AGW1, located to the front of the proposed new poultry house.

Assessment and Mitigation:

There were no groundwater monitoring results provided in support of the application. The installation is located on the border between the Monaghan groundwater body (IEGBNI_NB_G_012) and the Aughnacloy groundwater body (IEBGNI_NB_G_007), both have a WFD status of good. The following combination of techniques, regulatory requirements and mitigation measures will reduce the likelihood of an impact on the two on-site wells:

- The provision of 26-weeks organic fertiliser storage capacity is conditioned in the RD;
- New wash water tanks will be constructed to DAFM standards;
- Fill points for organic fertiliser will have concrete area/collection tank to collect any spill/leak;
- Provision of bunding for overground storage tanks; and
- All wash water is diverted to the wash water tank.

The RD requires the applicant to provide monitoring of the onsite well on an annual basis. The RD contains standard conditions in relation to the storage and management of materials and wastes.

Accidents:

Accidental emissions to ground/groundwater could occur if a spill occurred, causing contamination of the ground/groundwater. However, the likelihood of accidental emissions to ground/groundwater occurring is considered low in light of the measures outlined in the '*Prevention of Accidents*' section below and in light of the proposed conditions discussed above.

6.2 Discharges to Waters

6.2.1 Storm water Discharges

Storm water arises onsite from storm water collected from clean yards and the roofs of buildings.

All clean storm water is diverted away from soiled areas of the site and is collected in a storm water collection system around each house and is diverted by gravity for discharge via

a single discharge point (SW1) into a field drain on the eastern boundary of the site. This drain flows south for approximately 300m to the Blackwater River. The Blackwater River currently has a WFD status of moderate. There are no identified drinking water abstraction points on the Blackwater River.

Assessment and Mitigation:

The storm water discharged through SW1 should be uncontaminated and therefore, should have no qualitative impact on receiving surface waters. The only period during which there is potential for contamination of surface waters is during removal of organic fertiliser from the poultry houses, i.e. once every 6-8 week rearing cycle and when the houses are washed out. Storm water from the installation should therefore be uncontaminated and have no impact on surface water quality offsite. All wash water is diverted to one underground wash water tank.

Storm water from the yards at the front of the houses flows into the collection drains which directs the clean storm water to SW1. This same system is used during the wash out of houses, except that the wash water from the front of the houses is diverted by a diversion chamber to the wash water tank. The applicant has advised that all wash water is diverted to the wash water tank.

The RD requires that measures are taken to ensure that wash water will be diverted to the wash water tanks prior to the commencement of poultry litter removal and during washing of the houses until washing is complete and that a written procedure and records are maintained.

The following combination of techniques, regulatory requirements and mitigation measures will reduce the likelihood of an impact on water quality from organic fertiliser:

- The provision of more than 26-weeks organic fertiliser storage capacity (wash water);
- No landspreading at the installation;
- The construction of a new wash water tank to DAFM standards;
- The fill points for organic fertiliser will have concrete area/collection tank to collect any spill/leak;
- The wash water storage tank will be fitted with high liquid level indicator(s);
- The provision of bunding for overground storage tanks;
- The diversion of all wash water to the wash water storage tank.

Condition 5 of the RD only permits uncontaminated storm water to be discharged to water, groundwater or soil. Condition 6 requires the provision and maintenance of an inspection chamber at SW1 within three months of date of grant of licence. In accordance with Condition 6 and Schedule C.2.3 Monitoring of Storm Water Emissions of the RD, the applicant is required to monitor storm water discharges at SW1 for BOD and COD as required by the Agency and to carry out a weekly visual inspection of the storm water monitoring points. The RD also requires the storage of all liquid fuels, chemicals, etc., in bunded areas to avoid spillage and discharge to surface water. These conditions will aid in achieving good water quality in the Blackwater River.

Accidents:

The risk of surface water contamination as a result of accidental emissions during poultry removal and washing activities is considered to be minimal for the following reasons:

- Poultry litter removal and washing only occurs once every 6-8 weeks (at the end of each batch);

- Drainage channel only needs to be diverted to the wash water tank once every 6-8 weeks;
- The applicant states that 112m^3 of wash water is generated by the activity per annum; and
- Wash water results from water being used to wash the surfaces of the houses and therefore coming in contact with poultry litter. The nutrient content of wash water is relatively low compared to livestock slurry.

Therefore, it is considered that the requirement of the RD conditions is sufficient for the protection of surface water during poultry litter removal and washing activities.

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. These measures will help to control any impacts which could occur. It is therefore considered that direct effects as a result of storm water discharges are considered to be neither likely nor significant.

6.3 EIA of Emissions and Discharges to Ground and Water

For the purposes of EIA, the environmental factors potentially affected by emissions to ground and water from the activity include: Population and human health, biodiversity, water quality.

Direct and Indirect Effects:

Based on the above assessment the installation's, direct emissions have been identified, described and assessed (there are no direct emissions from the installation).

Any exceedance of water quality standards could have implications for population and human health, water quality and the health status of biodiversity beyond the installation boundary. The above assessment of the installation's discharges to water and ground indicates that water emissions from the installation, under normal operation, are not likely to cause a significant direct effect on the above environmental factors.

Should any accidental emission e.g. spills, occur it has the potential to discharge to ground or through the storm water discharge point. This could have the potential to affect surface/groundwater quality, as well as aquatic habitats within the surface water body.

We consider that no significant secondary or indirect effects are likely as a result of these water discharges from the activity with the controls in place and controls recommended.

Cumulative Effects:

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 no other developments, installations or activities in the vicinity that are likely to generate significant emissions to ground/groundwater. Therefore, we considere that there will be no significant cumulative effect from storm water discharges from the activity and from other activities/developments in the area.

We are satisfied that based on the above assessment, the nature of the activity, the mitigation measures in place, and the conditions in the RD that the likelihood of a significant effect on the environment occurring as a result of emissions to ground and/or water is negligible.

6.4 Overall Conclusions in relation to effects of emissions to water and ground on the environment

Based on the above assessment of the installation's emissions to water and ground, the direct, indirect and cumulative effects have been identified, described and assessed, and are detailed above.

We are satisfied that there will not be significant effects on water quality, population and human health and biodiversity or any other aspect of the environment from water emissions arising from the operation of the activity.

7. Noise

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

The applicant has submitted noise survey data relating to several other intensive agricultural sites, for comparison purposes only, and noise is not expected to cause a impairment of amenities at this site.

Noise arising from site could have the potential to cause impairment of amenities for those living in the vicinity of the activity or disturbance of noise sensitive species near the site.

Assessment and Mitigation:

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. There has been no history of noise complaints at the installation and none have been received by the Agency or the HSE.

Noise emissions will be minimised by implementing the good management practices - most important of these are; use of automated feeding and ventilation systems, ensuring houses and associated feeding and ventilation systems are well maintained, ensuring houses are stocked at the correct rate and that deliveries (inward & outward) are confined to the normal daily work routine.

Standard noise conditions and emission limit values, which apply at the noise sensitive locations, have been included in the RD. BAT 10 lists techniques to prevent and/or reduce noise emissions, the RD requires implementation of this BAT.

Accidents:

Accidental noise emissions could occur if equipment malfunctions, causing tonal or impulsive noise. However, the likelihood of accidental noise emissions occurring is considered low in light of the measures outlined in the Prevention of Accidents section below and in light of the proposed conditions discussed above.

7.1 EIA on Noise Generation

For the purposes of EIA, the environmental factors potentially affected by noise from the activity include: Population and human health and biodiversity.

Direct and indirect effects;

Noise arising from site could have the potential to cause impairment of amenities for those living in the vicinity of the activity or disturbance of noise sensitive species near the site. The above assessment of the installation's noise emissions indicates that noise from the installation, under normal operation, is not likely to cause a significant direct effect on the

above environmental factors. The likelihood of accidental noise emissions occurring is considered low considering the measures outlined and the conditions discussed above.

I consider with the controls in place and the new controls recommended that significant direct effects and indirect effects as a result of noise from the activity are unlikely.

Cumulative Effects:

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 no other developments, installation/facilities or activities in the vicinity that are likely to generate noise to an extent that could lead to likely or significant cumulative effects. In addition, noise emission limit values apply at the noise sensitive locations. Therefore, we consider that with the controls in place and controls recommended there would not likely to be a significant cumulative effect from noise emissions from the proposed activity and other noise emissions generated by other activities/developments in the area.

We are satisfied that based on the above assessment, the nature of the activity, the mitigation measures in place, and the conditions in the RD that the likelihood of a significant effect on the environment occurring as a result of noise emissions is negligible

7.2 Overall conclusions in relation to noise emissions

Based on the above assessment of the installation's noise emissions, direct, indirect and cumulative effects are identified, described and assessed above.

We are satisfied that there will not be significant effects on population and human health and biodiversity or any other aspect of the environment from noise emissions arising from the operation of the activity.

8. Waste Generation

The activity does not produce significant quantities of waste. There are no waste disposal or recovery activities undertaken onsite. Waste arising onsite includes fluorescent tubes, fallen stock (animal carcasses), veterinary/chemical waste containers and general waste.

Assessment and Mitigation:

The applicant states that waste is minimised by employing best technologies combined with good management practices and the maintenance of a high health status on the farm. It is policy to minimise waste accumulation and to recycle as much as possible. Promotion of waste minimisation is also done through source reduction and staff awareness.

The installation will be operated in an efficient manner to minimise overall waste generation. This is done by specialist feeding devices to minimise feed waste. The regular maintenance of feeding, water supply, organic fertiliser removal and ventilation systems, maximises efficiency and helps conserve resources.

Carcasses, are stored temporarily onsite in covered skips, before being transported to an appropriately licensed installation where the material will be rendered in accordance with the Animal By-Product Regulations (Regulation (EC) No. 1069/2009).

In relation to pests and rodents, the following combination of techniques, regulatory requirements and mitigation measures will further reduce the likelihood of a negative impact on the environment:

- Regular removal of wastes which could attract pests;
- Appropriate storage and regular removal of wastes (including carcasses) which could attract pests;

- Good housekeeping around the installation to avoid an impact on the amenities outside the installation boundary;
- Weed control around the site to remove any potential cover for vermin; and
- Maintenance of a vermin/pest control system with vermin control carried out in accordance with Bord Bia and DAFM requirements.

Condition 3 of the RD requires the applicant to establish, maintain and implement a pest control programme in accordance with relevant DAFM guidelines and includes conditions for waste management at the installation.

The RD requires that bird carcasses are stored in covered, leak-proof containers and removed at least fortnightly to an approved installation. All other wastes must be appropriately segregated, stored, labelled and removed from site which will significantly reduce the likelihood of pests being attracted to the installation. The RD requires that all waste sent offsite is transported and recovered/disposed in accordance with National and European Legislation and requires maintenance of records on matters relating to the waste management operations and practices at this installation.

If dealt with in accordance with the conditions of the RD, the management of waste generated at the facility will be in accordance with the requirements of Article 11(e) of the IED.

Accidents:

The likelihood of accidental waste emissions occurring is considered low in light of the measures outlined in the '*Prevention of Accidents*' section below and in light of the proposed conditions discussed above.

8.1 EIA on Waste Generation

For the purposes of EIA, the environmental factors potentially affected by waste generation from the activity include: Material assets, population and human health, air and biodiversity.

Direct and Indirect Effects:

The above assessment of the installation's waste control and mitigation measures indicates that waste from the installation, under normal operation, is not likely to cause a significant direct effect on the above environmental factors. The likelihood of accidental waste emissions occurring is considered low considering the measures outlined and the conditions discussed above.

We consider with the controls in place and the new controls recommended that significant direct effects and indirect effects as a result of waste from the activity is unlikely.

Cumulative Effect:

There are no other large scale developments or activities close to the proposed installation where waste and pests could arise at levels that might lead to cumulative effects.

8.2 Overall conclusions in relation to waste generation.

Based on the above assessment of the installation's waste generation, direct, indirect and cumulative effects are identified, described and assessed above.

We are satisfied that there will not be significant effects on material assets, population and human health, air and biodiversity or any other aspect of the environment from the generation of wastes from the operation of the activity or from pests or vermin.

9. Organic Fertiliser

The installation will necessarily generate organic fertiliser (poultry litter and wash water). The operation of the poultry unit at the current bird capacity (22,000 broilers) results in the production of approximately 200 tonnes of organic fertiliser per annum.

9.1 Poultry Litter (Organic Fertiliser)

Poultry litter is an organic fertiliser and is a valuable source of nutrients for the mushroom composting industry and farmers. It is subject to strict conditions to prevent adverse effects through nuisance, euthrophication and the spread of disease. Another potential outlet for this material is biogas plants.

The collection, transport, handling, treatment, transformation, processing, storage, placing on the market, distribution, and use of all animal by-products (ABP) including poultry litter is governed by the EU Animal By-Product Regulation (EC) No. 1069 of 2009 and Regulation (EU) No. 142 of 2011 which are given legal effect by The European Communities (Animal By-Product) Regulations 2014 (SI No. 187/2014). Poultry litter is categorised as a category 2 Animal By-Product and the options for its disposal are set out in Article 13 of Regulation 1069/2009. Poultry litter must be transported by a haulier registered with the Department of Agriculture Food and Marine.

Poultry litter poses a direct and indirect risk of transmitting botulism to cattle. Outbreaks of botulism may occur, not just on the farm where the poultry litter is being spread, but also on neighbouring farms. The DAFM provides detailed Codes of Practice for the handling and use of poultry litter.

Assessment and Mitigation:

If the site expands to 65,000 bird capacity as proposed, annual organic fertiliser production is estimated at 600 tonnes.

At the end of the batch cycle the poultry litter is collected and removed from the houses. 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 application includes a letter from George Coulson and Sons Limited, confirming they take poultry litter from the installation to mushroom compost production facilities and to recipient farmers for use as organic fertiliser. George Coulson and Sons Limited is a registered contractor with the DAFM for the transport of animal by-products (poultry litter), DAFM Reference No. HAC2334. All litter will be transported in covered vehicles under and in accordance with the European Communities (Transmissible Spongiform Encephalopathies and Animal By-Products) Regulations 2008 (S.I. No. 252 of 2008) and in accordance with the Nitrates Regulations and the Animal By-Product Regulations.

The Nitrates Regulations (Article 11(1)) require a minimum of 26-weeks' storage capacity for organic fertiliser is provided; however, the applicant is exempt due to having 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 such a contract to be in place.

The poultry litter storage capacity currently provided onsite within the poultry houses is approximately 8 weeks (duration that a batch of birds is onsite).

As outlined above, poultry litter will be sent for use in the mushroom compost production industry or for use as an organic fertiliser on land. 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 specifies when organic fertiliser can be applied to land, the application rates etc. and are enforced by the DAFM and Local Authorities.

The RD provides that organic fertiliser may be sent offsite for use as fertiliser by farmers in accordance with the Nitrates Regulations.

The RD requires that records of organic fertiliser that is sent offsite for use on land are maintained in accordance with the requirements of the Nitrates Regulations. Records of organic fertiliser that is sent for compost production must also be maintained.

The Animal By-Product Regulations 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 is required to receive a completed copy of the 'commercial document' from the transporter confirming the final destination.

The applicant (poultry farmer) is required under the licence to submit to DAFM by the 31st December annually details in relation to the quantity of organic fertiliser (poultry litter and wash water) exported (Record 3 form). 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, including farmers who are recipients of organic fertiliser and the quantity received.

There is no landspreading of organic fertiliser conducted and/or permitted within the installation boundary., and consequently there will be no additional ammonia emissions within the installation boundary from landspreading activities.

The quantity of nitrogen and phosphorus generated by the activity is 15,600 kg/N and 5,850 kg/P based on figures available in the Nitrates Regulations (Annual nutrient excretion rates for livestock). Aside from potential pollution and nuisance, which are negative in nature, the application of organic fertiliser to land as fertiliser is a positive effect of the development and contributes to circular economy.

Accidents:

The likelihood of accidental organic material emissions occurring is considered low in light of the measures outlined in the '*Prevention of Accidents*' section below and in light of the proposed conditions/mitigation measures discussed above.

9.2 Wash water

Wash water is generated by the activity every 6-8 weeks. Prior to washing, the floors will be brushed to reduce the quantity of poultry litter that could potentially enter the wash water system. The wash water will be directed to the wash water storage tank where it will be contained until sent offsite for use as fertiliser. Finally, 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 is considered suitable for use on land as and organic fertiliser and such use is provided for by the Nitrates Regulation and Animal By-Product Regulations.

Assessment and Mitigation:

The quantity of wash water that will be generated by the expanded activity has been calculated to be 112m^3/annum. Wash water from the activity will be collected in one wash water collection tank with an estimated capacity of 54m^3 (net of freeboard). The wash water storage tank and supplementary tanks provide more than the 26-week storage capacity requirement in the Nitrates Regulations.

The applicant has identified that the wash water will be used on approximately 13.5ha of farmland on the applicant's landholding in the vicinity of the activity, outside the boundary to which this licence relates.

The following combination of techniques, regulatory requirements and mitigation measures will further reduce the likelihood of an impact on water and soil quality from organic fertiliser (wash water) and from accidental spillages arising onsite:

- The licensable activity takes place on an impermeable concrete base;
- The poultry litter is dry, thereby reducing the quantity of wash water produced during wash down;
- All houses are thoroughly brushed out and all organic fertiliser is removed from the installation before washing commences, reducing the nutrient content of the resulting wash water;
- No organic fertiliser is stored onsite (other than wash water);
- The provision of 26-weeks' organic fertiliser (wash water) storage capacity is conditioned in the RD;
- The provision of separate storm and wash water collection facilities; and
- The diversion of all wash water to the wash water storage tank.

The RD requires the movements of wash water from the installation to land to be recorded. Furthermore it requires the submission of a completed record of the export (Record 3) to DAFM and for the record to be in accordance with the Nitrates Regulations, as outlined above for poultry litter. The transport and use of wash water as fertiliser in accordance with the Nitrates Regulations and Animal By-Product Regulations will not cause environmental pollution.

The RD requires that records are kept of all organic fertiliser movements offsite and that such records must be available onsite and sent to the DAFM annually.

The RD also requires that:

- A freeboard of at least 200mm from the top of each covered wash water tank and 300mm from the top of uncovered wash water tanks is maintained, as a minimum, at all times;
- The required freeboard must be clearly indicated in the tank;
- The wash water storage tanks must be fitted with high liquid level indicators within three months of the date of grant of this licence;
- All underground and overground storage tanks are assessed within twelve months of date of grant of this licence, and at least once every five years thereafter;
- The storm water discharge points are visually inspected weekly and monitored for BOD or COD as required by the Agency, in accordance with *Schedule C.2.3 Monitoring of Storm Water Emissions*; and
- There will be appropriate storage of materials and wastes, and that the loading and unloading of materials must be carried out in designated areas protected against

spillage and leachate run-off, and that bunding be provided for all tank and drum storage areas.

Accidents:

The RD also requires that accident and emergency response procedures are put in place and that there is an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the installation. The likelihood of accidental organic material emissions occurring is considered low in light of the measures outlined in the '*Prevention of Accidents*' section below and in light of the proposed conditions discussed above.

9.3 EIA on Organic Fertiliser

For the purposes of EIA, the environmental factors potentially affected by organic fertiliser from the activity include: Population and human health, air, water, soil, land and biodiversity.

Direct and Indirect Effects:

The above assessment of the installation's organic fertiliser generation indicates that under normal operation, the activity is not likely to cause a significant direct effect on the above environmental factors. Odour effects could occur on or near spreadlands outside the installation on occasions but any effects will most likely be of short duration. I consider that the transport and use of organic fertiliser as fertiliser in accordance with the Nitrates Regulations and Animal By-Product Regulations will not cause environmental pollution. I am satisfied that there will be no adverse significant effects on the environment from landspreading which is subject to the controls of the Nitrates Regulations or from the handling onsite of organic fertiliser (poultry litter) from the activity or from its use in compost production. The likelihood of accidental releases to the environment, as a result of the licensable activity is low in light of the measures outlined in the '*Prevention of Accidents*' section below and the conditions discussed above. I am satisfied that there will not be significant effects on the environment from organic fertiliser generated by the activity.

Cumulative Effects:

From a cumulative effects perspective, the installation is in a rural area where the predominant farming activities involve the rearing of livestock. All farms with livestock in the area will produce a quantity of organic fertiliser which they are individually obliged to manage and may use as fertiliser in accordance with the Nitrates Regulations.

According to 'Ireland's Informative Inventory Report 2019' (EPA 2019), which contains the most recent data, ammonia emissions in 2017 from the poultry sector were 5.17kt. Approximately 3.4% 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. 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 draft Code of Good Agricultural Practice as referred to earlier in this report will include guidelines on topics including inter alia low emission spreading and fertiliser management. The organic fertiliser generated by the activity represents a negligible quantity relative to the quantity of organic fertiliser arising from the livestock sectors in Ireland (cattle, sheep, pigs, poultry).

The National River Basin Management Plan (2018-2021) was published in April 2018. Over the period of the next river basin planning cycle, there will be initiatives such as significant

investments in nutrient storage and low-emission spreading equipment (€395 million allocated under the Targeted Agricultural Modernisation Scheme (TAMS), 6,000 inspections by LA/DAFM personnel, the deployment of 43 local authority investigative assessment personnel and 30 sustainability advisors promoting agricultural best practice in 190 Areas for Action nationally.

Decisions on Priority Areas for Action were made through the local-authority-led regional structures, supported by the EPA's scientific analysis and evidence base. It is noted that 11 of the 15 priority areas for action in this region (Cavan/Monaghan) have agriculture listed as a pressure. The TAMS scheme will promote targeted uptake in these areas, an initiative that will be supported by the EPA through the Water Policy Advisory Committee (WPAC) and associated committees. The EPA will continue our enforcement of EPA licences on a risk based approach and the Catchment Unit will continue to assess environmental outcomes.

Targeted monitoring as envisaged under the National River Basin Management 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.

In addition, there are no other licensed installations or activities in the vicinity where there could be a significant risk of release of organic fertiliser or other substances to ground that could lead to likely or significant cumulative effects on groundwater, soil, surface water or habitats when considered in tandem with the activities at this installation.

9.4 Overall conclusions in relation to organic fertiliser

Based on the above assessment of the organic fertiliser from the installation, direct, indirect and cumulative effects are identified, described and assessed above.

We are satisfied that there will not be significant effects on population and human health, air, water, soil, land and biodiversity or any other aspect of the environment from organic fertiliser generated by the operation of the activity, when the activity is operating in accordance with the conditions of the RD.

10. Use of Resources

The operation of the installation involves the consumption of water, gas and electricity. The estimated existing and proposed quantities are given below.

Resource	Quantity per annum - existing	Quantity per annum - proposed
Electricity	22 MWh	65 MWh
Water (Public Supply & Well)	1,100 m^3	3,250 m^3
Liquified Petroleum Gas	5,940 m^3	17,540 m^3
Feed	624 tonnes	1,780 tonnes
Diesel		Only when electricity supply interrupted

Assessment and Mitigation:

- Energy

  Electricity is used to power all processes onsite. The electricity supply is backed-up by the offsite generator. Heating for the poultry houses is primarily provided by gas. All buildings are insulated to reduce the requirement for gas for heating. A back-up generator is used to provide electricity onsite in the event of a power cut.

- Water

  Water for the activity is provided by the Tyholland/Glaslough Group Water Scheme. There is one recently bored well will also be used. The installation is located on the border between the Monaghan groundwater body (IEGBNI_NB_G_012) and the Aughnacloy groundwater body (IEBGNI_NB_G_007), both have 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. In accordance with the European Union (Water Policy) (Abstractions Registration) Regulations 2018 (S.I. No. 261 of 2018) those who abstract 25m^3 (25,000 litres) of water or more per day are required to register their water abstraction with the EPA.

  The poultry houses will be physically cleaned of organic fertiliser and brushed/blown down to minimise washing and water consumption. The RD requires the applicant to install and maintain a water meter on all water supplies serving the installation, to maintain records of water usage, to identify opportunities to reduce water use, and reduce the potential generation of wash water onsite.

- Feed

  Feed formulation is adjusted in relation to protein, energy, mineral and vitamins to match the bird's varying requirements throughout its lifecycle. This practice minimises excretion and maximises meat quality. Feed is supplied by specialist suppliers and stored in storage bins/silos adjacent to the poultry house(s). The RD includes requirements in relation to the efficient use of feed, as well as nutritional management in relation to the reduction of nutrients excreted.

- Medication and Disinfectant

  Medication and disinfectant will be stored in designated areas on the farm.

The use of natural resources by the activity will not be significant. Only materials necessary for the activity will be used or stored on site.

Annex III of the IED specifies criteria for the determination of BAT, including the consumption and nature of raw materials (including water) used in the process and energy efficiency. The RD includes conditions dealing with water, energy and raw material use, reduction and efficiency onsite.

Accordingly, and in the application of BAT, Condition 7 of the licence provides for the efficient use of resources and energy in all site operations. It requires a Resource Use and Energy Programme to be established and an energy audit to be carried out and repeated at intervals as required by the Agency. Resource use efficiency is further conditioned in the RD in accordance with BAT 5 (efficient use of water), BAT 8 (efficient use of energy) and BAT 29 (Resource consumption). The BREF on Energy Efficiency should be referred to in the context of the Resource Use and Energy Programme.

The RD includes conditions in relation to the storage and handling of materials in order to prevent leaks or spillages.

10.1 EIA on Use of Resources

For the purposes of EIA, the environmental factors potentially affected by the use of resources from the activity include: Material assets, water, soil, land and biodiversity.

Direct and Indirect Effects:

The above assessment of the installation's resource use indicates under normal operation, the activity is not likely to cause a significant direct effect on the above environmental factors. The likelihood of accidental releases of these substances to the environment, as a result of the licensable activity is low in light of the measures outlined in the '*Prevention of Accidents'* section below and the conditions discussed above. We are satisfied that there will not be significant effects on the environment from the use of natural resources from the operation of the activity.

Cumulative Effects:

The installation is in a rural area with most of the developments in the vicinity of the installation being dwelling houses and farm yards, all of which would use minimal amounts of resources. Therefore, significant cumulative effects on the environment from the use of resources by this installation and other developments are not likely.

10.2 Overall conclusions in relation to resource use

Based on the above assessment of the installation's use of resources, the direct, indirect and cumulative effects have been identified, described and assessed, and are detailed above.

We are satisfied that there will not be significant effects on material assets, water, soil, land and biodiversity or any other aspect of the environment from the proposed resource use from the operation of the activity, when the activity is operating in accordance with the conditions of the RD.

11. Prevention of Accidents and Cessation

11.1 Prevention of Accidents

Measures to be taken to prevent accidents and limit consequences

The application details a range of measures that will help to prevent accidents at the installation and limit their environmental consequences. These include

- The provision and maintenance of adequate wash water storage facilities;
- The assessment and maintenance of the integrity of tanks;
- The provision of more than 26-weeks organic fertiliser storage capacity (onsite / offsite);
- The self bunding of the generator;
- The provision of emergency response and corrective action procedures which will be put in place/which are in place;
- The diversion of the storm water collection system to wash water holding tank during cleaning;
- The separation of wash water and clean storm water;
- The assessment and maintenance of the integrity of the wash water network as required;
- The regular visual monitoring and inspection of the storm water discharge points;
- The provision of concrete aprons around the new poultry house; and

- No storage of organic fertiliser from poultry litter onsite, other than what is under the birds during the cycle at the installation.

Condition 9 of the RD includes a requirement to ensure that a documented accident prevention procedure is in place that addresses the hazards onsite, particularly in relation to the prevention of accidents with a possible effect on the environment, as well as responding to emergencies to minimise the effect on the environment. The RD requires that the procedure is reviewed annually and updated as necessary.

In addition, the RD specifies the minimum organic fertiliser storage capacity to be maintained, assessment of organic fertiliser storage tanks, control and management of organic fertiliser onsite, storm water monitoring etc.

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.

Conclusion:

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.

11.2 Cessation of Activity

The application details a range of measures to be employed upon cessation of the activity. These include:

- Operations onsite will cease;
- Usual materials in stock would be disposed of or distributed in the same way as during the normal operation of the enterprise;
- Saleable stock will be sold to the usual outlet;
- Wastes will be removed as per normal procedure;
- Feed and medicines will be returned to suppliers;
- The buildings, once empty of stock, would be washed clean and all wash water would be removed as per normal procedure; and
- If a Class A disease incident occurs, any non-saleable stock would be humanely put down and consigned either for rendering or for incineration. The actions undertaken would be under the supervision of Veterinary Division of Department of Agriculture, Food and the Marine.

Condition 10 of the RD specifies decommissioning and residuals management requirements. Condition 12 of the RD requires that an annual statement is provided in the AER as to the measures taken or adopted at the site, in relation to the prevention of environmental damage, for remedial actions following closure/decommissioning or accidents/incidents, as may be associated with the carrying on of the activity. The applicant must have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) and, as appropriate, Guidance on Financial Provision for Environmental Liabilities (2015) when doing so.

11.3 Baseline Report

Article 22(2) of the IED requires that where the 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 operator must prepare and

submit to the competent authority a baseline report before starting operation of an installation.

A baseline screening assessment was undertaken by the applicant in accordance with Stages 1 to 3 of the European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions.

The applicant states that the activity does involve the use of small amounts of hazardous substances including fuels, disinfectants and fluorescent tubes. However, they state that limited quantities will be stored onsite at any one time and materials will be stored in designated areas with minimal if any risk of soil/groundwater contamination; therefore, a baseline report in accordance with Section 86B of the EPA Act 1992 as amended was not provided with the licence application.

Considering the small quantities of substances used, 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. Having regard to the possibility of soil and groundwater contamination and to the European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU the Agency is satisfied that a baseline report is not required.

The RD does not require that relevant hazardous substances are monitored in soil and groundwater, due to the reasons set out above.

11.4 EIA on Accidents and Cessation

The environmental factors potentially affected by accidents at the installation, or the cessation of activity, include: Material Assets, Population and Human Health, Biodiversity, Air, Soil and Water.

Direct and indirect effects

Accidental emissions are addressed in this report (sections on air, water, noise, waste generation, use of resources, prevention of accidents). We consider 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 an accidental emission should one occur.

Upon completion of implementation of the decommissioning and residuals management requirements, the installation would be in a suitable state for future use and would not pose a risk to public health and safety or the environment. The installation buildings and common external utility features will remain in a suitable condition for future site users.

Given the above, and noting the general low risk nature of the site processes we consider that the proposed activity is not likely to lead to residual issues upon eventual closure of the site. We are further satisfied that there will not be significant effects on the environment from cessation of the activity provided the measures specified in Condition 10 of the RD have been correctly implemented.

Cumulative effect:

We consider it very unlikely that accidents or closure would occur concurrently at neighbouring installations that would give rise significant effects on the environment.

The site is in a rural location and it is considered that an accident/closure at the site would not give rise to significant cumulative effects due to the scale of the installation and surrounding sites' activities.

14.4 Overall conclusions in relation to Accidents and Cessation

Based on the above assessment of accidents and cessation, the direct, indirect and cumulative effects have been identified, described and assessed, and are detailed above.

We are satisfied that there will not be significant effects on Material Assets, Population and Human Health, Biodiversity, Air, Soil and Water or any other aspect of the environment from accidents or cessation from the operation of the activity, when the activity is operating in accordance with the conditions of the RD.

12. Other Matters relating to EIA

12.1 Effects on landscape, material assets and cultural heritage

(a) Cultural heritage including archaeology and architecture

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 onsite.

There are no buildings or features of architectural significance at or near the site of the installation. There is a souterrain 0.88km from the site. It is very difficult to envisage any pathway by which emissions from the operation of the activity could impact any feature which may be present.

(b) The Landscape

Any disturbance of the landscape or the cultural heritage of an area has the potential to impact on human beings and their enjoyment of the surrounding area. These matters are dealt with in the decision of the planning authority to grant planning permission for the developments onsite.

The installation is in an agricultural area that is not highly populated. Emissions from the operation of the activity will not impact on the agricultural landscape and culture of the area.

(c) Material assets

Material assets are taken to mean roads, built services and waste generation. The latter item is presented in Section 8 of this report. The impact of traffic movements associated with the development is dealt with in the decision of the planning authority to grant planning permission for the poultry unit. 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. We are satisfied that there will not be significant effects on materials assets from the operation of the activity, as respects the matters that come within the functions of the Agency.

No additional mitigation measures have been proposed in relation to (a), (b) and (c) above.

Direct, Indirect and Cumulative Effects:

There are no significant cumulative, direct or indirect effects on the material assets, landscape or cultural heritage from the site likely to arise as it maintains the area's agricultural heritage. Emissions from the operation will not affect the agricultural landscape and culture of the area.

12.2 Overall Conclusions in relation to effects on landscape, material assets and cultural heritage from the activity

Based on the above assessment of the effects on material assets, cultural heritage or the landscape, direct, indirect and cumulative effects are identified, described and assessed above.

We are satisfied that there will not be significant effects on landscape, material assets and cultural heritage from the operation of the activity.

Accordingly, if the activity is carried out in accordance with the RD and the conditions attached, the operation of the activity will not cause environmental pollution.

13. Environmental Impact Assessment

13.1 Statutory Provisions

This EIA has had regard to the information provided by the applicant, received through consultation, written submission, as well as considering any supplementary information where appropriate and includes the licence assessment completed in this Report.

We have carried out an examination, analysis and evaluation of the information provided by the applicant, including the EIAR, received through consultation, written submission, as well as considering any supplementary information, where appropriate. A summary of the submission made by the planning authorities is provided in Section 3 of this report. A summary of the submissions made by third parties have been set out at Section 4 of this report.

Having regards to the requirements of the EIA Directive 2014/52/EU, I am satisfied that:

(i) the environmental effects arising as a consequence of the proposed activity have been satisfactorily identified, described and assessed in accordance with the requirements of Article 3;
(ii) the information contained in the EIAR has been prepared by competent experts and complies with the provisions of Article 5;
(iii) the EIAR contains a non-technical summary in accordance with the requirements of Article 5;
(iv) the public have been given early and effective opportunity to participate in the environmental decision-making procedure.

13.2 Alternatives

The Directive 2014/52/EU requires:

a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;

Annex IV of the Directive (Information for the EIAR) provides more detail on 'reasonable alternatives':

A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.

The matter of alternatives is addressed in Chapter 3 of the EIAR. The consideration of alternative locations, size, layout, processes and design were considered; however, the current project was considered the most appropriate due to, among other things, its proximity to applicant's current poultry unit and farm, its suitability and efficiency for rearing broilers, its integration into the landscape and the restraints of the current site. A poultry rearing unit has been located on the current site since the late 1980s.

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

13.3 Likely Significant Direct and Indirect Effects

The likely significant direct and indirect effects of the development are considered in this Inspector's Report under the following headings, after those set out in Article 3 of the EIA Directive 2014/52/EU:

(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).

13.3.1 Population & human health

Overall Conclusions:

The likely significant direct and indirect effects of the development on population and human health has been identified, described and assessed in Sections 5, 6, 7, 8, 9 and 11 of this report. We have examined all the information on population and human health, provided by the applicant, received through consultation, written submission as well as considering any supplementary information, where appropriate. We are satisfied that the potential significant effects identified will be avoided, managed and mitigated by the measures proposed and through the conditions of the RD. We, therefore, are 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.

13.3.2 Biodiversity

Overall Conclusions:

The likely significant direct and indirect effects of the development on biodiversity has been identified, described and assessed in Sections 5, 6, 7, 8, 9, 10 and 11 and Section 14 on appropriate assessment of this report. We have examined all the information on biodiversity provided by the applicant, received through consultation, written submission, as well as considering any supplementary information, where appropriate. We are satisfied that the potential significant effects identified will be avoided, managed and mitigated by the measures proposed and through the conditions of the RD. We are, therefore, satisfied that the operation of the activity is not likely to have any unacceptable significant direct or indirect effects in terms of biodiversity.

13.3.3 Land and soil

Overall Conclusions:

The likely significant direct and indirect effects of the development on land and soil have been identified, described and assessed in Sections 6, 9, 10, 11 and 12 of this report. We have examined all the information on land and soil provided by the applicant, received through consultation, written submission, as well as considering any supplementary information, where appropriate. We are satisfied that the potential significant effects identified will be avoided, managed and mitigated by the measures proposed and through the conditions of the RD. We, therefore, satisfied that the operation of the activity is not likely to have any unacceptable significant direct or indirect effects in terms of land and soil.

13.3.4 Water

Overall Conclusions:

The likely significant direct and indirect effects of the development on water have been identified, described and assessed in Sections 6, 9, 10 and 11 of this report. We have examined all the information on emission to sewer discharges; storm water discharges; and emissions to ground and groundwater provided by the applicant, received through consultation, written submission, as well as considering any supplementary information, where appropriate. We are satisfied that the potential effects identified will be avoided, managed and mitigated by the measures and through the conditions of the RD. We are, therefore, satisfied that the operation of the activity is not likely to have any significant unacceptable direct or indirect effects in terms of waste water discharges; storm water discharges; or emissions to ground or groundwater.

13.3.5 Air

Overall Conclusions:

The likely significant direct and indirect effects of the development from emissions to air have been identified, described and assessed in Sections 5 and 8 of this report. We have examined all the information on air provided by the applicant, received through consultation, written submission, as well as considering any supplementary information, where appropriate. We are satisfied that the potential significant effects identified will be avoided, managed and mitigated by the measures proposed and through the conditions of the RD. We are, therefore, satisfied that the operation of the activity is not likely to have any significant unacceptable direct or indirect effects in terms of air.

13.3.6 Climate

Overall Conclusions:

The likely significant direct and indirect effects of the development under the heading climate has been identified, described and assessed in Section 5 of this report. We have examined all the information on climate provided by the applicant, received through consultation, written submission, as well as considering any supplementary information, where appropriate. We are satisfied that the significant potential effects identified will be avoided, managed and mitigated by the measures proposed and through the conditions of the RD. We are, therefore, satisfied that the operation of the activity is not likely to have any significant unacceptable direct or indirect effects in terms of climate.

13.3.7 Landscape, Material Assets and Cultural Heritage

Overall Conclusions:

The likely significant direct and indirect effects of the development under the headings material assets, cultural heritage and the landscape has been identified, described and assessed in Sections 8, 10 and 12 of this report. We have examined all the information on material assets and cultural heritage and the landscape provided by the applicant, received through consultation, written submission, as well as considering any supplementary information, where appropriate. We are satisfied that the potential significant effects identified will be avoided, managed and mitigated by the measures proposed. We are, therefore, satisfied that the operation of the activity is not likely to have any significant unacceptable direct or indirect effects in terms of material assets, cultural heritage and the landscape.

13.3.8 Interactions of the foregoing

We have considered the interaction between population and human health, biodiversity, land, soil, water, air, climate, landscape, material assets, cultural heritage and the interaction of the likely significant effects identified throughout this report. The interaction between factors as a result of the operation of the installation, and as addressed in the earlier parts of this report, are summarised below.

Positive effects on human beings from the activity will include provision of food supply and employment associated with the installation. These are outside the Agency's remit.

Population and human health and biodiversity

Potential effects from emissions to air may impact on population and human health, air and biodiversity as demonstrated in the Emissions to Air section above. Such impacts are not considered to be significant.

Water, soil, biodiversity and population and human health

Accidental discharges or spills may directly and indirectly effect soil, ground water quality, surface water quality downstream, aquatic habitats and aquatic flora and fauna. As demonstrated above, in earlier parts of this report such effects are considered not to be likely or significant.

Overall Conclusion:

We are satisfied that the potential significant effects identified will be avoided, managed and mitigated by the measures proposed and through the conditions of the RD. We are, therefore, satisfied that the operation of the activity is not likely to have any significant unacceptable direct or indirect effects in terms of the interaction between the foregoing environmental factors.

13.4 Cumulative Effects

Overall Conclusion:

The significant cumulative effects of the development have been identified, described and assessed in this report. We have examined all the information provided by the applicant, received through consultation and written submission. We are satisfied that the potential

significant effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD.

13.5 Vulnerability of the Project

The Seveso Directive[6] and Regulations are not applicable at the installation. The risks of accidents associated with the activity are dealt with in Section 11 of this report. Consequently, no specific mitigation measures have been proposed in relation to these effects.

Conclusion:

The vulnerability of the project to risks of major accidents and/or disasters has been identified, described and assessed. We have examined all the information provided by the applicant, received through consultation, written submission, as well as considering any supplementary information, where appropriate. We are satisfied that the potential significant effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD.

13.6 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 submissions from the planning authorities, and the 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
- Accidental leakages or spills

Having assessed those potential effects, we conclude as follows:

- Emissions to air will be mitigated through: imposing emission limit values; 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; 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 licence.

Having regard to the effects (and interactions) identified, described and assessed throughout this report, we consider that the monitoring, mitigation and preventative measures proposed will enable the activity to operate without causing environmental pollution, subject to compliance with the licence.

Accordingly, if the activity is carried out in accordance with the RD and the conditions attached, the operation of the activity will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of

[6] 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.

accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

14. Appropriate Assessment

Appendix 1 lists the European Sites assessed, their associated qualifying interests and conservation objectives.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the proposed activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, attention was paid to the European Site(s) at Sliabh Beagh SPA (RoI), Sliabh Beagh-Mullaghfad-Lisnaskea SPA (NI), Magheraveely Marl Loughs SAC (NI) and Sliabh Beagh SAC (NI).

The proposed 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 proposed activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the proposed activity was not required.

This determination was based on the following reasons:

- The installation is not located within a European site.
- The is no surface water pathway connecting the installation to a European site.
- The risk of surface water or groundwater contamination because of accidental emissions during washing activities or from spillage from the wash water tanks, is minimal.
- The litter generated at the installation has high dry matter content and remains within the 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.
- 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.
- The Agency notes that the 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 Special Area of Conservation.
- Based on the use of SCAIL Agriculture, ammonia emissions and nitrogen deposition from this activity are not predicted to have a significant impact on sensitive receptors within the European Sites listed above.
- Noise levels from poultry installations are very low and as the nearest European Site is 10.8km (direct distance) northwest of the installation (Sliabh Beagh SAC), it is considered that noise will not impact on the qualifying interests within that European Site.

- Given the small scale of emissions associated with these activities, it is considered that the activity in combination with other plans or projects will not have a significant effect on any protected sites.

15. Fit & Proper Person Assessment

The Fit & Proper Person test requires three elements of examination:

1) Technical Ability

The applicant, Mr. Brian McArdle is the owner/operator of this installation. Mr. McArdle is an experienced operator and has run a poultry operation on this site since the late 1980s. The applicant has demonstrated the technical knowledge required.

2) Legal Standing

The applicant stated that neither the applicant nor any relevant person has relevant convictions.

3) Financial Standing/Provision

Due to the nature of the activity, it is not likely to lead to significant environmental liabilities upon cessation. The applicant has supplied a declaration confirming that he will meet any financial commitments for liabilities associated with the activity or in consequence of ceasing to carry out the activity.

It is my view, that the applicant can be deemed a Fit & Proper Person for the purpose of this application.

16. Capacity of Installation

Schedule A of the RD limits the number of birds housed onsite to 65,000 broilers. This is the capacity that is specified in the application, the EIAR prepared and the planning permission granted for the installation.

17. Site Visit

A site visit was not undertaken by the Environmental Licensing Programme (ELP). Sufficient information was available in the application, additional information submitted and in the HSE site visit report, to allow a recommendation to be made without the need for an ELP site visit.

18. Cross Office Consultation

The Environmental Licensing Programme (ELP) and the Office of Environmental Enforcement (OEE) have liaised in relation to licensing of the intensive agricultural sector over a number of years. This in part has informed the assessment of this application.

19. Charges

The annual enforcement charge recommended in the RD is €2,679. This is considered appropriate to cover the costs associated with the enforcement of the RD. This is inline with similar installation in this sector.

20. Recommendation

The RD specifies the necessary measures to provide that the installation must 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 EIA. The RD gives effect to the requirements of the

Environmental Protection Agency Acts 1992 as amended and has regard to submissions made.

This report was prepared by Máire Buckley, Mary Sheehan, Pól O Seasnáin, Éimer Godsil and Niamh O'Donoghue.

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

Procedural Note

In the event that no objections are received to the Proposed Determination of 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

1. AA table

Appendix 1: List of European sites assessed, their associated qualifying interests and conservation objectives.

	European Site ***(Site code)***	***Distance / Direction from installation***	***Qualifying Interests*** *(* denotes a priority habitat)*	***Conservation objectives***
1	Slieve *Beagh SPA (004167)*	*10.8km west of the installation*	***Species*** *Hen Harrier (Circus cyaneus)*	*As per NPWS (2015) Conservation objectives for Slieve Beagh SPA (004167). Generic version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (dated 15/08/2016).*
2	*Magheraveely Marl Loughs SAC (UK0016621)*	*17.5km southwest of the installation*	***Habitats*** *Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. Calcareous fens with Cladium mariscus and species of the Caricion davallianae * Alkaline fens* ***Species*** *White-clawed Crayfish (Austropotamobius pallipes)*	*As per Magheraveely Marl Loughs SAC (UK0016621) Conservation Objectives. Version 2. Department of Environment Northern Ireland[1] (dated 01/04/2015)*
3	Slieve *Beagh SAC (UK0016622)*	*16.2km northwest of the installation*	***Habitats*** *Natural dystrophic lakes and ponds* *European dry heaths* *Blanket bogs (*if active bog)*	*As per Slieve Beagh SAC (UK0016622) Conservation Objectives. Version 2. Department of Environment Northern Ireland[1] (dated 01/04/2015)*
4	Slieve Beagh-Mullaghfad-Lisnaskea SPA (UK902302)	18km west of the installation	**Species** Hen Harrier (Circus cyaneus)	*As per Slieve Beagh-Mullaghfad-Lisnaskea SPA (UK9020302) Conservation Objectives. Version 3. Department of Environment Northern Ireland[1] (dated 01/04/2015)*

[1] Currently known as Department of Agriculture, Environment and Rural Affairs

2. Relevant European (and international) legal instruments

The following European and international legal instruments are regarded as relevant to this application assessment and have been considered in the drafting of the RD.

Industrial Emissions Directive (IED) (75/10/EU)
Environmental Impact Assessment (EIA) Directive (85/337/EEC, as amended)
Habitats Directive (92/43/EC) & Birds Directive (2009/147/EC)
Water Framework Directive [2000/60/EC]
Air Quality Directives (2008/50/EC and 2004/107/EC)
Environmental Liability Directive (2004/35/CE)
Groundwater Directive (80/68/EEC) and 2006/118/EC
Animal by-Products Regulation (EC) No 1069/2009
Nitrates Directive, 91/676/EEC
Energy Efficiency Directive.

3. Other BREF documents and National BAT notes relevant to this assessment

Sectoral Commission Implementing Decisions	Publication date
Commission Implementing Decision 2017/302/EU for the Intensive Rearing of Poultry or Pigs	February 2017
Sectoral BREF	Publication date
Reference Document on the Best Available Techniques for the Intensive Rearing of Poultry or Pigs	February 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