

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

Signed: *Marie O'Connor*

Date: 12/04/2023



OFFICE OF ENVIRONMENTAL SUSTAINABILITY

INSPECTOR'S REPORT ON AN INDUSTRIAL EMISSIONS LICENCE APPLICATION, LICENCE REGISTER NUMBER P1142-01

TO: TOM RYAN, DIRECTOR

FROM: Philip Stack, ELP Inspector

DATE: 12 April 2023

| | |
|---|---|
| Applicant: | Laragh House Farms Limited |
| CRO number: | 648251 |
| Location/address: | Killycrone, Stradone, County Cavan |
| Application date: | 29 January 2021 |
| Class of activity (under EPA Act 1992 as amended): | 6.1(a): The rearing of poultry in installations where the capacity exceeds 40,000 places. |
| Category of activity under IED (2010/75/EU): | 6.6(a): Intensive rearing of poultry with more than 40,000 places for poultry. |
| Main CID: | CID (EU) 2017/302 (15 February 2017). Establishing (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for the intensive rearing of poultry or pigs. |
| All relevant CIDs, BREF documents and legislation are listed in appendices of this report. | |
| Activity description/background: Expansion of an activity for the rearing of poultry (broilers) in an installation with a capacity increase from 43,000 to 143,000 birds. | |
| Additional information received: | Yes (28 July 2021, 07 March 2022, 13 June 2022, 09 August 2022, 19 August 2022, and 11 January 2023) |
| No of submissions received: | 7 |
| Environmental Impact Assessment required: Yes | Stage 2 Appropriate Assessment required: Yes |
| Environmental Impact Assessment Report submitted (EIAR): Yes (29 January 2021) | Natura Impact Statement (NIS) submitted: Yes (11 January 2023) |
| Site visit: None | Site notice check: 15 February 2021 |

1. Introduction

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

Laragh House Farms Limited operates a poultry (broiler) rearing farm at Killycrone, Stradone, County Cavan. Details of the current and proposed site capacity and infrastructure are provided in Table 1.1 below.

The installation consists of three poultry houses and the applicant is proposing to build an additional two new poultry houses.

Table 1.1. Application details.

| | Existing | Proposed |
|----------------------|----------|----------|
| Bird type | Broiler | Broiler |
| Current numbers | 43,000 | 143,000 |
| No. of animal houses | 3 | 5 |

The applicant is currently operating the installation at 40,000 - 43,000 places. The applicant and the EPA's Office of Environmental Enforcement (OEE) were notified that this is above the licensing threshold.

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

2. Description of activity

The installation is located in a rural location, with most development near the installation consisting of dwelling houses and farmyards. Poultry farming has been carried out on this site since the 1980s. The present enterprise provides part-time employment for the applicant.

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 under the Bord 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 site and taken to the processing installation (at approximately 5 – 7 weeks). At the end of each rearing cycle the houses are destocked, and the birds are sold for processing. Following the removal of poultry litter (also termed organic fertiliser¹), the

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.

poultry houses are cleaned and left empty for a period of 1 – 2 weeks, to allow for complete drying after the cleaning process. The houses are then restocked.

The type of broiler house used for this activity is a simple closed building of block and timber/metal construction on an impervious concrete base. The houses are and will be thermally insulated, with a computer-controlled ventilation system and artificial lighting. Automatic feeding and ventilation systems operate on a 24-hour basis. The solid flooring of each broiler house is and will be bedded with wood shavings/chopped straw over its entire area immediately prior to housing each new batch brought from the hatchery. The principal inputs to the operation are bedding, feed, water, veterinary medicines and energy (electricity, diesel for back-up generator, and gas for heating). The main by-product of poultry rearing is organic fertiliser (poultry litter and wash water). These are discussed in further detail below.

3. Planning Status

A number of planning applications have been made by the applicant for the area within the installation boundary. These are summarised in Table 3.1 below.

Table 3.1: Relevant planning permissions for the site

| Planning Reference | Grant Date | Description |
|---------------------------|-------------------|--|
| 18/563 | 4 April 2019 | Construction of one new poultry house with capacity for 50,000 broilers to accommodate an overall capacity on the farm of 93,000 bird places. |
| 19/521 | 27 March 2020 | Construction of another new poultry house with capacity for 50,000 broilers to accommodate an overall capacity on the farm of 143,000 bird places. |
| 20/319 | 23 October 2020 | Retention permission for two existing poultry houses dating from the 1980s and an extension to another existing poultry house. |

The development authorised under planning permissions ref. no. 18/563 and 19/521 has not yet been completed.

Details of these planning permissions have been provided in the application form.

The applicant has submitted the EIAR associated with planning permission 19/521.

Having reviewed the planner’s reports for previous planning permissions, it is considered that the EIAR submitted with the licence application, along with the licence application and the further information received, contains adequate information to inform the Agency’s assessment and that the EIARs relating to previous planning permissions are not required for the Agency’s assessment.

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

Schedule A of the RD limits the number of birds housed onsite to 143,000 broilers. This is the capacity that is specified in the application, in the EIAR submitted in support of the application, and in the planning permissions granted for the installation.

4. Environmental Impact Assessment (EIA) Screening

In accordance with Section 83(2A) of the EPA Act 1992 as amended, the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an EIA, where the activity meets the criteria outlined in Section 83(2A)(b) and 83(2A)(c).

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

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

- 17(a) Installations for the intensive rearing of poultry with more than 85,000 places for broilers.

An EIAR was submitted to the Agency as part of the application on 29 January 2021. This is addressed in the 'EIA' Section later in this report.

5. Best Available Techniques and CID

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

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

6. Emissions

6.1 Emissions to Air

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

6.1.1 Channelled Emissions to Air

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

6.1.2 Fugitive Emissions

The only fugitive emissions from this sector are dust, odour and ammonia. These are discussed below. The nearest third-party dwellings potentially affected by fugitive emissions are detailed in Table 6.1 below.

Table 6.1: Nearest third-party residential dwellings

| Distance from Site (and number of dwellings) | Direction from Site |
|---|----------------------------|
| 130-170 m (4) | East |
| 190-270 m (2) | North |
| 265 m (1) | Northwest |
| 475 m (1) | West |

6.1.3 Dust

Dust may arise from the expulsion of warm air from ventilation systems onsite, vehicle movements, removal of organic fertiliser, filling of meal storage bins and the loading and unloading of animals during periods of dry weather. Minimal dust impact may occur locally within the installation boundary during site operations.

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

The applicant has stated that good housekeeping at the installation and keeping the concrete surface in a clean condition will minimise dust from the installation. The RD specifies the following to prevent the generation and emission of dust:

- That dust from the activity shall not result in an impairment of, or an interference with amenities or the environment beyond the installation boundary (Condition 5).
- To use one or a combination of the techniques listed in BAT 11 to prevent or reduce dust emissions from the poultry houses (Condition 6).

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

6.1.4 Odour

The potential impact from odour from poultry house odours is minimal as houses are stocked at optimum levels, adequately ventilated, and the litter kept as dry as possible. Odour may arise when removing the organic fertiliser from the houses and when the houses are cleaned; however, this is deemed to be minor because it is removed just once in every 6-8 week cycle (approximately seven times per annum) and takes 4-5 hours to completely remove the organic fertiliser from the houses. All organic fertiliser from the houses will be removed offsite by a registered contractor.

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

The RD specifies the following odour control conditions:

- That odour from the activity shall not result in an impairment of, or an interference with amenities or the environment beyond the installation boundary (Condition 5).
- To use a diet formulation and nutritional strategy to reduce the total nitrogen and phosphorus excreted, as per BAT 3 and BAT 4 (Condition 6).
- To use a combination of the techniques listed in BAT 13 to prevent/reduce odour emissions/impact from the site (Condition 6).
- That carcasses stored onsite will be covered in covered leak-proof containers and transported offsite in covered, leak proof containers at least fortnightly (Condition 8).
- That organic fertiliser shall not be stored in the open pending its collection (Condition 8).

6.1.5 Ammonia

The report *Ireland's Informative Inventory Report 2022*² (EPA, 2022) identifies agriculture as the primary contributor (99.4%) to Irish ammonia emissions in 2020, emitting a total of 123.41 kilotonnes (kt) of ammonia in that year. According to that report, ammonia emissions from the poultry sector in 2020 were approximately 4.9 kt. The Department of Agriculture, Food and the Marine (DAFM) has published a *Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture*³, as required by the National Emission Ceiling Directive (NECD).

This installation, once redeveloped, would emit approximately 3.08 tonnes of ammonia per annum. Ammonia emissions from this activity could have the potential to impact sensitive receptors in the vicinity of the installation. The Agency screened the impact of ammonia emissions and nitrogen deposition at European sites using a screening model (SCAIL Agriculture⁴) which indicated potentially elevated ammonia emissions and nitrogen deposition. The model results indicated the potential for the poultry rearing process to contribute to ammonia emissions and nitrogen deposition at the Lough Oughter and Associated Loughs SAC, Lough Oughter SPA, Upper Lough Erne SPA, Upper Lough Erne SAC, and Lough Sheelin SPA. The SCAIL Agriculture screening model is conservative. The screening was based on standard animal housing and did not include the use of low emission housing onsite.

The applicant submitted a full site-specific model (not a screening model), as part of the completion of a Natura Impact Statement (NIS), using more refined details in accordance with the requirements of AG4⁵. However, while the model indicated a reduced contribution from the installation it still indicated the potential for impacts from ammonia in the Lough Oughter and Associated Loughs SAC. Therefore, to mitigate this potential impact from the installation on nearby European sites, the applicant has proposed the installation of low emission housing in accordance with the requirements of the Dutch Ammonia and Livestock Farming Regulation (RAV) to reduce emissions to below that of the current installation.

The RAV list of housing systems have measured and proven emission factors and are referenced in the intensive agriculture BREF document. In addition, forced drying of litter is listed as a technique for reducing ammonia emissions from broiler houses in section 4.13.2 of the CID. The applicant has proposed to construct the two proposed houses, Houses 4 and 5, and retrofit the largest of the existing houses, House 3, to the BLW2017.01.V2 Dutch standard. This standard requires the installation of tube heating in the broiler houses and has an ammonia emission factor of 0.012 kg-NH₃/animal place/year. Proposed Houses 4 and 5 each have a capacity of 50,000

²https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/Ireland-IIR-2022_mergev2.pdf

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

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

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

broilers and House 3 has a capacity of 23,000 broilers. The remaining two houses, Houses 1 and 2, each have a capacity of 10,000 broilers.

The installation currently emits 3.4 tonnes of ammonia per annum if operated up to 43,000 broilers. With the implementation of the low emission housing system in the new and one of the existing buildings, the total ammonia emissions from the installation are estimated to be 3.08 tonnes per annum: approximately 91% of the existing emissions despite the higher stocking rate. The remaining two poultry houses will not be upgraded. The housing standards and emission factors are specified and required in Condition 3 and Schedule B of the RD.

I am satisfied that the combination of housing systems proposed, will be techniques that represent BAT, and have set the emission limits in Schedule B.1 accordingly. The ELVs applied to the poultry houses with low emission housing (Houses 3, 4, and 5) will be at the lower end of the range set out in the CID but are necessary due to the number of animals proposed onsite and the proximity of the installation to Natura 2000 sites.

The Agency has issued a guidance document to assist applicants and licensees in undertaking an assessment of the impacts of ammonia and nitrogen titled "Assessment of the impact of ammonia and nitrogen on Natura 2000 sites from intensive agriculture installations" (EPA, May 2021⁶). The licensee calculated the emissions of ammonia from the existing and proposed activity, as part of the completion of a Natura Impact Statement (NIS). The potential impact of ammonia on Natura 2000 sites was assessed in accordance with the above procedure and concluded that ammonia emissions from the proposed changes to the installation will be less than those from the existing installation due to the use of low emission housing.

In order to prevent ammonia emissions from the proposed activity being greater than the existing activity, the activity in House 3 must be discontinued prior to the activity commencing in either of the new poultry houses. The activity may only be recommenced in House 3 once the EPA is satisfied that the poultry housing has been retrofitted and is operating as per the BLW2017.01.V2 Dutch standard.

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

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

⁶ <https://www.epa.ie/publications/licensing--permitting/industrial/ied/Assessment-of-Impact-of--Ammonia-and-Nitrogen-on-Natura-sites-from-Intensive-Agriculture-Installations.pdf>

- To use one or a combination of the techniques listed in BAT 32 to reduce ammonia emissions to air from each house for broilers (Condition 6).
- To complete an estimation of ammonia emissions from the houses in accordance with BAT 25 (Schedule C).

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

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

6.2 Emissions to Water and Ground

6.2.1 Emissions to Surface Waters

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

6.2.2 Emissions to ground/groundwater

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

6.2.3 Other emissions to ground/groundwater

There are no other emissions to ground or groundwater.

6.3 Storm water discharges

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

All clean storm water will be diverted away from soiled areas of the site by a storm water collection system around each house and will be diverted by gravity for discharge via three discharge points. SW-1 and SW-2 will discharge into field drains on the northeastern and northern boundaries of the site respectively. SW-3 will discharge to ground. SW-1 and SW-2 will have a silt trap installed prior to discharge.

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

Table 6.2: Proposed stormwater discharge point details

| Discharge Reference | Monitored parameters (monitoring frequency) | Abatement | Drainage areas | Discharging to |
|---------------------|--|-----------|-----------------------|---|
| SW-1 | Visual (weekly); COD/BOD (as required by the Agency) | Silt trap | Roofs and clean yards | Piped drain >> Monelty stream >> Laragh River |
| SW-2 (proposed) | Visual (weekly); COD/BOD (as required by the Agency) | Silt trap | Roofs and clean yards | Field drain >> Laragh River |

| | | | | |
|--------------------|---|--|--------------------------|----------------------|
| SW-3 (proposed) | Visual (weekly); COD/BOD (as required by the Agency) | None (silt trap required within three Months) | Roofs and clean yards | Ground (soakaway) |
|--------------------|---|--|--------------------------|----------------------|

The piped drain from SW-1 flows to the Monelty Stream, which joins the Laragh River approximately 0.4 km downstream of the installation. The field drain from SW-2 flows directly to the Laragh River 0.2 km downstream. The Laragh River currently has a WFD status of 'good' (waterbody code: IE_NW_36L010400). There are no identified drinking water abstraction points on the Laragh River within 10 km downstream of the installation.

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

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

The only period during which there is potential for contamination of surface waters is during removal of organic fertiliser from the poultry houses and when the houses are washed out. All wash water will be diverted to four underground wash water storage tanks. Wash water from the yards at the front of the houses flows into the same collection drains which channel clean storm water to the stormwater discharge points, however during the wash out of houses, this wash water is diverted by a diversion chamber into the wash water tanks for storage.

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

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

- That the applicant diverts all uncontaminated storm water to the storm water drainage system (Condition 6).
- That the applicant maintains an up to date site drainage map onsite, and that the storm water drainage system be inspected weekly and maintained properly at all times (Condition 6).
- That the applicant provides and maintains a storm water/rainwater collection and drainage system for all poultry houses onsite (Condition 6).
- That the applicant provides and maintains inspection chambers at the outlets of the storm water drainage system within three months of the date of grant of this licence (Condition 3).
- That the applicant, provides and maintains silt trap at the installation to ensure that all storm water discharges from the paved areas of the installation, pass through a silt trap in advance of discharge (Condition 6).
- That wash water is diverted to the wash water storage tanks prior to the commencement of poultry litter removal and washing of the houses, until such time that wash down activities are completed, and that a written procedure and records of this are maintained (Condition 6).
- That the storm water discharge is visually inspected weekly and monitored for Chemical Oxygen Demand (COD) or Biological Oxygen Demand (BOD) as required by the Agency, in accordance with Schedule C.2.3 *Monitoring of Storm Water Discharges*.

- Schedule C.2.3 *Monitoring of Storm Water Discharges* of the RD further requires the applicant to submit the exact location of the discharge points upon installation and within one month of the date of grant of this licence or prior to discharge in the case of new discharge points.

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

6.4 Noise

The main sources of noise at the installation include the operation of equipment, ventilation systems, the emergency generator, vehicle deliveries/collections, and animals. As mentioned earlier, the nearest third-party residential dwelling is 130 m away.

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

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

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

7. Waste Generation

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

Table 7.1: Estimated waste generation

| <i>Waste Type</i> | <i>Estimated quantity (tonnes) per annum</i> |
|-------------------------|--|
| Animal Carcasses | 18 |
| General Waste | 2 |
| Fluorescent Light Tubes | Minimal |

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

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

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

8. Organic Fertiliser

The installation will necessarily generate organic fertiliser (poultry litter and wash water). Details are given in Table 8.1 below.

Table 8.1: Organic fertiliser

| | <i>Wash water</i> | <i>Poultry litter</i> |
|---|--|---|
| <i>Quantity produced per annum</i> | 250 m ³ | 1,250 tonnes |
| <i>Number of storage tanks/stores onsite</i> | 4 | NA |
| <i>Total storage capacity onsite (ex freeboard)</i> | 90.5 m ³ | 0 tonnes |
| <i>No. weeks storage onsite</i> | 19 (additional storage available offsite) | NA |
| <i>End use offsite</i> | Landspreading by applicant | Mushroom composting or landspreading via contractor |
| <i>Contractor Name</i> | N/A | CLR Co-Op |
| <i>Contractor DAFM No.</i> | N/A | HAC2342 |

Condition 8 of the RD requires that the applicant maintains a record of organic fertiliser sent offsite for use on land or for compost production in accordance with the requirements of the Nitrates Regulations⁷. The applicant will be required under the licence to submit to DAFM by the 31st of December annually, details in relation to the quantity of organic fertiliser (poultry litter and wash water) exported (Record 3 form) offsite. The record must also be maintained at the installation for inspection by the Agency, Local Authority or DAFM. DAFM may use the record of export of organic fertiliser to identify the recipient of the organic fertiliser and the quantity received.

The Animal By-product (ABP) Regulations⁸ impose legal requirements on the applicant, the 'commercial haulier' and the user of the organic fertiliser. These requirements

⁷ S.I. No. 113 of 2022 European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022.

⁸ EU Animal By-Product Regulation (EC) No. 1069 of 2009 and Regulation (EU) No. 142 of 2011, given legal effect by The European Union (Animal By-Product) Regulations 2014 (SI No. 187/2014), laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal By-Products Regulation) as amended.

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.

There will be no landspreading of organic fertiliser conducted and/or permitted within the installation boundary, and consequently there will be no additional ammonia emissions from landspreading activities within the installation boundary. It is important to note that the IE licence relates to the site of the activity for which the licence application is made and does not extend to the lands on which organic fertiliser may be used as fertiliser. The Nitrates Regulations specify when organic fertiliser can be applied to land and the application rates, and these are enforced by the DAFM and Local Authorities. The Climate Action Plan 2023 includes an action to review the maximum nitrogen limits set out in the Nitrates legislation by Q2 2024.

8.1 Organic Fertiliser (Poultry Litter)

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

Poultry litter must be transported either by the applicant (or staff member) or by a haulier registered with the Department of Agriculture, Food and the Marine. Poultry litter is and will be moved offsite by an approved and registered contractor for use in mushroom compost production, and/or by other customer farmers for use as an organic fertiliser.

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

The application includes a letter from CLR Co-op, confirming they take and will continue to take poultry litter from the installation (details given in Table 8.1 above).

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

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

- 34,320 kg N per year, and
- 12,870 kg P₂O₂ per year,

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

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

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

8.2 Wash water

Wash water 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. After washing, the houses are allowed to dry and then disinfectant applied. The wash water may contain insignificant quantities of disinfectant from the previous washing cycle.

Wash water details are given in Table 8.1 above. The wash water storage capacity will be supplemented by additional storage capacity available in the applicant's offsite bovine slurry storage tanks. The total wash water storage capacity is sufficient to meet the 26-week storage capacity requirement in the Nitrates Regulations.

The wash water is considered suitable for use on land as an organic fertiliser and such use is provided for by the Nitrates Regulations and Animal By-product Regulations. The applicant has identified approximately 48.7 ha of farmland on the applicant's landholding in the vicinity of the activity, outside the boundary to which this licence relates, on which the wash water will be landspread. The applicant has demonstrated in the application that the addition of wash water from the installation will not result in a stocking rate above 170 kg organic Nitrogen per hectare stocking rate, the maximum specified in the Nitrates Regulations.

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

- That wash water storage tanks be fitted with high liquid level indicators within three months of the date of grant of this licence and before utilisation for new tanks (Condition 3).
- That all storage tanks are integrity assessed within three months of date of grant of this licence for existing tanks and before utilisation for proposed tanks, and at least once every three years thereafter (Condition 6).
- That the applicant uses a combination of the techniques listed in BAT 6 to reduce the generation of wash water onsite (Condition 6).
- That the applicant uses one or a combination of the techniques listed in BAT 7 to reduce the emissions to water from wash water onsite (Condition 6).
- That a freeboard of at least 200 mm from the top of covered wash water storage tanks and 300 mm from the top of uncovered wash water storage tanks is maintained, as a minimum, at all times and that this is clearly indicated in the tank (Condition 6).
- That the loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off (Condition 8).

9. Energy Efficiency and Resource Use

The operation of the installation involves the consumption of fuel, electricity and resources. The proposed quantities to be used at a capacity of 143,000 broilers are given below.

Table 9.1: Estimated resource usage

| Resource | Quantity per annum |
|----------------------------|--------------------------------|
| Electricity | 143 MWh |
| Liquified Petroleum Gas | 38,600 m ³ |
| Water (Group water scheme) | 6,400 m ³ |
| Feed | 3900 t |
| Kerosene/Diesel | 0.2 t (Back-up generator only) |

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

The Group Water Scheme abstraction, Mountainlodge Water Scheme Co-Operative Society Ltd., is registered with the Agency (Reg. No. R00387-01).

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

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

10. Prevention of Accidents

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

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

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| Potential for an accident or hazardous/emergency situation to arise from activities at the installation | <ul style="list-style-type: none"> - Surface water and/or ground/groundwater contamination during poultry removal and washing. - Surface water and/or ground/groundwater contamination by spillage of organic fertiliser, fuel or other polluting materials. - Surface water and/or ground/groundwater contamination due to leaks from tanks. - Accidental diversion of wash water to storm water drainage system. |
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| | <ul style="list-style-type: none"> - Accidental emissions of noise, dust or odour such as to cause nuisance outside the site boundary. |
| Preventative/Mitigation measures to reduce the likelihood of accidents and mitigate the effects of the consequences of an accident at the installation | <ul style="list-style-type: none"> - The provision and maintenance of adequate wash water storage facilities. - The storage of potentially polluting liquids in bunded areas. - The concreting of yards around houses. - The provision of concrete aprons around wash water areas. - The protection of gas/fuel tanks from accidental damage. - The separation of wash water and clean storm water, including diversion of the storm water collection system to wash water holding tanks during cleaning. |
| Additional measures provided for in the RD | <ul style="list-style-type: none"> - Integrity assessment and maintenance of the wash water network and poultry house floors as required (Condition 6). - The regular visual examination and inspection of the storm water discharge points and storm water drainage system (Condition 6). - No storage of organic fertiliser (poultry litter) onsite, other than what is in the animal houses during the poultry rearing cycle at the installation (Condition 8). - Accident prevention and emergency response procedures requirements (Condition 9). - A preventative maintenance programme (Condition 2). |

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

11. Cessation of Activity

A certain amount of environmental risk is associated with the cessation of any licensable activity (site closure). The applicant has provided a list of measures to be taken in the event of site closure/cessation of activity. These measures are listed in the Non-Technical Summary submitted as part of the application. Condition 10 of the RD requires the proper closure of the activity with the aim of protecting the environment.

Where an activity involves the use, production or release of Relevant Hazardous Substances, and having regard to the possibility of soil and groundwater contamination at the site of the installation, the IED requires operators to prepare a baseline report.

A baseline screening assessment was undertaken by the applicant, in accordance with Stages 1 to 3 of European Commission Guidance⁹.

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

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

12. Fit and Proper Person

Technical Ability

The applicant has operated a broiler farm at this site for several decades. It is considered that the applicant has demonstrated the technical knowledge required to operate this installation.

Legal Standing

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

ELRA, CRAMP and Financial Provision

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

Fit and Proper Conclusion

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

13. Submissions

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

⁹ European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions.

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

Table 13.1: Submissions summary

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| 1. | Name & Position: Ms. Trish Smullen | Organisation: Geological Survey Ireland | Date received: 09 February 2021 |
| Issues raised: <i>The submission stated "the Geological Survey Ireland has no specific comment or observations to make on this matter at this time".</i> Agency Response: None required. | | | |
| 2. | Name & Position: Ms. Claire O'Dwyer, Principal Environmental Health Officer | Organisation: Health Service Executive (HSE) North East | Date received: 15 March 2021 |
| Issues raised: <i>The submission makes a number of observations in relation to the licence application. The issues raised include site location, manure (poultry litter), soiled water (wash water), surface/storm water, water supply, waste, odour, noise, and pest control. The HSE also confirmed in their submission that they have not received any complaints relating to odour or noise from the installation to date. The submission refers only to those areas within the remit of the HSE.</i> <i>Specific recommendations and observations highlighted by the HSE include:</i> <ul style="list-style-type: none"> • <i>The nearest non-family resident is located approximately 150 m from the site.</i> • <i>There is no manure (poultry litter) store onsite, manure is to be removed off-site by a registered contractor.</i> • <i>The EIAR did not provide adequate information on local groundwater supplies in the vicinity in the area. The applicant should consult the Geological Survey of Ireland (GSI) well database in order to identify local wells that may exist and carry out a door to door well survey of dwellings in close proximity to ensure water supplies are protected.</i> • <i>The HSE recommend that the applicant be aware of all poultry manure and soiled water storage requirements on and offsite, including six months storage capacity, certified construction work, and leak detection facilities, as well as BAT in relation to spreading and the installation of high-level indicators, that monitoring of groundwater nutrients be included in the Nutrient Management Plan and that the plan be approved by the Agency.</i> • <i>That soiled water does not contaminate clean surface water and all discharge points are labelled.</i> • <i>That storm and surface water monitoring is put in place.</i> • <i>The applicant should be advised to undertake continuous monitoring of odour due to the close proximity of a third party dwelling.</i> • <i>The HSE does not foresee noise being an issue at this installation.</i> • <i>A pest control programme should be implemented onsite.</i> | | | |

Agency Response:

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

The Agency has determined the closest third-party dwelling to be 130 m east of the installation.

Landspreading of organic fertiliser occurs outside of the licensed boundary and is/will be carried out in accordance with the Nitrates Regulations and Animal By-product Regulations¹⁰. This is monitored and controlled by the Department of Agriculture Food and the Marine (DAFM) and the Local Authorities (LAs).

The applicant has confirmed that there is a contract in place for the removal of poultry litter by a registered contractor. The RD prevents the storage of litter onsite, other than what is in the animal houses during a poultry rearing cycle.

The ‘Energy Efficiency and Resource Use’ section and ‘Emissions to ground/groundwater’ section of this report address water sources for the activity. There are no emissions to ground.

The RD will require conditions in relation to wash water storage and tank specifications.

The RD will require the applicant to have adequate and appropriate storage onsite for dead birds.

Odour and noise are addressed in the relevant sections of this report.

Pest control is addressed in the ‘Waste Generation’ Section of this report.

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| 3. | Name & Position: Mr. Peter Sweetman | Organisation: Wild Ireland Defense CLG | Date received: 27 October 2022 |
| <p>Issues raised:</p> <p><i>The submission states that the CJEU has found that compliance with European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2017 (S.I. 605 of 2017) cannot be considered a mitigation measure when conducting an appropriate assessment.</i></p> <p>Agency Response:</p> <p>The submission did not provide a reference to the Court of Justice of the European Union (CJEU) case to which it refers. However, the judgments of the CJEU form part of this application assessment, as appropriate. The landspreading of organic fertilizer was considered in carrying out AA and regard was had to the regulatory systems in place, i.e. <i>European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022.</i></p> | | | |

¹⁰

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

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| 4. | Name & Position: Aislinn Byrne | Organisation: None stated | Date received: 14 December 2022 |
| Issues raised: <p><i>The issues raised in the submission are as follows:</i></p> <p><i>"I am objecting to the following applications on the grounds that factory farming, or intensive agriculture, is seriously damaging the environment. The systems currently in place in the respective counties of the applicants are insufficient to deal with the current level of animal agriculture. Approving licenses for additional intensive farming would be wilfully destroying the land and the environment and putting people's health at risk.</i></p> <p><i>Separately it is cruel to farm animals in this manner. It's raises questions around the health of the animals and therefore the end product that is being sold to humans. It is putting smaller farmers out of business".</i></p> <p><i>The submission goes on to list by Reg. No. all of the pig and poultry licence applications upon which the submission is to be made.</i></p> Agency response: My assessment of this application included an Environmental Impact Assessment (EIA), an examination of the submitted Environmental Impact Assessment Report (EIAR) and my undertaking of an Environmental Impact Assessment (EIA) of the activity. The EIA Directive, among other things, sets down various factors to be considered during the EIA process for project categories such as intensive agriculture developments, and includes impacts on the following factors: <ul style="list-style-type: none"> (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). The Agency will not grant a licence or revised licence unless it is satisfied that emissions comply with relevant emission limit values and standards prescribed under regulations. <p>The submission also mentions animal cruelty concerns. Ireland has legislation governing animal welfare, which are the responsibility of the Dept. of Agriculture, Food and the Marine (DAFM).</p> <p>The submission also mentions financial implications of intensive farming over "smaller farmers". The viability of a business, including farming, is beyond the scope of the EPA Licensing Process.</p> | | | |
| 5. | Name & Position: Laura Broxson | Organisation: National Animal Rights Association | Date received: 17 December 2022 |
| Issues raised: <p><i>The issues raised in the submission are as follows:</i></p> <ul style="list-style-type: none"> • <i>The submitter states that the application should be refused as it is "not ethically acceptable to kill or consume any living creature".</i> | | | |

- *The submission states that "Ireland's ammonia emissions have not met EU limits for 7 out of the last 9 years" and that "almost all of Ireland's ammonia emissions come from agriculture". It states that "more than half are located in Monaghan and Cavan, counties already struggling with excess manure".*
- *The submission goes on to include some of the damage that can be caused by ammonia pollution and PM_{2.5} to the environment and human beings.*
- *It concludes that "for animal rights, human health and safety, and the impact it would have on the environment, these 36 applications need to be refused".*

The submission goes on to list by Reg. No., all of the pig and poultry licence applications upon which the submission is to be made.

Agency response:

- The principle of whether or not it is ethical to consume meat is beyond the remit of the EPA.
- Ireland is addressing ammonia emissions from the agricultural sector through the implementation of 'Ag Climatise – A roadmap towards Climate Neutrality'. The recommendations of this document, regarding the national reduction of ammonia levels, are considered during the assessment of licence applications.
- All EPA licensed facilities are required to operate to the best available techniques (BAT) standard as specified in the Commission Implementing Decision (CID) for the intensive rearing of poultry or pigs. This includes the requirement to implement techniques for the reduction and control of ammonia emissions.
- Due to the number of intensive agriculture applications/reviews and licences, especially in the Cavan/Monaghan, the EPA published guidance on how applicants should assess the predicted impact of air emissions. This has specific restrictions on applications in the Cavan/Monaghan area.

The assessment of this application included undertaking of an Environmental Impact Assessment (EIA) of the activity. Further information on this can be seen in the 'ammonia', 'dust' and 'EIA' sections of this report.

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| 6. | Name & Position: <i>Caroline Rowley</i> | Organisation: <i>Ethical Farming Ireland</i> | Date received: <i>30 December 2022</i> |
| | Issues raised: <i>The issues raised in the submission are as follows:</i> <ul style="list-style-type: none"> • <i>The submitter cites the Agency's responsibilities under Section 52(2) of the Environmental Protection Agency Act 1992, in relation to the Agency's need to keep itself informed of policies and objectives of public authorities, of the requirement to have regard for the need for high standard of environmental protection and the requirement to have regard to the need for precaution in relation to potentially harmful effects of emissions.</i> • <i>The submission discusses the government's targets for reducing greenhouse gas emissions under the programme for government, DAFM's 'Ag Climatise – A Roadmap towards Climate Neutrality' (Ag Climatise) and the Climate Action Plan 2023.</i> • <i>The submission states, the Programme for Government (inter alia) commits Ireland to an average 7% per annum reduction in overall greenhouse gas</i> | | |

emissions from 2021 to 2030 (a 51% reduction over the decade) and to achieving net zero emissions by 2050.

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

Ethical Farming Ireland urges the Agency to reject the application.

Agency response:

The Agency, in conducting its licence assessments, has regard to the government's targets for reducing greenhouse gas emissions, the Ag Climatise document, and the Climate Action Plan 2023, as detailed in this report.

Issues in relation to climate are discussed in the EIA (Climate) section of this report in terms of Government policy, the Ag-Climatise document and the Climate Action Plan 2023. Energy efficiency is discussed in the Energy Efficiency and Resource Use section of this report.

Ireland is addressing greenhouse gas emissions from the agricultural sector through the implementation of 'Ag Climatise – A roadmap towards Climate Neutrality'. Biogenic methane is primarily associated with ruminants, which produce methane while digesting their food, and not with pigs, which are a monogastric animal. Greenhouse gas emissions from the installation are discussed further in the EIA (Climate) section of this report.

Ammonia emissions are discussed in the Emissions to Air (Ammonia) and EIA (Air) sections of this report. Regard to government policy and national plans are discussed in these sections.

The EPA has published guidance on how applicants should assess the predicted impact of ammonia emissions from their proposed installation. This application has been assessed in accordance with that guidance document. The site will be required to operate in accordance with its licence requirements including BAT which will

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| | <p>ensure minimisation of ammonia emissions. This topic is discussed further in the ammonia section and EIA sections of this report.</p> <p>The Agency is satisfied that this licence assessment meets the requirements of sections 52(2)(a), (b) and (c) of the EPA Act.</p> | | |
| 7. | <p>Name & Position: Mr. Peter Sweetman</p> | <p>Organisation: None stated</p> | <p>Date received: 25 March 2023</p> |
| | <p>Issues raised:</p> <p><i>In the submission Mr. Sweetman quotes the following from the Courts of Justice of the European Union judgement for cases C-29317 and C-29417:</i></p> <p><i>1. Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that the grazing of cattle and the application of fertilizers on the surface of land or below its surface in the vicinity of Natura 2000 sites may be classified as a 'project' within the meaning of that provision, even if those activities, in so far as they are not a physical intervention in the natural surroundings, do not constitute a 'project' within the meaning of Article 1(2)(a) of Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.</i></p> | | |
| | <p>Agency response:</p> <p>Organic fertiliser is something which may be distributed to farmers for use on their farms, but that ultimately use does not form part of the project in respect of which the Agency was considering a licence application. Ultimately, the location on which landspreading of organic fertiliser from the installation may occur, can vary across and within any given year.</p> <p>The spreading of organic fertiliser on farms is regulated by the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2022 (S.I. 113 of 2022) which gives effect to the 5th Nitrates Action Programme (2022 to 2025), published in accordance with the Nitrates Directive.</p> <p>In 2022, the 5th Nitrates Action Programme was subject to appropriate assessment (as referred to in this Agency's inspector's report) and a strategic environmental assessment. In addition, the referenced Courts of Justice ruling stated that "Article 6(3) of Directive 92/43 must be interpreted as not precluding national programmatic legislation which allows the competent authorities to authorise projects on the basis of an 'appropriate assessment' within the meaning of that provision, carried out in advance and in which a specific overall amount of nitrogen deposition has been deemed compatible with that legislation's objectives of protection."</p> <p>The appropriate assessment conducted as part of this application is considered in compliance with the rulings of the Courts of Justice of the European Union judgement for cases C-29317 and C-29417.</p> | | |

14. Consultations

14.1 Cross Office Consultation

The Environmental Licensing Programme (ELP) and the Office of Environmental Enforcement (OEE) routinely liaise in relation to the licensing of the intensive agricultural sector. This in part has informed the assessment of this application.

14.2 Transboundary Consultations

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

15. Appropriate Assessment

Appendix 2 lists the European sites assessed, their associated qualifying interests and conservation objectives along with the assessment of the effects of the activity on the European sites.

A screening for Appropriate Assessment (AA) was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Lough Oughter and Associated Loughs SAC, Lough Oughter SPA, Upper Lough Erne SPA, Upper Lough Erne SAC, and Lough Sheelin SPA.

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

- Air emissions from the installation have the potential for adverse impact on sensitive receptors due to elevated ammonia levels and / or nitrogen deposition at European sites.

A Natura Impact Statement was received by the Agency on 09 August 2022.

An Inspector's Appropriate Assessment has been completed and has determined, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats Directive, that the activity, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular Lough Oughter and Associated Loughs SAC, Lough Oughter SPA, Upper Lough Erne SPA, Upper Lough Erne SAC, and Lough Sheelin SPA, having regard to their conservation objectives, and will not affect the preservation of these sites at favourable conservation status if carried out in accordance with this RD and the conditions attached hereto for the following reasons:

- The installation is not located within a European site.
- The closest European site is approximately 9.9 km away.
- The proposed storm water collection system includes a silt trap on all storm water lines prior to discharge of the storm water from the site.
- The risk of surface water or groundwater contamination because of accidental emissions during washing activities, or from spillage from the wash water tanks, is minimal, given the distance between the activity and a European site.

- Waste generated onsite will be handled and stored in a manner which will ensure there is no risk to European sites and will only be sent to appropriately authorised facilities.
- The litter generated at the installation has a high dry matter content.
- The litter remains within the concrete-floored covered broiler houses until all broilers are removed at the end of each batch. Therefore, there is no pathway between the litter and surface water/groundwater while the houses are stocked.
- When the houses are destocked, the litter is removed from the animal houses and removed offsite.
- Wash water is and will be used as a fertiliser on lands that are not within the installation boundary. Poultry litter is transported by a contractor to composting facilities or may be used as an organic fertiliser on land in accordance with the Nitrates Regulations.
- The licence, if granted, relates to the site of the activity for which the licence application is made, i.e. the rearing of poultry within the installation boundary, and does not extend to the lands on which organic fertiliser may be used as fertiliser.
- Activities which can take place within European sites are restricted by legislation. All persons must obtain the written consent from the relevant Minister before performing particular operations on, or affecting, particular habitats where they occur on lands or waters within the SACs and SPAs.
- Noise levels from poultry installations are very low and as the nearest European Site is approximately 9.9 km west of the installation, it is considered that noise will not impact on the qualifying interests within that, or any other European sites.
- The installation is in a rural area where the predominant farming activities involve the rearing of livestock. There is one other licensed intensive agricultural installation within a 5 km radius of the installation. This installation is required to operate in accordance with the conditions of an EPA licence.
- Emissions of ammonia and nitrogen deposition from the proposed change to the activity will be lower than those from the existing activity.

In light of the foregoing reasons no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of those European Sites Lough Oughter and Associated Loughs SAC, Lough Oughter SPA, Upper Lough Erne SPA, Upper Lough Erne SAC, and Lough Sheelin SPA.

16. Environmental Impact Assessment

16.1 EIA Introduction

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

The application was accompanied by an Environmental Impact Assessment Report (EIAR).

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

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

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

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

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

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

16.2 Consultation with Planning Authorities in relation to EIA

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

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

16.3 Consultation with other competent authorities

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

16.4 Alternatives

The matter of alternatives is addressed in Chapter 3 of the EIAR. It examines several alternative sites, layout and design, size, processes, and management of by-products

were considered. The process chosen offers the applicant the best fit between proposed and existing enterprises.

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

16.5 Likely Significant Direct and Indirect Effects

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

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

16.5.1 Population & Human Health

Identification, Description and Assessment of Effects

Population and human health are mainly addressed in Chapter 12 of the EIAR. The potential direct and indirect effects on population and human health are associated with emissions to air, dust, odour, noise emissions, emissions to water, waste generation, and accidental emissions. Should emissions exceed environmental quality standards this could have implications for population and human health.

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

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

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

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

Mitigation and Monitoring

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

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

Conclusions

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

16.5.2 Biodiversity

Identification, Description and Assessment of Effects

Biodiversity is mainly addressed in Chapter 7 of the EIAR. The EIAR describes the habitats and species at and in the vicinity of the installation. There are five Natura 2000 designated sites within 20 km of the application site, the closest being over 9 km away from the installation. The site of the application is typical of the agricultural nature of the surrounding land. The applicant also submitted a NIS (Refer to the Appropriate Assessment section of this report).

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

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

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

Cumulative effects of the activity in relation to biodiversity have been assessed and it is considered that there is not likely to be a significant cumulative effect from the changes to the activity and other activities/developments because improvements on this site (i.e. low emission housing) will reduce overall ammonia emissions from this installation, leading to a reduced overall cumulative value in the region. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

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

- Emissions to Air;
- Emissions to Water and Ground;
- Storm Water Discharges;
- Waste Generation;

- Noise;
- Organic Fertiliser; and
- Prevention of Accidents

Conclusions

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

16.5.3 Land and Soil

Identification, Description and Assessment of Effects

Land and soil are addressed in Chapter 4 of the EIAR. The installation will be located on a greenfield site in a moderately productive agricultural area. This area has a relatively flat to gently undulating topography similar to a significant part of Co. Cavan and surrounding areas. Land use currently in the development area is improved agricultural grassland. Any potential contamination issues are dealt with in the 'baseline report' section of this report.

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

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

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

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

Mitigation and Monitoring

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

- Emissions to Air;
- Emissions to Water and Ground;

- Storm Water Discharges;
- Organic Fertiliser;
- Waste Generation;
- Prevention of Accidents; and
- Cessation of Activity.

Conclusions

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

16.5.4 Water

Identification, Description and Assessment of Effects

Water is mainly addressed in Chapters 5 and 6 of the EIAR. The site is within the Cavan groundwater body (Ref: IE_NW_G_061) which has a Water Framework Status of 'good' and a vulnerability of 'high' to 'extreme'.

The site lies within the Erne catchment area and Laragh sub-catchment. Storm water from the roof and yard area will discharge via silt traps to a soakpit adjacent to poultry house 3 (SW-3) and to field drains (SW-1 and SW-2), flowing towards the Laragh River which is approximately 200 m north of the site at its closest point.

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

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

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

The site is in a rural area with most of the developments in the vicinity of the installation being dwelling houses and farmyards. There is one other intensive agriculture EPA licensed installation within 5 km of this installation and no other significant industrial developments. This installation is required to operate in accordance with the conditions of an EPA licence and does not emissions to surface water. Due to the nature of those activities and the controls in place, it is considered that there will be no significant cumulative effect from storm water discharges from the activity and from other activities/developments in the area.

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

The National River Basin Management Plan (2018-2021) was published in April 2018. Over the period of this river basin planning cycle, there are measures being undertaken to meet the environmental objectives of the WFD. These include measures such as implementation of the Nitrates Action Programme (Nitrates Regulations) and associated inspection regime. Targeted monitoring as envisaged under the Plan allied with multi-party enforcement (EPA/LA/DAFM) provides an early warning of potential problems/improvements and of the possible need to adapt the Plan to ensure protection of our waters.

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

Mitigation and Monitoring

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

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

Conclusions

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

16.5.5 Noise

Identification, Description and Assessment of Effects

Noise is mainly addressed in Chapter 9 of the EIAR. The potential direct and indirect effects of noise associated with the operation of the activity is the potential to cause nuisance for those living near the activity or to affect noise sensitive species near the site. The effects have been assessed in the 'noise' section of this report.

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

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

Mitigation and Monitoring

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

Conclusions

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

16.5.6 Air

Identification, Description and Assessment of Effects

Air is mainly addressed in Chapter 9 of the EIAR. The potential direct and indirect effects on air are associated with emissions to air of ammonia, dust and odour from the poultry housing, and dust from the installation yard. Should emissions cause an exceedance of air quality standards or critical levels/loads, this could have implications for air quality, human health and biodiversity within and beyond the site boundary. General site dust and odour emissions have the potential to impact human health and cause nuisance.

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

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

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

In relation to cumulative effects, it is noted that there is one other EPA-licensed intensive agriculture installation, within 5 km of the installation. Emissions to air from these activities have been considered during the EPA licensing process and they are each required to comply with the conditions of their licences. These installations should not have any significant emissions of odour, dust or ammonia under normal operations. In addition, improvements on this site (i.e. low emission housing) will reduce overall ammonia emissions from this installation, leading to a reduced overall cumulative value in the region.

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

According to 'Ireland's Informative Inventory Report 2022' (EPA 2022), which contains the most recent data, ammonia emissions in 2020 from the poultry sector were 4.91 kt (or 4% of Ireland's National emissions). This installation will emit 11.4 tonnes per annum. In December 2020, the Government issued 'Ag Climatise – A Roadmap towards Climate Neutrality'. This is a roadmap of actions for agriculture to cut GHG emissions as well as ammonia emissions significantly over the next decade, and up to 2050. The road map lists actions aiming to reduce the cumulative impact of ammonia emissions from the sector as a whole.

As mentioned earlier, the AFS sets out four high level mission statements for the sector one of which is to become a 'Climate smart, environmentally sustainable Agri-food sector'. Another of its seven goals is to develop a climate neutral food system by 2050 and improve air quality. This will build on the Ag Climatise roadmap and it is proposed that detailed plans to manage the sustainable environmental footprint of the dairy and the beef sectors will be produced in 2022 reducing total emissions from the sector. As stated, its associated AA concluded "the adoption of the AFS would not have significant adverse effects on the integrity of any Natura 2000 sites with the inclusion of the mitigation recommendations."

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

Approximately 3.4% of the ammonia emissions that originate from landspreading in Ireland come from the poultry sector. This equates to 1% of Ireland's total ammonia emissions. The organic fertiliser generated by the activity represents a negligible quantity relative to the total quantity of organic fertiliser arising from the livestock sectors in Ireland (cattle, sheep, pigs and poultry).

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

Mitigation and Monitoring

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

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

Conclusions

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

16.5.7 Climate

Identification, Description and Assessment of Effects

Chapter 9 of the EIAR addresses Climate. Climate change is a significant global issue which affects weather and environmental conditions (air, water and soil) which consequently affects population and human health, material assets, cultural heritage, the landscape and biodiversity. Climate change is caused by warming of the climate system by enhanced levels of atmospheric greenhouse gases (GHG) due to human activities. GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

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

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

In December 2022, the Irish Government released the 'Climate Action Plan 2023', under the 'Climate Action and Low Carbon Development (Amendment) Act 2021', which will support Ireland's transition to Net Zero and achieve a climate neutral economy by no later than 2050. The 'Climate Action Plan 2023' includes a target for the reduction in overall GHG emissions from agriculture by 25% from 2018 levels by 2030.

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

However, any discussion of GHG emissions must be extended to national and global climate impact. As part of the non-ETS (Emissions Trading Scheme) sector the GHG emissions from this site are covered by Ireland's commitments under the Effort Sharing Decision (Decision No 406/2009/EC) and the Effort Sharing Regulation (Regulation (EU) 2018/842) from 2021. Given the small quantity of climate altering substances that could be released from the activity, in a national context, I consider that the impact of any emissions from the installation on climatic considerations should be minimal.

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

Mitigation and Monitoring

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

- Emissions to Air;
- Organic Fertiliser;

- Prevention of Accidents; and
- Energy Efficiency.

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

Conclusions

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

16.5.8 Material Assets, Cultural Heritage and the Landscape

16.5.8.1 Material Assets (including resource use and waste generation)

Identification, Description and Assessment of Effects

Chapter 11 of the EIAR addresses Material Assets, and include information on traffic, transport, agricultural and non-agricultural property, and resources (both natural and others) such as energy and water. Material assets such as roads and traffic and built services are dealt with in the decision of the planning authority to grant permission for the development and are not controlled by the Agency. The planning authority has considered the effect to be acceptable.

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

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

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

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

Mitigation and Monitoring

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

- Waste Generation;
- Energy Efficiency and Resource Use.

Material Assets Conclusions

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

The planning authority has also identified, described and assessed the likely significant direct and indirect effects of the development on material assets. Their assessment concluded that the development is “unlikely to give rise to any significant environmental impact subject to adherence to the mitigation measures outlined in the EIAR”.

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

16.5.8.2 Cultural Heritage Identification, Description and Assessment of Effects

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

There are one building or features of architectural significance and one known archaeological feature at or near the site of the installation. St. Mark’s church is 0.1 km east of the site. There is a ringfort 0.1 km west of the site. It is very difficult to envisage any pathway by which emissions from the operation of the activity could impact any feature which might be present.

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

Mitigation and Monitoring

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

Cultural Heritage Conclusions

The Planning Authority has identified, described and assessed the likely significant direct and indirect effects of the development on cultural heritage. Their assessment concluded that “the impact of the proposed development on the architectural heritage of the area would be negligible”.

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

16.5.8.3 The Landscape Identification, Description and Assessment of Effects

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

The installation is located in a rural, predominantly agricultural area. Emissions from the operation of the activity will not affect the agricultural landscape of the area.

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

Mitigation and Monitoring

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

The Landscape Conclusions

The Planning Authority has identified, described and assessed the likely significant direct and indirect effects of the development on the landscape. Their assessment concluded that "the proposed development could be adsorbed into the landscape sensitively and without any undue visual impact".

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

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

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

16.5.9 Interactions Between Environmental Factors

Interactions of effects are considered in Chapter 13 of the EIAR. The most significant interactions between the factors as a result of the activity are summarised below.

Population and human health, air, and biodiversity

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

Water, soil, and biodiversity

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

Conclusions

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

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

Supplementary information received by the Agency on 19 August 2022 describes the expected effects deriving from the vulnerability of the activity to risks of major accidents and/or disasters that are relevant to the activity.

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

The Seveso Directive¹¹ and Regulations are not applicable at the installation. The risks of accidents associated with the activity are dealt with in the 'Prevention of Accidents' and 'Cessation of Activity' sections of this report. The applicant assessed the vulnerability of the project and determined that due to the nature of the processes onsite, no significant risks occur and consequently, no specific mitigation measures have been proposed in relation to these effects.

Mitigation and Monitoring

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

Conclusions

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

16.6 Reasoned Conclusion on the significant effects

Having regard to the examination of environmental information contained above, and in particular to the content of the EIAR and supplementary information provided by the applicant, and the submissions from the planning authority and third parties in the course of the application, it is considered that the potential significant direct and indirect effects of the activity on the environment are as follows:

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

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

¹¹ Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC.

- Emissions to air will be mitigated through: inclusion of abatement (including low emission housing); imposing emission limit values to comply with the CID; and implementing monitoring, maintenance and control measures;
- Noise emissions will be mitigated through: imposing daytime, evening-time and night-time noise limits at noise sensitive locations; and implementing monitoring, maintenance and control measures; and
- Accidental leakages or spills will be mitigated through: inspection and maintenance of bunds and tanks; and accident and emergency requirements specified in the RD.

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

17. EPA Charges

The annual enforcement charge recommended in the RD is €2,750, which reflects the anticipated enforcement effort required and the cost of monitoring.

18. Recommendation

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

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

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

Signed

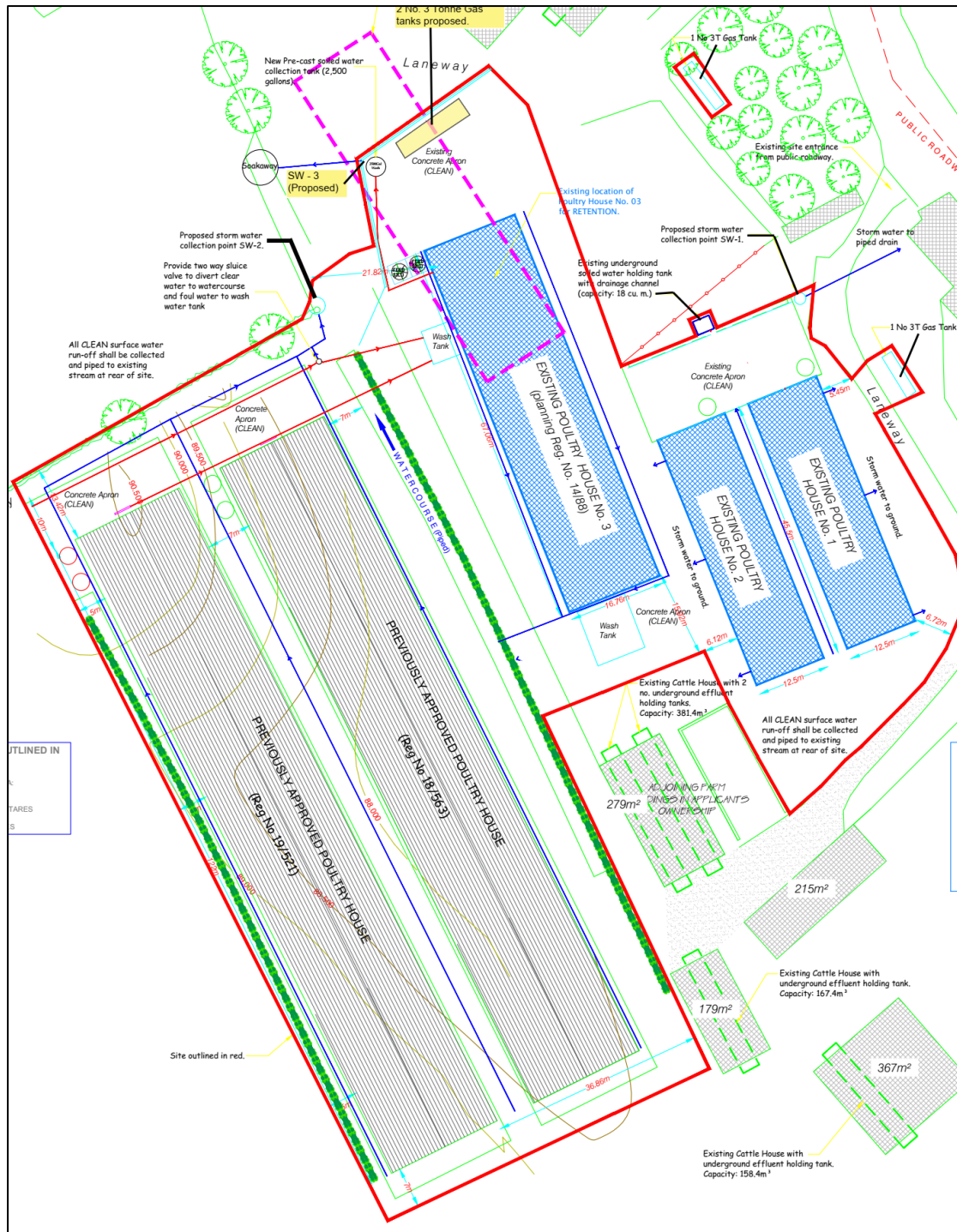
A handwritten signature in cursive script that reads "Philip Stack".

Philip Stack, ELP Inspector

Procedural Note

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

Appendix 1: Maps



Detail from the site plan received by the Agency as part of the application on 19 August 2022.

Appendix 2: AA table

Table A2.1: Assessment of the effects of the activity on European sites and proposed mitigation measures.

| Site Code | Site Name | Qualifying Interests (* denotes a priority habitat) | Conservation Objectives | Assessment |
|-----------|---|--|--|---|
| 000007 | Lough Oughter and Associated Loughs SAC | <p>Habitats</p> <p>3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation</p> <p>91D0 Bog woodland*</p> <p>Species</p> <p>1355 Otter (<i>Lutra lutra</i>)</p> | <p>As per Lough Oughter and Associated Loughs SAC 000007. Version 1. National parks and Wildlife Service, Department of Housing, Local Government and Heritage (dated 26/11/2021).</p> | <p>The site is located 9.9 km to the west of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site due to the distance and direction of the installation the SAC and its sensitive qualifying interests.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to any potential hydrological connectivity of the project site with the European site being in excess of 32 km.</p> <p>The project site is not located within the vicinity of any known breeding site for Otter (<i>Lutra lutra</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</p> |
| 004049 | Lough Oughter Complex SPA | <p>Species</p> <p>A005 Great Crested Grebe (<i>Podiceps cristatus</i>)</p> <p>A038 Whooper swan (<i>Cygnus cygnus</i>)</p> <p>A050 Wigeon (<i>Anas penelope</i>)</p> | <p>As per NPWS (2021) Conservation objectives for Lough Oughter Complex SPA (004049). Generic version 8.0. Department of Housing, Local</p> | <p>The site is located 12.2 km to the west/northwest of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest species for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to any potential</p> |

| Site Code | Site Name | Qualifying Interests (* denotes a priority habitat) | Conservation Objectives | Assessment |
|-----------|----------------------|--|--|---|
| | | | Government and Heritage (dated 23/03/2021). | <p>hydrological connectivity of the project site with the European site being in excess of 24 km.</p> <p>The project site is not located within the vicinity of any known breeding site for Great Crested Grebe (<i>Podiceps cristatus</i>), Whooper swan (<i>Cygnus cygnus</i>), or Wigeon (<i>Anas penelope</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</p> |
| UK9020071 | Upper Lough Erne SPA | Species A038 Whooper swan (<i>Cygnus cygnus</i>) | <i>As per Upper Lough Erne SPA (UK9020071) Conservation Objectives. Version 2. Department of Environment Northern Ireland¹ (dated 01/04/2015)</i> | <p>The site is located 15.5 km to the northwest of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest species for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to any potential hydrological connectivity of the project site with the European site being in excess of 50 km.</p> <p>The project site is not located within the vicinity of any known breeding site for Whooper swan (<i>Cygnus cygnus</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</p> |
| UK0016614 | Upper Lough Erne SAC | Habitats | <i>As per Upper Lough Erne SAC</i> | The site is located 17.1 km to the northwest of the installation. |

| Site Code | Site Name | Qualifying Interests (* denotes a priority habitat) | Conservation Objectives | Assessment |
|-----------|-------------------|--|---|---|
| | | 3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles 91D0 Bog woodland* 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion alvae) 7230 Alkaline fen 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinia caerulea) Species 1355 Otter (<i>Lutra lutra</i>) 1106 Atlantic salmon (<i>Salmo salar</i>) | (UK0016614) Conservation Objectives. Version 2. Department of Environment Northern Ireland1 (dated 01/04/2015) | <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest habitats or species for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to any potential hydrological connectivity of the project site with the European site being in excess of 50 km.</p> <p>The project site is not located within the vicinity of any known breeding site for Otter (<i>Lutra lutra</i>) or Atlantic salmon (<i>Salmo salar</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</p> |
| 004065 | Lough Sheelin SPA | Species A005 Great Crested Grebe (<i>Podiceps cristatus</i>) A059 Pochard (<i>Aythya farina</i>) A061 Tufted Duck (<i>Aythya fuligula</i>) A067 Goldeneye (<i>Bucephala clangula</i>) | (2022) Conservation objectives for Lough Sheelin SPA (004065). Generic Version 9.0. Department of Housing, Local Government and Heritage. | <p>The site is located 19.2 km to the south of the installation.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions from the project site will not cause an impact on the qualifying interest species for this European Site.</p> <p>I am satisfied beyond reasonable scientific doubt that storm water discharges will not cause an impact on this European Site due to the lack of hydrological connectivity of the project site with the European site.</p> <p>The project site is not located within the vicinity of any known breeding site for Great Crested Grebe (<i>Podiceps cristatus</i>), Pochard (<i>Aythya farina</i>), Tufted</p> |

| Site Code | Site Name | Qualifying Interests <i>(* denotes a priority habitat)</i> | Conservation Objectives | Assessment |
|-----------|-----------|---|-------------------------|--|
| | | | | <p>Duck (<i>Aythya fuligula</i>) or Goldeneye (<i>Bucephala clangula</i>) at this European site.</p> <p>I am satisfied beyond reasonable scientific doubt that ammonia emissions or storm water discharges from the project site will not cause an impact on the conservation objectives for this European Site.</p> |

Appendix 3: Relevant Legislation

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| The following European instruments which have been transposed into Irish legislation are regarded as relevant to this application assessment and have been considered in the drafting of the Recommended Determination. |
| National Emissions Ceilings Directive (2016/2284) |
| Industrial Emissions Directive (IED) (2010/75/EU) |
| Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU) |
| Habitats Directive (92/43/EEC) & Birds Directive (79/409/EC) |
| Water Framework Directive [2000/60/EC] |
| Waste Framework Directive (2008/98/EC) |
| Air Quality Directives (2008/50/EC and 2004/107/EC) |
| Groundwater Directive (80/68/EEC) and 2006/118/EC |
| Environmental Liability Directive (2004/35/CE) |
| Regulation (EC) No 1069/2009, as amended (Animal By-products Regulation) |
| Nitrates Directive (91/676/ EEC) |
| Energy Efficiency Directive (2018/2002/EU) |

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

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