



Submission

Submitter:	Ms. Maria Horkan
Organisation Name:	Health Service Executive West
Submission Title:	received by email
Submission Reference No.:	S005861
Submission Received:	05 November 2019

Application

Applicant:	Mr Eugene Lannon
Reg. No.:	P0911-02

See below for Submission details.

Attachments are displayed on the following page(s).

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Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

An tSeirbhís Sláinte Chomhshaoil
Feidhmeannacht na Seirbhíse Sláinte (Iarthar)
Ceanncheathrú Naomh Muire
Caisleán an Bharraigh
Contae Mhaigh Eo

Environmental Health Service
HSE West
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Date: 04 November 2019

Name: EPA
Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford

Re: Industrial Emissions Licence Application Reference: P0911-02

Proposed development: Bernies Farm, Began, Ballyhaunis Co. Mayo

Name and Address of applicant: Mr. Eugene Cannon, Began (Bernies Farm) Ballyhaunis,
Co. Mayo

Dear Sir/Madam

Please find enclosed the HSE consultation report(s) in relation to the above licence application. If you have any queries regarding any of these reports the initial contact is Ms. Maria Horkin Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours faithfully,

Maria Horkin

Maria Horkin
Principal Environmental Health Officer

Date: 04 November 2019

Our reference: 1016

Report to: Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford

Type of Consultation: Industrial Emissions

Applicant: Mr Eugene Lannon, Began (Bernies Farm), Ballyhaunis,
Co. Mayo

Nature of Activity: The rearing of poultry in installations where the capacity
Exceeds 40,000 places

EPA reference: P0911-02

Introduction

The following HSE departments were notified of the consultation request for the licence application on 27 September 2019

- Emergency Planning – Kay Kennington
- Estates – Helen Maher
- Assistant National Director for Health Protection – Kevin Kelleher / Laura Murphy
- CHO – Tony Canavan

This report only comments on Environmental Health impacts of the licence application.

General

Mr Eugene Lannon, Began, Ballyhaunis, Co. Mayo has applied for a review of an Industrial Emissions Licence (P0911-01) for Bernies Farm, Began, Ballyhaunis, which was granted by the EPA in 2010.

In January 2019, Mayo County Council granted planning permission (P18/551) for the redevelopment of the site to which this licence applies. The redevelopment of the site includes the demolition of the existing poultry houses (5 No.), the erection of 4 x 28,000 poultry houses, associated drainage, feeding systems, heating, lighting and ventilation.

As this activity falls within Category 6.1 (a) of Schedule 1 of the EPA Act 1992 (as amended) an Industrial Emissions licence is required. A review of the original licence (P0911-01) is required as

- there is an increase in the capacity of the poultry houses
- there are new emissions points
- there are site related changes

As stated in the Non-Technical Summary accompanying the licence application, the main activities carried out on site are associated with the raising of poultry from day old chicks to 42 day old birds. This involves:

- Transporting day old chicks to the farm
- Feeding and rearing the birds
- General animal husbandry practices
- Transport of feed to the farm
- Transport of birds from the site to a processing factory at approximately 42 days old
- Removal of litter from the houses to storage offsite on 3rd party lands for use as agricultural fertilizer
- Washing of houses between each batch for flock health and performance reasons
- Bedding houses with straw/shavings in preparation for the next crop
- Maintenance of buildings and equipment
- Recording and monitoring of internal house environment and bird performance and mortality

All commitments to future actions including mitigation and further testing have been taken as read, and all data has been accepted as accurate. No additional investigations/measurements were undertaken in the review of this application.

The Environmental Health Service has not received any complaints regarding the existing Bernies Farm facility.

In respect of this application, the areas reviewed were those of concern to Environmental Health and which are:

- Any potential contamination of surface or ground water
- Emissions to air including odour and noise
- Waste

An Environmental Health Officer visited the location to assist in the preparation of this report.

The material submitted in this licence application was reviewed with reference to '*BAT Reference Document for the Intensive Rearing of Poultry and Pigs*' (2017).

Site location

Bernies Farm is located in a rural area in the townland of Brackloon West on the northern edge of the small village of Began, which is 6.5km from Ballyhaunis, Co. Mayo. The village includes a school, community centre, church and a number of private dwellings all of which are within 1km of Bernies

The entrance to Bernies Farm is via a short access road off a local road which links the N60 to the south and the R323 to the north. The proposed poultry farm has a footprint of approximately 2.5 acres on a hard standing of approximately 2.72 acres.

An EPA licenced poultry facility has operated at this site since 2010 (EPA Licence P0900-01). The facility comprised five poultry houses with a capacity for 97,000 birds. Two of these houses were demolished due to storm damage. Planning Permission was granted for the demolition of the remaining houses and the construction of four new houses with a total capacity of over 100,000 birds.

- **Surface and ground water**

The Environmental Health Service has considered any potential risk of contamination of surface water and makes the following comments:

There are no proposed emissions to surface or ground water. It is noted in Chapter 10.1 '*Biodiversity– Aquatic Environment*' that both a desktop review and a site assessment was undertaken in the preparation of the EIAR.

The soils in the area are described as "poorly drained basic mineral soils"

The site of the proposed development is located in the Western River Basin District. The River Robe is situated 825m from the site. Began Lough is located approximately 240m east of the proposed development site and is assigned a Water Framework Directive classification of "possibly at risk of not achieving good status". The site does not have any surface water elements. A drainage channel which discharges in to the River Robe is situated 120m from the site.

Began Group Water Scheme supplies potable water to the local area. This supply feeds directly from the Lough Mask Regional Water Supply (LMRWS) which is managed by Irish Water. The Began Group Water Supply is sampled at a number of locations within the village by Mayo Environmental Health Service four times each year. It is understood that a number of farmhouses in the locality may have their own private wells which they use in addition to the Began Group Water Scheme.

It is recommended that the following mitigation measures referred to in Chapter 10.6 of the EIAR are implemented in full in order to minimise the risk to water quality in the vicinity of the proposed development and to public health

- **Drainage from the yard and roofs *must* pass through a SuDS surface water drainage system, which would reduce the rate of emissions and remove suspended solids. The system is to include a silt trap, oil interceptor and soakpits.**
- **The Environmental Health Service supports the recommendation that a sampling/inspection chamber be provided in the surface water drainage design. This inspection chamber should be visually inspected daily and solids regularly removed from the system**

It is also recommended that all chemicals or materials stored on site are stored in banded containers/areas with adequate bund provision to contain 110% of the largest drum volume.

- **Soiled water , poultry litter and waste management**

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Chapter 11.4.2.2 'Storage of Soiled Washwater ' and Chapter 11.4.2.3 'Spreading of Soiled Washwater' describes the process of collection of soiled washwater following cleaning out of the houses between each crop of birds and the proposal for the disposal of the collected washwater by spreading it on the applicant's land.

Clarification is required that a minimum of six months storage capacity is available for the proposed centrally located washwater storage tank. Chapter 10.5 'Impacts' provides details on the capacity of the proposed tank (30,280 litres) and the quantity of washwater generated annually (142.6m³ or 142,600 litres) but the Environmental Health Service is unable to locate any reference to the proposed frequency of emptying of the washwater storage tank.

It is recommended that high level monitors are installed on the proposed washwater tank to reduce the risk of accidental overflow. This is recommended for the protection of nearby watercourses and in the interest of the protection of public health.

When constructed, the wastewater storage tank should be inspected by a Chartered Engineer and certified as structurally sound for their intended purpose. The Environmental Health Service recommends that tanks are inspected annually to check their structural integrity.

It is noted that the applicant intends to spread collected washwater on his lands. It is recommended that compliance with Section 4.6 'Spreading Poultry Manure' of the EPA's 'Batneec Guidance Note for the Poultry Production Sector' is included as a licence condition.

It is noted in Chapter 2.2.2 'Description of the proposed Structures and Systems' that *'the design of the proposed poultry houses complies with BAP housing systems for broiler chickens as identified in the BREF Document for Intensive Rearing of Poultry or Pigs (2017), i.e. broilers would be kept on "litter spread over the entire floor area" bedding would comprise of "straw or wood shavings", houses'*

It is further noted in Chapter 2.3.1 'Production Process' that *'the removal of litter (mixture of bedding material, feathers and manure) to a covered trailer for immediate removal by licenced haulier (M.J. Kehoe) and transported to the Walsh Mushrooms composting facility in Co. Wexford'* Therefore there would be no requirement for the storage of poultry manure onsite.

The Environmental Health Service recommends that poultry litter is not removed during periods of heavy rain. This is in order to reduce the potential contamination of stormwater (and ultimately surface and groundwater) and is in the interest of the protection of public health.

Chapter 11.4.2.4 'Foul Water' of the EIAR states that there is a septic tank onsite which *'is several years old and little information on its construction or design is available'*. **The Environmental Health Service recommends that the septic tank is inspected and that it complies with the requirements of Section 70(c) (i) of the Water Services Amendment Act 2012 and related regulations.**

Chapter 2.3.2 Management of Wastes' indicates that it is estimated that there will be a poultry casualty rate of 1.5% per batch, which equates to 1500 birds every six weeks to be collected at two weekly intervals. Consequently it will be necessary to provide storage capacity for approximately 500 carcasses. **It is recommended that storage containers with a capacity for 500 carcasses are provided and that the containers are of steel construction and are water, pest and topple proof.**

- **Water supply**

Chapter 11.3.2.9 'Groundwater Abstractions & Source Protection Areas' of the EIAR states that 'there are no wells on the proposed development site itself. The existing poultry unit obtains its water supply from the mains supply'

Chapter 2.2 'Site Layout and Construction' indicates that water usage on site is estimated to be 4482.6m³ per year (4.48m litres) and that water would be sourced from the existing mains water supply. Attachment 4.8.1 'Site Operation Report' states that 'water for stock and for washing to be acquired from the proposed onsite well'. **The Environmental Health Service recommends that the applicant clarifies which source of water it is intended to use for the facility and whether the Bekans Group Water Supply and /or the proposed groundwater well has the capacity to supply the required volume of water necessary for the operation of the poultry farm.**

- **Nutrient Management Plan**

The 'Baseline Report' submitted as part of the licence application that 'regular soil or groundwater monitoring was not required in the previous licence (P0911-01)'. **Due to the increase in the capacity of the poultry houses it is recommended that the applicant monitors ground nutrients on his lands by way of a Nutrient Management Plan (NMP) which should be updated annually.**

- **Noise**

Chapter 7 'Noise' states that a Noise Impact Assessment has been undertaken with background noise levels recorded at three noise monitoring locations on 20 April 2018. The potential impacts from additional traffic movements as a result of the development have been assessed.

The area in which Bernies Farm is located is rural in nature with residences in the area situated along the existing road network. According to the EIAR *'the closest noise sensitive locations to the proposed broiler houses in each geographical direction are as follows:*

- *a residence 120 metres to the south-east of the site boundary,*
- *a farmyard 200 metres to the north-west of the site boundary,*
- *a residence 210 metres to the south-west of the site boundary'*

The EIAR concludes that there would be 'a slight to moderate impact on the closest noise sensitive locations due to noise from agricultural/delivery vehicles'. **The Environmental Health Service is aware of four similar facilities within a 5km radius of Bernies Farm` (three of which are within 1.5km) and recommends that deliveries and removal of poultry manure/casualty carcasses are co-ordinated within the locality, where possible. In order to minimise the impact on the nearest noise sensitive receptors from traffic noise at this facility, it is further recommended that**

- **Deliveries are limited to daytime hours. Any operations which have to be undertaken outside these hours must be notified in advance to the nearest sensitive receptors**
- **Vehicle engines should be switched off when not in use**
- **Access roads should be maintained in good condition**

Confirmation is sought regarding the operational hours of the proposed facility (8.00am – 8pm stated in Attachment No. A1 Non-Technical Summary; 7.00 – 7pm stated in Chapter 7 'Noise')

The Environmental Health Service notes that each of the proposed poultry houses would be fitted with thirty-six ventilation fans (4 houses with 9 fans each). These fans would be operating at a steady state and would only operate at maximum during the hottest periods of summer days, when the noise from the operation of the ventilation fans could have the potential to impact on the nearest sensitive receptors.

The Environmental Health Service recommends that a programme for the inspection and maintenance of the ventilation fans is put in place to minimise the potential impact of noise from the ventilation fans on sensitive receptors

- **Odour**

Potential sources of odour from this facility will be from the poultry sheds, storage of casualty carcasses, cleaning of houses and the collection of litter and the spreading of wash water on land. Odour dispersion modelling was undertaken in the preparation of the EIAR for Bernies Farm.

The result of the odour modelling predicted that the siting of the new poultry units would not impact on nearby sensitive receptors.

The Environmental Health Service recommends that the mitigation measures proposed in Chapter 6.5 'Mitigation Measures' of the EIAR should be incorporated into the conditions of the licence to minimise the impact of odour from the facility on the nearest sensitive receptors.

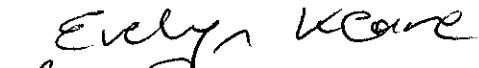
Conclusion

The Environmental Health Service makes the following recommendations in respect of this application –

- **Drainage from the yard and roofs must pass through a SuDS surface water drainage system**
- **A sampling/inspection chamber should be provided in the surface water drainage design. This inspection chamber should be visually inspected daily and solids regularly removed from the system**
- **Chemicals or materials stored on site should be stored in bunded containers/areas with adequate bund provision to contain 110% of the largest drum volume**
- **Clarification is required that a minimum of six months storage capacity is available for the proposed centrally located washwater storage tank.**
- **High level monitors are installed on the proposed washwater tank to reduce the risk of accidental overflow**
- **The wastewater storage tank should be inspected by a Chartered Engineer and certified as structurally sound for their intended purpose.**
- **Tanks should be inspected annually to check their structural integrity**
- **Compliance with Section 4.6 'Spreading Poultry Manure' of the EPA's 'Batneec Guidance Note for the Poultry Production Sector' is included as a licence condition**
- **The removal of poultry litter should be avoided during periods of heavy rain.**
- **Containers with a capacity for 500 carcasses are provided for the storage of casualty carcasses. The containers are of steel construction and are water, pest and topple proof.**

- The septic tank on site is inspected and confirmation provided that it complies with the requirements of Section 70(c) (i) of the Water Services Amendment Act 2012 and related regulations.
- The applicant should clarify which source of water it is intended to use for the facility and whether the Bekans Group Water Supply and /or the proposed groundwater well has the capacity to supply the required volume of water necessary for the operation of the poultry farm.
- The applicant should monitor ground nutrients on his lands by way of a Nutrient Management Plan (NMP) which should be updated annually.
- Deliveries and removal of poultry manure/casualty carcasses are co-ordinated with other similar facilities within the locality where possible
- Deliveries are limited to daytime hours. Any operations which have to be undertaken outside these hours must be notified in advance to the nearest sensitive receptors
- Vehicle engines should be switched off when not in use
- Access roads should be maintained in good condition
- That confirmation is provided regarding the operational hours of the proposed facility
- A programme for the inspection and maintenance of the ventilation fans is put in place to minimise the potential impact of noise from the ventilation fans on sensitive receptors
- The odour mitigation measures proposed in Chapter 6.5 'Mitigation Measures' of the EAIR should be incorporated into the conditions of the licence


 Evelyn Keane
 Environmental Health Officer
 Mayo


 Caroline Hueston
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