


**This Report has been cleared
for submission to Director by
Senior Inspector Pat Byrne.
Signed Pat Byrne Date 5/5/10**

		OFFICE OF CLIMATE, LICENSING & RESOURCE USE	
INSPECTOR'S REPORT ON A LICENCE APPLICATION			
To:	Director		
From:	Kate Stafford	ENVIRONMENTAL PROGRAMME	LICENSING
Date:			
RE:	Application for an IPPC Licence from Mr Eugene Lannon, Bekan (Hunts Farm), Ballyhaunis, County Mayo, Licence Register No. P0912-01.		

Application Details	
Class of activity:	Class 6.1: The rearing of poultry in installations, whether within the same complex or within 100 metres of the same complex, where the capacity exceeds 40,000 places.
Category of Activity under IPPC Directive (2008/1/EC)	6.6 (a)
Licence application received:	8 th January 2010
Notice under Article 11(2)(b)(ii) issued:	22 nd February 2010
Information under Article 11(2)(b)(ii) received:	18 th March 2010
Submissions received:	None
Site notice inspected:	2 nd February 2010
Site visits:	2 nd February 2010

Introduction

Mr. Eugene Lannon is the owner and operator of the installation located in a rural part of Co. Mayo, approximately 7 km west of Ballyhaunis. The installation is involved in the rearing of poultry since 1979. The installation has a capacity of 96,000 places within four broiler-rearing houses and therefore exceeds the licensing threshold specified under Annex 1 of the IPPC Directive and the New First Schedule of the EPA Acts 1992 to 2007.

The most recent planning permission (P90-79) was granted by Mayo County Council in 1990. An Environmental Impact Statement (EIS) was not required in support of the above planning application.

Automated feeding and ventilation systems are installed in all four houses and these operate on a 24 hour basis. The installation is operated by Mr. Eugene Lannon and a site manager.

The main activities including deliveries of feed, bedding materials, chicks, collection of finished birds, carcasses, occur between 8.00 a.m. and 8.00 p.m.

Site Visit

I visited the installation on the 2nd February 2010. Mr. Eugene Lannon and Ms. Yvonne Kerrigan completed a full site tour of all site infrastructure including the four broiler units, feed silos, control rooms for each house, vermin control, waste storage areas (fluorescent bulbs) and the fuel storage areas.

Process description and surface water flow across the site were discussed.

Process Description

The licensable activity involves the rearing of chicks from day old to slaughter. The activity is cyclical with a batch of birds per broiler house being reared every six to eight weeks. Houses are emptied for an additional two weeks to allow complete drying after the cleaning process. There are four purpose built broiler houses on-site with a capacity for 24,000 places each.

Prior to the delivery of chicks to the installation the entire floor area in the houses is bedded with wood shavings or straw. Day old chicks are delivered to the installation from a hatchery and placed in the broiler houses on-site.

The birds are fed a mixture of cereal, soya and protein; the constituents of the animal feed are adjusted to suit the growth stage of the birds during the 35-56 days when they are on-site. There are four stages of rations fed throughout the lifecycle; starter, grower, finisher and withdrawal. These are formulated to exactly match the birds requirements for protein, energy, minerals and vitamins at the various ages and to minimise nutrient excretion. As the birds grow, ambient temperature is reduced and ventilation is increased automatically.

From approximately day 35 a percentage of the birds may be removed from the houses and taken for slaughter, the balance of the birds are removed for slaughter over the following days. When all the birds have been removed from the house the poultry litter is removed and transported off-site for recovery by a specified contractor.

When the birds have been removed from the houses the poultry litter is removed and the house is brushed/ blown down to remove the litter and dust. The house is then washed down and disinfected. The soiled water is collected to a tank at the end of house D. The storage tank has a storage capacity of c.70m³, which is sufficient to hold the soiled water from 3 crops based on approximately 50 gallons (0.23m³) of water used per 1000 birds to wash the broiler houses. The houses are left empty for two weeks to allow them to dry out completely prior to restocking.

Some birds die of natural causes before they reach maturity (mortality 3-4%). Dead bird carcasses are placed in a closed barrels located at the front of each shed. These barrels are regularly transported to the Western Brand Group Limited slaughtering installation (IPPC licence Reg. No. P0831-01) where the waste is combined with the offal arising from the Western Brand activity. This waste is then transported to a rendering plant operated by Ulster By-Products.

The applicant has identified that poultry litter is a valuable fertiliser, which is applied to land as a replacement for inorganic fertiliser subject to the requirements of the European Communities (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. 101 of 2009). The poultry litter is removed from the farm and transported off site for recovery as an agricultural fertiliser onto a landbank in Rosenallis, Mountmellick, Co. Laois. . The applicant has confirmed that the poultry litter is stored and covered with black plastic sheeting on the off-site tillage farm on a concrete slab. This storage area has a capacity to store 26 weeks of litter (360 tonnes) arising from the installation. Condition 6.7 of the RD “*The licensee shall ensure that all manure generated on-site is stored in a*

manner which does not pollute ground or surface waters” and Condition 8.12.4 of the RD “The licensee shall ensure that in cases where there is a transfer of manure from the installation to storage provided by the recipient that it is contained in a purpose built holding structure, adequate for the protection of groundwater and surface water.” should ensure that any run-off/seepage from the stored poultry manure will be collected and managed in an appropriate manner. A nutrient management plan accompanied this application, which demonstrated adequate capacity for recovery of manure generated at the installation.

Emissions

The main emissions from the activity are odour from the building ventilation systems, poultry litter which is recovered and currently used as an agricultural fertiliser on another farmer’s landbank in County Laois, and washwater, which is recovered on the applicant’s land (outside the installation boundary). Other emissions from the activity include surface water run off and generation of wastes including carcasses, domestic municipal waste etc.

Emissions to Air

The poultry houses are simple closed buildings constructed of block and timber/wood. They are thermally insulated with a forced computer controlled and/or natural ventilation system and artificial lighting.

The main contaminants present in ventilation emissions are ammonia, odour from gas volatilisation and dust. The greatest potential for odour nuisance and dust emission is during the removal of poultry litter, which is limited to once in every eight to ten week cycle per broiler house and therefore not considered significant.

There are a number of control measures in place to minimise and abate potential odour. These include: high standard of litter management, use of adequate bedding material, appropriate stocking densities, quality of ventilation and house design, minimisation of carcasses by maintaining flock health to a high standard, minimisation of ammonia emissions by using optimally formulated feed and minimisation of feed and water waste by maintenance of food and water systems in optimum conditions and operation. According to the applicant there have been no complaints of odour from the site. It is considered that these management practices will minimise emissions to atmosphere.

Emissions to Sewer

There are no process emissions to sewer.

Emissions to Waters

There are no process emissions to waters other than uncontaminated storm water emissions, which are addressed under *Surface Water* below.

Surface Water

All poultry rearing activities take place inside the broiler houses. The only period when there is a potential for poultry litter to contaminate the surface water is during poultry litter removal, i.e. once every eight to ten week poultry rearing cycle per broiler house. All clean water (storm water and yard water) drains to the hardcore ground adjacent to each of the broiler houses and collects by gravity to the storm water collection sump on site.

The storm water collection sump drains towards a small dyke running parallel with the public road which acts as a soak pit for this water, therefore the surface water drains to ground in this area.

Condition 6.8 of the RD requires the licensee to provide and subsequently maintain a rainwater collection and drainage system for all poultry housing on-site.

The closest rivers to the installation are the River Robe (River ID 30_1579) approx 0.65Km to the west, an unnamed River Robe Tributary (River ID 30_642) approximately 0.75Km south of the installation and the Bekan Lake(Lake ID WE_30_341) approximately 0.8km to the north-east. The nearest EPA water quality monitoring point is approximately 2.5Km downstream of the installation (2Km downstream of Lismore Bridge Station of Cloonbullan ID: 30R010015). The biological water quality is recorded as Q4 (unpolluted fair quality) for 2006 at this point. There is no upstream EPA water quality monitoring point. This section of the Robe River is classified as 1a 'at risk of not achieving good status in 2015'. The Bekan Lake is not monitored by the EPA.

Condition 6.8.4 of the RD requires the applicant to provide and maintain an inspection chamber(s) at the outlet(s) of the surface water drainage system within three months of the date of grant of licence. Surface water from the installation should be uncontaminated and therefore should have no impact on surface water quality off-site or groundwater. *Schedule C.2.3 Monitoring of Storm Water Emissions* requires COD/BOD monitoring as required by the Agency and weekly visual inspection at the surface water discharge point(s).

The RD requires that oil and fuel storage facilities on-site are bunded. There is no requirement for oil interceptors as the risk of the surface water collected on-site being contaminated by oil are considered to be low.

Emissions to ground

There are no process emissions to ground from this activity. The storm water collection sump drains towards a small dyke running parallel with the public road which acts as a soak pit for this water, therefore the surface water drains to ground in this area.

In accordance with the Water Framework Directive the groundwater (Cong-Robe IE_WE_G_0019) at the installation and surrounding area is classified as 1a 'at risk of not achieving good status in 2015'. Washwater is applied to the applicant's adjoining farm and poultry manure is recovered on another farmer's landbank in County Laois. The proposed storage and landspreading of poultry manure and washwater is discussed in section *Manure/Poultry litter* below.

Any surface water run-off from the site should be uncontaminated and must be monitored as per *Schedule C.2.3* of the RD. In accordance with Condition 6.5 of the RD, the integrity of all storage tanks on site must be tested. In addition, Condition 6.7 of the RD requires the licensee to ensure that all manure generated on site is stored in a manner, which does not pollute ground or surface waters. These conditions serve to protect ground and surface waters.

Waste

Waste arising on-site includes animal carcasses, packaging, domestic solid waste, fluorescent tubes and veterinary waste containers. Animal carcasses arise from mortalities associated with the rearing of poultry (c. 3-4% mortality). The RD requires that carcasses be removed at least fortnightly. The carcasses are stored on site in sealed containers temporarily prior to the Western Brand Group Limited slaughtering installation (IPPC licence Reg. No. P0831-01) where the waste is combined with the offal arising from the Western Brand, which is subsequently transported to a rendering plant by Ulster By-Products.

Empty medicine containers from veterinary waste are rinsed and combined with domestic refuse for recycling or disposal by WERS Waste Limited (Waste Collection Permit No.

WCP-MO-09-0608-02) The RD requires that hazardous and non hazardous wastes be recovered/ disposed of at appropriate facilities.

The only hazardous waste generated at the installation is spent fluorescent lighting tubes (approximately 5-10 tubes per annum). The fluorescent lighting tubes from the farm are taken back to CT Electrical Shop in Ballyhaunis on a regular basis, from where they were purchased.

The RD requires that transportation of waste shall be by an authorised waste contractor, or an exempted person, to the site of recovery/disposal in accordance with the appropriate National and European legislation and protocols.

Manure/Poultry Litter

Approximately 660 tonnes/annum of poultry litter is generated as part of the poultry rearing activity. The applicant has identified that the poultry litter is utilised as a fertiliser on a landbank in Rosenallis, Mountmellick, Co. Laois in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. of 101 of 2009). A Nutrient Management Plan (NMP) has been prepared by Mr. Michael Fraher of Panther Environmental Solutions Ltd., which indicates that there is capacity on the landbank to accept 1097 tonnes from this installation based on the fact that it is a tillage farm and based on a total organic nitrogen load of 170KgN per hectare. The RD provides for the use of poultry litter as a fertiliser in accordance with the NMP submitted and subject to the submission of an annual NMP for the lands to be used for the recovery of manure.

The applicant identifies the requirement under Article 8(capacity of storage facilities for effluents and soiled water) of the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, S.I. No. 101 of 2009. Article 8 requires that soiled water shall equal or exceed the capacity required to store all soiled water likely to arise on the holding during a period of 10 days. Soiled water is defined in the regulations. Washwater arising from the wash down of the broiler houses is stored in storage tanks, which have a total combined capacity of approximately 70m³. This is sufficient to hold the soiled water from c. 3 crops, 3 crops represents a storage period of 24-30 weeks. The RD requires 26 weeks storage of manure on –site or off-site, manure is defined in the glossary of the RD to include washwater. The washwater is used as a fertiliser on the applicant's.

Condition 3.6 of the RD requires the applicant to provide a minimum of 26 weeks' storage of manure on-site or at an agreed location.

Poultry litter and washwater when used as fertiliser in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations and the conditions of this RD are not considered likely to cause environmental pollution. The RD requires the applicant to maintain records of all movements of poultry litter/manure off-site to the satisfaction of the Agency and in accordance with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, S.I. No. 101 of 2009.

Noise

The installation is situated within the applicant's landholding in a rural area of Co. Mayo. The nearest sensitive location is a dwelling house located approximately 175 metres from the site boundary. The activities carried out at this installation are not likely to cause significant noise emissions. *Schedule B.4 Noise Emissions* specifies the standard noise emissions limit values of 55dB (A) daytime and 45dB (A) night-time at any noise sensitive location. The RD requires that the applicant carry out a noise survey of site operations as required by the Agency.

Use of Resources

The activity involves the consumption of water, feed, oil, electricity and medications. It is estimated that 3.8 – 4 tonnes of feed and 7m³ of water are used per 1,000 birds produced. The use of four specialised diets over the rearing period helps to ensure that the minimum amount of nutrients is excreted.

The amount of electricity and oil used for heating houses on the site varies depending on the time of year and weather conditions. The average oil volume used is 40-45 litres/1,000 birds produced. A back up generator (78 KVA) is used in the event of a disruption to the electricity supply.

All water used for feeding and washing is sourced from the mains supply. Condition 7 includes conditions on resource use and energy efficiency. The RD requires annual maintenance of the heating system and generator.

Compliance with EU Directives

IPPC Directive (91/61/EC)

This installation falls within the scope of category 6.6(a) (*Installations for the intensive rearing of poultry with more than 40,000 places for poultry*) of Annex I of Council Directive 96/61/EC concerning integrated pollution prevention and control. The RD as drafted takes account of the requirements of the Directive. BAT is taken to be represented by guidance given in the IPPC reference document on *BAT for Intensive Rearing of Poultry and Pigs*, July 2003.

Water Framework Directive [2000/60/EC]

The only emission to water from this installation is uncontaminated storm water from building roofs and the concrete yard area. The RD requires a weekly visual inspection of storm water emissions and COD/BOD monitoring as required by the Agency. The RD requires that poultry litter and washwater to be managed and recovered appropriately and provides for the landspreading of such materials as fertiliser subject to conditions.

EU Animal By-Products Regulations (EC No. 1774/2002)

Animal tissue and carcasses arise due to mortalities. This waste shall be stored on site temporarily in covered leak proof containers, prior to removal to the Western Brand Group Limited slaughtering installation (IPPC licence Reg. No. P0831-01) where the waste is combined with the offal arising from the Western Brand activity. and subsequently transported to a rendering plant by Ulster By-Products.

EU Nitrates Regulations

The Nitrates Directive (91/676/EEC) – *Council Directive of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources* -has the objective of reducing water pollution caused or induced by nitrates from agricultural sources and preventing further such pollution, with the primary emphasis being on the management of livestock manures and other fertilisers. The Directive has been transposed into Irish Legislation by the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 (S.I No. 101 of 2009). The RD specifies the minimum manure storage requirements for this installation and includes the exemption from this storage capacity as provided for under Article 13(1) of the Regulations in relation to reduced storage where manure: is removed to off-site storage, the applicant has access to a waste treatment facility for manure or the manure is transferred to an authorised (EPA Act or Waste Management Act Licensed) facility. The RD requires that where chicken litter/manure is landspread such practice shall be undertaken in accordance with the Regulations and the conditions of the RD.

Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC)

There are no discharges from the installation directly into any site designated under the E.U. Habitats or Birds Directives. The closest designated area is 50km downstream at Mask Lough as a Special Area of Conservation (Site Code 004062) and Special Protected Area (Site Code 001774) under the Habitats Directive. Surface water from the installation should be uncontaminated and therefore should have no impact on surface water quality off-site. *Schedule C.2.3 Monitoring of Storm Water Emissions* requires COD/BOD monitoring as required by the Agency and weekly visual inspection at the surface water discharge point(s).

Best Available Techniques (BAT)

I have examined and assessed the application documentation and I am satisfied that the site, technologies and techniques specified in the application and as confirmed, modified or specified in the attached Recommended Determination comply with the requirements and principles of BAT. I consider the technologies and techniques as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the way the installation is located, designed, built, managed, maintained, operated and decommissioned.

Fit & Proper Person Assessment

The Fit & Proper Person test requires three elements of examination: technical ability, legal standing and financial standing. It is my view, that the applicant can be deemed a Fit & Proper Person for the purpose of this licence.

Submissions

No submission was received in relation to the licence application.

Recommended Determination (RD)

The RD permits the applicant to operate the poultry rearing activity in accordance with EPA Acts 1992 to 2007 and the IPPC Directive (91/61/EC).

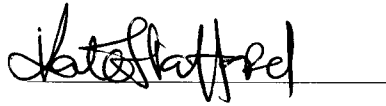
Charges

The annual charge included in the RD is €2,688.40, which is considered appropriate to cover the costs associated with enforcement of the RD.

Recommendation

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

Signed



Kate Stafford

Inspector

Procedural Note

In the event that no objections are received to the Proposed Determination of the application, a licence will be granted in accordance with Section 87(4) of the Environmental Protection Agency Acts 1992 and 2007 as soon as may be after the expiration of the appropriate period.