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Natural Resources Wales permitting decisions

**D. J. Huxley (Farms) Ltd**  
**Lower Mulsford**

**Decision Document**

## Bespoke permit

The application number is: PAN-002295

The Applicant / Operator is: D. J. Huxley (Farms) Ltd

The Installation is located at: Lower Mulsford, Sarn, Malpas, Wrexham, SY14 7LP

We have decided to grant the permit for Lower Mulsford operated by D. J. Huxley (Farms) Ltd.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

### Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

### Structure of this document

- Table of contents
- Key issues
- Annex 1 the consultation and web publicising responses

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## Key issues of the decision

### 1 Our decision

We consider that, in reaching that decision, we have taken into account all relevant considerations and legal requirements and that the permit will ensure that a high level of protection is provided for the environment and human health.

This Application is to operate an installation which is subject principally to the Industrial Emissions Directive (IED).

The permit contains many conditions taken from our standard Environmental Permit template including the relevant Annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations (EPR) and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the permit, we have considered the Application and accepted the details are sufficient and satisfactory to make the standard conditions appropriate.

### 2 How we reached our decision

#### 2.1 Receipt of Application

The Application was received on 29 January 2018 and was duly made on 14 February 2018. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

#### 2.2 Consultation on the Application

We carried out consultation on the Application in accordance with the EPR and our statutory Public Participation Statement (PPS).

We advertised the Application by a notice placed on our website, which contained all the information required by the IED, including telling people where and when they could see a copy of the Application.

A copy of the Application and all other documents relevant to our determination (see below) are available for the public to view. Anyone wishing to see these documents could arrange for copies to be made.

We sent copies of the Application to the following bodies, which includes those with whom we have “Working Together Agreements”:

- Wrexham County Council Planning Authority
- Wrexham County Council Environmental Protection Department

- Food Standards Agency
- Health Protection Agency
- Public Health Wales

These are bodies whose expertise, democratic accountability and/or local knowledge make it appropriate for us to seek their views directly.

Further details along with a summary of consultation comments and our response to the representations we received can be found in Annex 1. In this instance no comments were received.

### **2.2.1 Draft Permit Consultation**

We are now carrying out a consultation on our draft decision. This consultation will begin on 07/06/18 and end on 05/07/18.

## **3 The Legal Framework**

The Permit will be granted, under Regulation 13 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an installation as described by the IED;
- subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which also have to be addressed.

We address the legal requirements directly where relevant in the body of this document. NRW is satisfied that this decision is consistent with its general purpose of pursuing the sustainable management of natural resources (SMNR) in relation to Wales, and applying the principles of SMNR. In particular, NRW acknowledges that it is a principle of sustainable management to take action to prevent significant damage to ecosystems. We consider that, in granting the Permit a high level of protection will be delivered for the environment and human health through the operation of the Installation in accordance with the permit conditions.

## 4 The Installation

### 4.1 Description of the Installation and related issues

#### 4.1.1 The permitted activities

The Installation is subject to the EPR because it carries out an activity listed in Schedule 1 Part 2 of the EPR:

- Section 6.9 Part A(1)(a)(i) Rearing poultry in an installation with more than 40,000 places.

An installation may also comprise “directly associated activities”, which at this Installation include:

- Dirty water storage
- Biomass Boiler
- Carcass Incineration
- Feed silos
- Fuel storage

Together, these listed and directly associated activities comprise the Installation.

#### 4.1.2 The Site

The site lies to the south west of Threapwood, approximately 4km east of Bangor-on-Dee at grid reference SJ 43431 45004. The surrounding area is hilly with some woodland. The predominant land use is grassland and grazing.

The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. In addition the operator has provided a site layout/drainage plan which includes discharge points.

A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.

#### 4.1.3 What the Installation does

The facility will comprise of two poultry houses, with capacity for 106,000 broiler birds. The birds will be brought in from a hatchery and then transported to a processing plant at the end of the cycle. The average crop cycle will be approximately 39 days plus 7 days to disinfect, clean and prepare for the next crop. When the birds reach around five weeks old a ‘thinning’ takes place. When the birds are around six weeks old the remainder are collected and removed from the site. The bird removal takes place over one to two days. This will be done on an all-in, all-out basis.

## 4.2 The site and its protection

### 4.2.1 Proposed site design: potentially polluting substances and prevention measures

There will be two poultry houses, with a combined capacity for 106,000 birds. The working area where vehicles operate is laid to concrete and hard standing. Ventilation is provided by side inlets and roof extraction via a number of fan outlets on the ridgeline. Additional ventilation (during exceptionally hot weather) is provided by rear gable-end extraction fans. Rain and lightly contaminated water from the houses and yard area will be captured and treated by a balancing pond located to the north east of the site.

Water is via a nipple drinking system fitted with cups to reduce leakage and spills, leading to drier litter. Feed is delivered in covered lorries and stored on site in vermin proof steel galvanised bins. At the end of the growing period the used litter is immediately taken away from the site in covered vehicles and taken to a local Anaerobic Digester plant where it will be used as a feed stock to produce electricity as a renewable energy source

### 4.2.2 Closure and decommissioning

Permit condition 1.1.1 requires the Operator to have a written management system in place which identifies and minimises risks of pollution including those arising from closure. At the definitive cessation of activities, the Operator has to satisfy us that the necessary measures have been taken so that the site ceases to pose a risk to soil or groundwater, taking into account both the baseline conditions and the site's current or approved future use. To do this, the Operator has to apply to us for surrender, which we will not grant unless and until we are satisfied that these requirements have been met.

The operator has included a site closure plan with their application detailing the steps that will be taken on the event of the facility closing.

A site condition report has been completed providing a baseline for the site at the time of the permit application. No pollution incidents have previously occurred at the site. We consider that the description provided is satisfactory. The decision was taken in accordance with our guidance on site condition reports – guidance and templates (H5).

## 4.3 Operation of the Installation – general issues

### 4.3.1 Administrative issues

The Applicant is the sole Operator of the Installation. We are satisfied that the Applicant is the person who will have control over the operation of the Installation; and that the Applicant will be able to operate the Installation so as to comply with the conditions included in the Permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.

#### 4.3.2 Relevant convictions

Our Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found.

#### 4.3.3 Management

The Applicant has stated in the Application that they will implement an Environmental Management System (EMS) that will meet the requirements for an EMS in our “How to comply with your environmental permit guidance”. The Applicant submitted a summary of the EMS with their application which includes sections on normal operations, complaints, accident/emergency plan, incidents and abnormal operations, maintenance schedule recording, training and site security

All written management systems will be subject to regular review by the Operator.

We are satisfied that appropriate management systems and management structures will be in place for this Installation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.

#### 4.3.4 Accident management

In order to ensure that the management system proposed by the Applicant sufficiently manages the residual risk of accidents, permit condition 1.1.1(a) requires the implementation of a written management system which addresses the pollution risks associated with, amongst other things, accidents.

The operator has an emergency plan which will be subject to regular review. It includes contingencies for events such as fire, power failure, flood, disease and containment failure.

#### 4.3.3 Site security

The site itself does not have a secure boundary fence, but the perimeter will be defined by planted hedgerows and trees. The site is a significant distance from the public road and will be well hidden by the proposed trees and hedgerow to be planted. The sheds will be securely locked at night.

The site entrance barrier will be locked at night to prevent pedestrian and vehicle access out of hours. The fuel oil tank and kerosene tank will be secure and locked.

Having considered the information submitted in the Application, we are satisfied that procedures will be in place to ensure that the site remains secure.

#### 4.3.5 Operating techniques

Prior to the arrival of the day-old chicks, the polished concrete floors in each house are covered with wood shavings (or equivalent) to a depth of 20mm using a ‘litter spreader’; this allows the floor to breathe and release moisture thus enhancing environmental conditions inside the poultry house. This proposed depth of litter

complies with the Red Tractor Assured Poultry Standards. The houses are then pre-warmed to 31°C using space heaters fed from the biomass-fuelled boilers. Sufficient feed (starter pellets) is delivered from a separately-owned feed mill and stored in the fully-enclosed feed bins which are protected from collision damage and positioned to the front of the buildings. Once the site is prepared the chicks are delivered from a hatchery and placed in the sheds. Ventilation is provided by side inlets and roof extraction via a number of fan outlets on the ridgeline. Additional ventilation (during exceptionally hot weather) is provided by rear gable-end extraction fans. Water is provided via nipple drinkers which are designed to minimise spillage.

Diets are formulated according to the birds' requirements and the stage of growth. Protein and phosphorus levels are reduced over the growing period. At the start of the crop cycle they are fed with starter pellets. The feed gradually changes to 'grower' mix and later to 'finisher' mix to reflect the needs of the birds as they grow. Feed is stored in the feed bins between the sheds and automatically dispensed to feeders evenly located throughout the shed.

Bird mortalities are removed each day and the numbers are recorded. The carcasses are held in covered, vermin-proof sealed containers prior to being frequently incinerated using an on-site incinerator designed for this purpose.

At the end of the growing period the used litter is immediately taken away from the site in covered vehicles and taken to a local Anaerobic Digester plant where it will be used as a feed stock to produce electricity as a renewable energy source.

These measures are intended to maintain bio security, reduce the production and emission of ammonia, dust and odours and to prevent liquid washings escaping to the environment.

We have reviewed the techniques proposed by the operator and compared these with the relevant guidance notes. We are satisfied that the techniques represent appropriate measures for the installation in line with BAT standards in EPR 6.09.

#### 4.3.6 Incorporating the application

We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.

These descriptions are specified in the Operating Techniques table in the permit.

#### 4.3.7 Energy efficiency

We are satisfied that the Applicant will ensure that energy is used in the most efficient way possible.

#### 4.3.8 Avoidance, recovery or disposal of wastes produced by the activities

At depletion any remaining litter will be removed from the site and used on operator controlled land with any extra sold to third parties.

## **5 Minimising the Installation's environmental impact**

Regulated activities can present different types of risk to the environment, these include odour, noise and vibration; accidents, fugitive emissions to air and water; as well as point source releases to air, discharges to ground or groundwater, global warming potential and generation of waste. All these factors are discussed in this and other sections of this document.

For an installation of this kind, the principal emissions are :

- Ammonia
- Dust
- Odour
- Noise
- Effluent discharges

The next sections of this document explain how we have approached the critical issue of assessing the likely impact of emissions from the Installation on human health and the environment and what measures we are requiring to ensure a high level of protection.

### **5.1 Assessment of Impact on Air Quality**

The applicant has carried out a risk assessment identifying potential risks to human health including dust and ammonia. Operating procedures have been put in place to minimise the risks, in line with BAT procedures. It is considered that if the site is operated in line with these procedures, there is no significant risk to human health as a result of activities at the site.

### **5.2 Assessment of odour impact**

The applicant has submitted detailed dispersion modelling of the impact of odour from the proposed facility.

H4 Odour Management guidance explains that the odour benchmarks are based on the 98<sup>th</sup> percentile of hourly average concentrations of odour modelled over a year at the site/installation boundary. The benchmarks are:

- 1.5 odour units for most offensive odours
- 3 odour units for moderately offensive odours
- 6 odour units for less offensive odours

Odours from poultry rearing are usually placed in the moderately offensive category. Therefore for their modelling the applicant has used the benchmark of 3.0 ouE/m<sup>3</sup> to assess the potential impact of odour on nearby sensitive receptors. Modelling has been carried out based on emissions from the two poultry houses and areas of the ranging area most likely to be used frequently.

The results of the modelling predict the highest maximum odour concentrations at the buildings directly associated with Lower Mulsford. All of the receptors fall below 1 ouE/m<sup>3</sup>.

We are satisfied that the risk of odour pollution at nearby receptors is not significant. NRW has assessed the modelling in detail and is satisfied that it accurately represents the predicted odours. It is recognised that this modelling does only represent the expected odour concentrations for 98% of the time and that odours may be higher for the remaining 2% of the time. NRW is not able to ensure that odour impacts on nearby receptors are reduced to zero, but is determined to ensure that they are minimised.

Permit condition 3.3.1 requires that emissions from the activities are free from odour at levels likely to cause pollution outside the site, as perceived by an officer of NRW. We are satisfied that this condition will be sufficiently protective in conjunction with the measures described by the applicant for minimising odour production at the installation.

### **5.3 Assessment of impact to surface and ground water**

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent pollution of ground and surface water.

Clean, uncontaminated rainwater from roofs and clean surfaces to open and stone filled infiltration trenches and a piped system each side of the sheds This is discharged to a balancing pool and then to watercourse with use of a hydro break flat control produced by Hydro International.

Any lightly contaminated yard wash will be directed to a sealed underground tank,

The permit includes a condition that requires periodic monitoring to be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

### **5.4 Emissions to sewer**

When birds are removed from the poultry houses, the site will be pressure washed, disinfected and dried out prior to the next cycle. All wash waters will be contained in sealed underground tank prior to being spread on operator controlled land. There are no emissions to sewer.

### **5.5 Fugitive emissions**

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise fugitive emissions, including dust, and to prevent pollution from fugitive emissions.

### **5.6 Assessment of noise impact**

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise noise emissions from the site.

A risk assessment of the potential impact of noise from the site on nearby sensitive receptors has been carried out by the applicant. Potential sources of noise include vehicles travelling to and from site and ventilation fans.

Because there are sensitive receptors within 400 metres of the installation. The applicant has submitted a noise management plan (NMP) for the installation as required by EPR 6.09 "*How to Comply with your Permit for Intensive Farming*". The NMP describes the measures and controls in place to minimise noise and includes twice daily inspections of the site.

We have compared the measures proposed for the site to the BAT standards in EPR 6.09 and are satisfied that the techniques represent appropriate measures for the installation. The NMP has been incorporated into the operating techniques section of the permit.

Permit condition 3.4.1 requires that emissions from the activities are free from noise at levels likely to cause pollution outside the site, as perceived by an officer of NRW. We are satisfied that this condition will be sufficiently protective in conjunction with the measures described by the applicant for minimising odour production at the installation.

### **5.7 Impact on Habitats sites, SSSIs, non-statutory conservation sites etc.**

The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat .

A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the sites.

The following sites have been considered:

SAC (within 5m)

River Dee SAC (3km to the North West)

SSSI (within 5km)

River Dee SSSI (2.7km North West)

Well Rough & Long Plantation SSSI (1.85km to the West)

Several areas of ancient semi natural woodland and local wildlife sites (within 2km).

The applicant has carried out detailed modelling of the potential impact of dispersion and deposition of Ammonia from the site. The submitted report concludes that the maximum predicted NH<sub>3</sub> process contributions (PCs) from the existing and proposed poultry units may exceed the lower critical level (CLE) for NH<sub>3</sub> at Well Rough & Long Plantation SSSI and the River Dee SSSI and SAC, with a PC of 2.7% and 2.9%

respectively. The applicant then provided detailed modelling where the PC's to these SSSI's had significantly lowered to 0.4% for Well rough & Long Plantation and 0.5% River Dee.

Impacts at all other receptors remain below this CLe with PC impacts at the SAC and SSSI sites of less than 1% of the CLe. After concluding detailed modelling all of these receptors fall below the 1%.

OGN Form 1 and CRoW Appendix 4 have been completed and forwarded onto our internal Natural Resource Management team for consultation. Full details of the assessment carried out of the potential effect of ammonia emissions from the proposed site on the SAC and SSSIs detailed above are detailed in the forms. Our conclusions were that the proposal is not likely to have a significant effect on any of these sites. The forms were sent to our internal Natural Resource Management team for consultation. The forms are available from our public register.

### **5.8 Impact on European Protected Species (EPS)**

We have consulted with our species officers and have been advised that the poultry farm is within the predicted range of local populations of great crested newts (GCNs). The predicted range of the species is 500m from natal ponds, though dispersal can be up to 1200m.

Given the location of this facility, the attenuation ponds being constructed on site are predicted to be colonized by this species. As a direct consequence of this colonization, any maintenance of the ponds will need to be subject to a EPS derogation licence issued by NRW under Regulation 55 of the Conservation of Habitats and Species Regulations 2017. A condition has been included in the permit requiring the surveillance of the ponds for GCN every 5 years. If GCN are subsequently found operational conditions may need to be revised.

Any measures to be implemented during the construction phase of the site will be considered through the planning application.

Based on the nature and spatial location of this proposal it is not considered that the application will not be detrimental to the maintenance of the favourable conservation status (FCS) of any known populations of European Protected Species (EPS) in the locality, including the GCNs.

## **6 Setting ELVs and other Permit conditions**

### **6.1 Translating BAT into Permit conditions**

Article 14(3) of the Industrial Emissions Directive (IED) states that BAT conclusions shall be the reference for setting the permit conditions to installations covered by the Directive. As a result of the Commission Implementing Decision (EU) 2017/302 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, the format of our Permit for the intensive farming sector has been updated. Appendix 1 of the Permit sets out generic conditions which apply to all sites. Appendix 2 sets out site specific conditions based on the activities being carried out.

## 6.2 Monitoring

Monitoring should be carried out for the parameters listed in Appendix 1, Schedule 3 of the permit using the methods and to the frequencies specified in Table S3.1 for broilers. These monitoring requirements have been introduced in order to demonstrate compliance with the best available techniques (BAT) conclusions for the intensive rearing of poultry or pigs, as set out in the Commission Implementing Decision (EU) 2017/302 of 15 February 2017.

No monitoring is required from the point source emissions on site.

## 6.3 Reporting

We have specified reporting requirements in Appendix 2, Schedule 4 of the Permit to ensure compliance with permit conditions and to monitor the efficiency of farming activities at the site in line with BAT.

## ANNEX 1: Consultation Responses

### A) Advertising and Consultation on the Application

The Application has been advertised and consulted upon in accordance with Natural Resources Wales Public Participation Statement. The way in which this has been carried out along with the results of our consultation and how we have taken consultation responses into account in reaching our draft decision is summarised in this Annex. Copies of all consultation responses have been placed on Natural Resources Wales public register.

#### 1) Consultation Responses from Statutory and Non-Statutory Bodies

| Response Received from Public Health Wales                                    |                                                     |
|-------------------------------------------------------------------------------|-----------------------------------------------------|
| Brief summary of issues raised:                                               | Summary of action taken / how this has been covered |
| <ul style="list-style-type: none"><li>• Management plans</li></ul>            | Permit conditions cover concerns                    |
| <ul style="list-style-type: none"><li>• Dust and particulates</li></ul>       | Permit conditions cover concerns                    |
| <ul style="list-style-type: none"><li>• Bunding all on-site liquids</li></ul> | Applicant has fuel stores bunded                    |

#### 2) Consultation Responses from Members of the Public and Community Organisations

##### a) Representations from Local MP, Assembly Member (AM), Councillors and Parish / Town / Community Councils

| Response Received from          |                                                     |
|---------------------------------|-----------------------------------------------------|
| Brief summary of issues raised: | Summary of action taken / how this has been covered |
| None                            | N/A                                                 |

##### b) Representations from Community and Other Organisations

| Response Received from          |                                                     |
|---------------------------------|-----------------------------------------------------|
| Brief summary of issues raised: | Summary of action taken / how this has been covered |
| None                            | N/A                                                 |

##### c) Representations from Individual Members of the Public

| Response Received from          |                                                     |
|---------------------------------|-----------------------------------------------------|
| Brief summary of issues raised: | Summary of action taken / how this has been covered |
| None                            | N/A                                                 |