AJ JM RJ & RE Abberley Cerrigcroes Poultry Unit

Decision Document

Bespoke permit

The application number is: PAN-001410

The permit number is: EPR/AB3693CX

The Applicant / Operator is: Andrew J, Janet M, Roger J & Ross E Abberley

The Installation is located at: Cerrigcroes Poultry Unit, Cerrigcroes, Lanyre, nr Llandrindod Wells, Powys, LD1 6EU

We have decided to grant the permit for Cerrigcroes Poultry Unit operated by AJ, JM, RE, RJ Abberley.

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 2 the consultation and web publicising responses

Table of Contents

Contents

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 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 22 March 2017 and was duly made on 20 April 2017. 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”:

- Powys County Council Planning Authority
- Powys 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.

2.3 Requests for Further Information

A Schedule 5 Notice was issued on 10 August 2017 requesting further information from the applicant including detailed ammonia modelling and drainage details. All of the information was provided by 15 August 2017. The additional information supplied satisfied the requirements of the Schedule 5 Notice. A copy of the notice requesting further information has been placed on our public register as have the responses received.

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

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 in relation to Wales, and applying the principles of sustainable management of natural resources. 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 Part 1 of Schedule 1 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

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

4.1.2 The Site

The site lies approximately 2km West of Llandrindod Wells at grid reference SO 03529 61371. The surrounding land is flat and the predominant land use is arable and grazing.

The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility, including the ranging area. 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 48,000 free range layers. One existing house, with capacity for 12,000 chickens is to be extended to accommodate 32,000 birds, the other house has capacity for 16,000 chickens. Both will be multi-tier housing systems. Birds will be housed at a point of lay and depopulated at the end of their egg laying cycle. This will be done on an all-in, all-out basis. There will be approximately one cycle per annum. Birds are allowed to range by means of pop holes at the base of the sides of the houses.

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 48,000 birds. The houses are already in use on site. One has a flat deck system, capped ridge fans and

gable end fans. The other is a multi-tier system, has uncapped high speed ridge fans and gable end fans. The current flat deck house is to be extended, changed to a multi-tier system and be fitted with uncapped high speed ride fans. Gable end fans will still be used.

The working area where vehicles operate is laid to concrete and hard standing. 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. Manure will be removed from the houses twice a week by a belt system. This system is currently only in use in the multi-tier system house. The other house will be changed to this system, from the current method of litter accumulating in the house through the laying cycle, as part of the planned extension.

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. It is noted that the land has previously been used for free range egg production. 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

A Partnership, comprising of four individuals will be the sole Operator of the Installation. We are satisfied that the Applicant 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, maintenance schedule recording, incidents and abnormal operations, complaints, accident/emergency plan, training, installation plans 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 1.1.1a 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.

4.3.5 Site security

The site itself does not have a secure boundary fence. Poultry houses, fuel stores and all store rooms are kept locked and secure, preventing any unauthorised access.

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

4.3.6 Operating techniques

Before bird arrival the house floors will be covered to a minimum depth of 2cm of bulk shavings. Temperature and humidity will be closely monitored on a daily basis to achieve bird comfort and a relative humidity of 55-60%, this should achieve litter with a dry matter content of between 60-70%, which is important to minimising emissions.

Ventilation is controlled by temperature, extraction fans will be high velocity roof mounted and gable end on both buildings. The birds themselves generate sufficient heat to negate the need for any additional heating. Water is via a nipple drinking system fitted with cups to reduce leakage and spills leading to drier litter.

Birds are fed a minimum of three diets during their cycle, with gradually reducing levels of protein and phosphorous as bird age increases. Feed is delivered from a UKASTA accredited feed mill and blown into bulk feed bins situated adjacent to the houses,

from the feed bins the feed is augered into the houses and distributed to the birds via a pan feeding system.

Manure belts will be operated twice weekly removing litter from the houses.

Wash water tanks along with sediment traps will be emptied and removed from site with litter from the houses.

The above measures are designed to reduce emissions, trees and hedges will trap dust particles reducing odour. Ammonia emissions will be reduced by reduced protein feed, maintaining good litter conditions with dry matter content above 70%.

Records of tonnages of litter and wash water removal are recorded, wash water will be spread on operator controlled land.

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.

4.3.7 Incorporating the application

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

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

4.3.8 Energy efficiency

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

4.3.9 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.

Fallen stock will be recorded daily and securely stored in vermin proof containers awaiting regular collection by a licenced renderer.

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 facility. The modelling has been carried out based on emissions from the existing poultry houses, from the same houses once the proposed changes have taken place, and parts of the ranging area most likely to be frequently used

H4 Odour Management guidance explains that the odour benchmarks are based on the 98th 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 ou_E/m^3 to assess the potential impact of odour on nearby sensitive receptors.

The results of the modelling predict the highest maximum odour concentration, 4.16 ou_E/m^3 at the residence directly associated with Cerrigcroes farm, and occupied by

one of the permit holders. The results for all other locations assessed are below the benchmark of 3 ou_E/m^3. At the five nearest receptors, the modelling shows that odour levels should decrease based on the proposed changes.

We are satisfied that the risk of odour pollution at nearby receptors, not directly associated with the farm, is not significant. NRW has assessed the modelling 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.

The applicant has submitted an odour management plan (OMP) for the installation as required by EPR 6.09 "*How to Comply with your Permit for Intensive Farming"* because there are sensitive receptors within 400 metres of the installation. The OMP describes the measures and controls in place to minimise odour and includes twice daily olfactory checks. 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 OMP has been incorporated into the operating techniques section of the permit. .

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 will drain to French drains running the length of the houses. The French drainage connects to a single discharge point, and with clean yard water will drain to a stream that runs through the ranging area and flows to the Cwm-nant. Any lightly contaminated yard wash will be directed to the sealed underground tanks.

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 two sealed underground tanks 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

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.

Roof mounted ventilation fans will be subject to regular, end of cycle maintenance by qualified electricians and noisy fans will be isolated and an electrician notified. Silencers will be fitted to feed delivery lorries. The movement of vehicles outside of the installation boundary is not within the regulatory scope of the Environmental Permitting (England and Wales) Regulations 2016 and is a matter for the local planning authority.

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 screening distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. As this application was received before 1 April 2017 it has been assessed using old screening limits and thresholds.

A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process.

The following sites have been considered:

SPA (within 10km)

Elenydd-Mallaen 7.4 West

SACs (within 10km)

Elenydd 7.4km West

River Wye 1.2km East and 2.2km East

Elan Valley Woodlands 7.7km North West

SSIs (within 5km)

Dwfant pasture 0.7km South

Rhos Dwfnant 1.4km South West

River Ithon 1.4km East

Moorland Pastures 1.6km North East

Crabtree Green Meadow 1.8km North East

Aberthin and Bedw Turbaries 1.8km South East

Gweunydd Coch-y-Dwst 2.2km North East

River Wye (Upper Wye) 2.2km West

Rhos Penrhiw 2.3km South

Llanfawr Quarries, Llandrindod Wells 2.7km East

Pentrofsa Mire 2.7km South East

Lake Wood, Llandrindod Wells 2.9km South East

Coed Aberdulas 3.2km North East

Bach y Graig stream section 3.4km East

95 areas of ancient semi natural woodland (within 2km).

There are no Local Wildlife Sites, Local Nature Reserves or National Nature Reserves within the relevant screening distance.

It is not considered that this application will be detrimental to the maintenance of the favourable conservation status (FCS) of any known populations of European Protected Species (EPS) in the locality.

The applicant has carried out detailed modelling of the potential impact of dispersion and deposition of Ammonia from the site. A critical level (Cle) of 1 has been assumed. The submitted report concludes that the potential impacts at receptors within the Elan Valley Woodlands SAC, Elenydd SAC and Elenydd-Mallaen SPA, and all except for one modelling location in the River Wye SAC are insignificant as the process contribution figures are all less than 4% of the lower critical level (Cle) for ammonia and critical load (Clo) for nitrogen deposition. The level at the one exceedance on the River Wye SAC is 4.9%. This is at the nearest point of the SAC to the site. The Transition Mire Feature, this being the only part which is sensitive to ammonia, for the River Wye SAC is known to only occur on land considerably further away than the nearest points of the river, where the modelling is below the relevant thresholds so it is not considered that there will be any significant impact.

The modelling showed that at all Ancient Woodland receptors the figures were below the thresholds for ammonia concentrations and nitrogen deposition rates and the potential impact is therefore insignificant.

Background concentration levels of Ammonia are known to be high at three SSSIs within close proximity to the Cerrigcroes site. Although the predicted process concentrations of ammonia were below the threshold of 20% of the critical level in the assessment provided by the applicant, we requested that detailed modelling be carried out, via the Schedule 5 notice.

- Dwfnant Pasture SSSI
- Rhos Dwfnant SSSI
- Aberithon and Bedw Turbaries SSSI

The modelling provided showed that the potential impact at the three sites was insignificant. The process contribution as a percentage of the Cle was a maximum of 4.9% at Dwfnant Pasture SSSI, 2.0% at Rhos Dwfnant SSSI and 1.5% at Aberthin and Bedw Turbaries SSSI. As a percentage of the Clo the process contribution was a maximum of 2.5% at Dwfnant Pasture SSSI, 1.0% at Rhos Dwfnant SSSI and 0.8% at Aberthin and Bedw Turbaries SSSI The impacts at all other SSSIs was screened out in the preliminary modelling carried out.

A Habitats Regulations Assessment has been carried out and an OGN Form 1 completed and forwarded onto the local Natural Resource Management team for consultation. A Form 2 has been completed in response which agrees with the conclusions of the Form 1. A CRoW Appendix 4 has also been completed for info. Full details of the assessment carried out of the potential effect of ammonia emissions from the proposed site on the SAC, SPAs and SSSIs listed 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 are available from our public register.

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 laying hens and laying hens in non-caged housing. 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 Reponses

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	
Brief summary of issues raised:	**Summary of action taken / how this has been covered**
PHW A response was provided for five different IF applications in one. "Based upon the information provided by the applicant, and provided that Best Available Techniques (BAT) and management controls are applied as per relevant guidance, then there is limited potential for risk to public health from activities undertaken at the application site."	N/A (Because BAT is already proposed by the applicant and required by the permit)
Powys County Council Planning Department Relates to planning application P/2009/0414. No comments have been made, or issues raised in response to our consultation.	N/A

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