

# Environment Agency permitting decisions

## Variation

We have decided to issue the variation for Northcott Farm Poultry Unit operated by P. D. Hook (Breeders) Limited & P. D. Hook (Rearing) Limited.

The variation number is [EPR/BP3638RX/V002](#).

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

- Description of the main features of the Installation
- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

This variation authorises the following changes:

- To incorporate the change of use at Northcott A from a rearing facility to a broiler breeder layer facility;
- Implement a 4 year phased improvement schedule for the current ventilation systems to improve ammonia dispersion by fitting high speed ventilation systems (at least 11m/s) in all poultry houses;
- Consolidation of permit with Industrial Emissions Directive conditions.

## Key issues of the decision

### Ammonia Impacts

There is one Site of Special Scientific Interest (SSSI) within 5 kilometres of the site. There are also 16 Local Wildlife Sites (LWS) within 2km of the installation. An assessment of the impacts of ammonia from the site has demonstrated that following the upgraded ventilation systems on site there will be no significant impact on the nature conservation sites from the farm installation, as detailed below.

#### Assessment of Site of Special Scientific Interest (SSSI)

The following trigger thresholds have been applied for the assessment of SSSIs:

- If the Process Contribution (PC) is less than 20% of relevant CLe or CLo, then the farm can be permitted.
- Where this threshold is exceeded an assessment alone and in combination is required.
- An in combination assessment will be completed to establish the combined PC for all existing farms identified within 5 km of the application.

Initial screening using Ammonia Screening Tool (AST) v4.5 has indicated that emissions from Northcott Farm will only have a potential impact on SSSIs with a precautionary critical level of  $1\mu\text{g}/\text{m}^3$  if they are within 1,406 metres of the emission source.

Initial screening indicates that beyond 1,406 m the PC is less than  $0.2\mu\text{g}/\text{m}^3$  (i.e. less than 20% of the precautionary  $1\mu\text{g}/\text{m}^3$  critical level) and therefore beyond this distance the PC is insignificant. Hence Moor SSSI is 5km from Northcott Farm and therefore screen out of any further assessment.

#### Assessment of Local Wildlife Sites (LWS)

The following trigger thresholds have been applied for the assessment of LWSs. If the PC is less than 100% of relevant CLe or CLo, then the farm can be permitted.

Screening using Ammonia Screening Tool v4.5 has indicated that beyond 482m the PC from Northcott Farm is less than  $1\mu\text{g}/\text{m}^3$  (i.e. less than 100% of the precautionary  $1\mu\text{g}/\text{m}^3$  critical level) and therefore the PC is insignificant.

Where the precautionary level of  $1\mu\text{g}/\text{m}^3$  is used, and the PC is assessed to be less than 100%, the site automatically screens out as insignificant, and no further assessment of critical load is necessary. It is possible to conclude no significant pollution will occur at this LWS site and no further assessment is required.

14 of the 16 non-statutory sites are beyond this distance and therefore screen out of any further assessment. See Table 1 below for site distances.

**Table 1 – Ammonia emissions – LWS distances**

| Site                       | Critical level ammonia ( $\mu\text{g}/\text{m}^3$ ) | Distance from Farm (m) |
|----------------------------|---|------------------------|
| Newcombe Errish Plantation | 3*  | Within 250m            |
| Shuttleton Common          | 1**   | 2,266                  |
| Stentwood                  | 1**   | 2,237                  |
| Blackborough Common        | 1**   | 1,568                  |
| Bodmiscombe Meadows        | 1**   | 1,424                  |
| Hackpen Hill               | 1**   | 1,988                  |
| Sheldon Grange Woods       | 1**   | 1,277                  |
| Blackborough Common        | 1**   | 1,576                  |
| Shute Farm (W)             | 1**   | 757                    |
| Lower Sheldon              | 1**   | 987                    |
| Shepherds Valley           | 1**   | 2,197                  |
| Newcombe                   | 1**   | 851                    |
| Shutes Farm (E)            | 1**   | 1,316                  |
| Shute's Farm (N)           | 1**   | 1,160                  |
| Slade                      | 1**   | 958                    |
| Newcombe Errish Field      | 3*  | Within 250m            |

\* CLe3 for ammonia has been applied due to lack of presence of protected lichens and bryophytes on Easimap layer

\*\* Precautionary CLe1 for ammonia has been applied

Newcombe Errish Plantation and Newcombe Errish Field are within 250m of Northcott Farm. Therefore the operator provided a detailed modelling assessment of the ammonia impacts from the farm.

For these sites this farm has been screened out, as set out above, using results of the detailed modelling supplied by the applicant as part of the application (*Document reference: A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing Pullet Rearing Units and the Proposed Pullet Rearing Unit and Egg Laying Chicken unit at Northcott Farm, Landcroft Lane, Blackborough in Devon. A S Modelling & Data Ltd. 31<sup>st</sup> August 2015*).

Detailed modelling provided by the applicant compares the current permitted ammonia emission scenario on site, with the proposed scenario following ventilation upgrades. The modelling has been checked by our Air Quality Modelling and Assessment Unit (AQMAU).

The applicant's assessment concludes that: *“Under the proposed scenario, ammonia emissions would be higher than currently, but the use of uncapped high speed fans for ventilation would lead to an improvement in initial dispersion characteristics which would mitigate against this to some extent. However, the modelling indicates that ammonia concentrations and nitrogen deposition rates would be higher than the current levels at some receptors*

and the area of exceedance of 50% of the Critical Load of 10 kg/ha over South Plantation LWS would increase to approximately 1.0 ha. There would also be a small exceedance of 50% of the Critical Load of 10 kg/ha over the western edge of the LWS to the east.”

The report demonstrates that there would not be an exceedance of the 100% threshold of the Critical Load of 10 kg/ha at any LWS's, and therefore the proposal can be permitted on this basis (see Tables 2 and 3 below).

AQMAU have undertaken a high level review of the applicant's report and recommended that the consultant's conclusions can be used for the basis of permit determination. We have confidence that we can agree with the report conclusions.

**Table 2 - Ammonia emissions**

| Site                           | Critical level ammonia $\mu\text{g}/\text{m}^3$ | Predicted PC $\mu\text{g}/\text{m}^3$ | PC % of critical level |
|--------------------------------|---|---------------------------------------|------------------------|
| Newcombe Errish Plantation LWS | 3*  | 0.824                                 | 27.5%                  |
| Newcombe Errish Field LWS      | 3*  | 0.460                                 | 15.3%                  |

\* CLe 3 applied as no protected lichen or bryophytes species were found when checking easimap layer

**Table 3 – Nitrogen deposition**

| Site                           | Critical load kg N/ha/yr | Predicted PC kg N/ha/yr | PC % of critical load |
|--------------------------------|--------------------------|-------------------------|-----------------------|
| Newcombe Errish Plantation LWS | 10*                      | 6.42                    | 64.2                  |
| Newcombe Errish Field LWS      | 10*                      | 3.58                    | 35.8                  |

\* Critical load values for broadleaved woodland taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk))

No further assessment for these sites is required.

## Emissions to Air

The operator is proposing to implement a 4 year phased improvement schedule for the current ventilation systems to improve ammonia dispersion by fitting high speed ventilation systems (at least 11m/s) in all poultry houses. 2 houses per year between 2016 and 2019 will be upgraded. This is summarised in the following table:

|      |   |
|------|---|
| 2016 | Northcott A and B - all houses have side vents and gable end fans   |
| 2017 | Northcott A - all houses have side vents and gable end fans<br>Northcott B - Houses 1 & 2 have high velocity fans; Houses 3 & 4 remain as side vents and gable end fans |

|              |  |
|--------------|--|
| 2018         | Northcott A - all houses have side vents and gable end fans<br>Northcott B - all houses have high velocity fans  |
| 2019         | Northcott A - Houses 1 & 2 have high velocity fans; Houses 3 & 4 remain as side vents and gable end fans<br>Northcott B - all houses have high velocity fans |
| 2020 onwards | Northcott A and B - all houses have high velocity fans   |

To accommodate this in the permit, we have included a different point source emissions to air table for each year between 2016 to 2019 and 2020 onwards (Tables S3.1a – S3.1e). If the operator does not follow the improvement program prescribed in their operating techniques and variation application they will be in breach of their permit.

## Odour

The operator has provided an updated Odour Management Plan (reference *Odour Management Plan: Northcott Poultry Unit*, October 2015) with the application, as there are sensitive receptors within 400m of the installation. We have not recorded any substantiated odour complaints relating to the installation.

Potentially significant sources of odour include, but are not limited to:

- Feed – delivery, storage and preparation;
- Housing – design, ventilation, and maintenance;
- Manure/litter – conditions, storage and management;
- Livestock – management and fallen stock;
- Cleanout – litter removal, dirty water generation and storage and bird depletion.

Mitigation techniques on site include, but are not limited to, the following:

- No onsite mixing and milling of feed; feed is blown directly from the delivery lorry into the storage silos and piped from silos to the sheds minimising dust emissions;
- Ventilation systems are roof mounted high velocity fans operated to achieve optimum temperatures for the stage of production in all weather and seasonal conditions. This avoids build up of moisture in the houses;
- Nipple drinkers minimise water spillage;
- No storage of used litter on site. All litter is placed into trailers at the entrance to each house. When full the trailer is covered and driven offsite;
- At clean out all dirty water is directed to underground tanks for storage;
- Carcasses are stored in purpose built locked bins on site prior to collection under the fallen stock scheme.

The Odour Management Plan has been assessed using Environment Agency Guidance *H4 Odour Management – How to Comply with your Environmental*

*Permit and the Poultry Industry Good Practice Checklist.* We have reviewed and approved the Odour Management Plan and consider it complies with the requirements of our H4 Odour management guidance note. We agree with the scope and suitability of key measures but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the operator. We accept this odour management plan and it has been incorporated into the permit as an operating technique.

## Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and permit/ notice.

| Aspect considered   | Justification / Detail  | Criteria met |
|---|---|--------------|
|   |   | Yes          |
| <b>Consultation</b>                                       |   |              |
| Scope of consultation                                     | The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.  | ✓            |
| Responses to consultation and web publicising             | The web publicising and consultation responses (Annex 2) were taken into account in the decision.<br><br>The decision was taken in accordance with our guidance.  | ✓            |
| <b>Operator</b>   |   |              |
| Control of the facility                                   | We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.   | ✓            |
| <b>European Directives</b>                                |   |              |
| Applicable directives                                     | All applicable European directives have been considered in the determination of the application.  | ✓            |
| <b>The site</b>   |   |              |
| Extent of the site of the facility                        | The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.<br><br>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.   | ✓            |
| Biodiversity, Heritage, Landscape and Nature Conservation | The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat .<br><br>A full assessment of the application and its potential to affect conservation sites has been carried out as part of the permitting process. We consider that the application | ✓            |

| Aspect considered   | Justification / Detail  | Criteria met |
|---|---|--------------|
|   |   | Yes          |
|   | <p>will not affect the features of the sites.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p> <p><b>Please see key issues section for further details.</b></p>  |              |
| <b>Environmental Risk Assessment and operating techniques</b> |   |              |
| Environmental risk  | <p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment, all emissions may be categorised as environmentally insignificant following the improvement program scheduled on site.</p>   | ✓            |
| Operating techniques  | <p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operator has proposed the following key techniques:</p> <ul style="list-style-type: none"> <li>• Dirty water storage facilities are in place on site;</li> <li>• Housing is well insulated and sheds have a damp proof course;</li> <li>• The computer controlled ventilation management system controls ventilation rates depending on health and welfare needs of the birds and outdoor weather conditions;</li> <li>• Fallen stock is disposed of under an approved scheme;</li> <li>• The fuel oil storage tank for the generator is fully bunded;</li> <li>• Pesticides and medicines are kept in a secure container that is capable of retaining spillage and is resistant to fire and frost;</li> <li>• Protein is reduced over the growing cycle by providing different feeds and phosphorus levels in rations are reduced over the production cycle.</li> </ul> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in Sector Guidance Note (SGN) EPR6.09 'How to comply with your environmental permit for intensive farming (version 2)'</p> | ✓            |



| Aspect considered                                | Justification / Detail   | Criteria met |
|--|--|--------------|
|  |  | Yes          |
|  | <p>and we consider them to represent appropriate techniques for the facility.</p> <p>We consider that the operating techniques specified in the permit reflect the Best Available Techniques (BAT) for the installation.</p>   |              |
| <b>The permit conditions</b>                     |  |              |
| Updating permit conditions during consolidation. | <p>We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit(s).</p> <p>The operator has agreed that the new conditions are acceptable.</p>                   | ✓            |
| Incorporating the application                    | <p>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.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p> | ✓            |
| <b>Operator Competence</b>                       |  |              |
| Environment management system                    | <p>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>  | ✓            |
| Financial provision                              | <p>There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.</p>   | ✓            |

## **Annex 2: Consultation and web publicising responses**

Summary of responses to consultation, web publication and newspaper advertising and the way in which we have taken these into account in the determination process.

The following organisations were consulted, however no response was received:

- Health and Safety Executive
- East Devon District Council – Environmental Health Department

This proposal was also publicised on the Environment Agency's website between 01/12/2015 and 31/01/2015, but no representations were received during this period.