

# Permitting decisions

## Bespoke permit

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We have decided to grant the permit for Alison's Farm operated by Grantham Partners Ltd.

The permit number is EPR/YP3803BM.

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 provides a record of the decision making process. It:

- highlights [key issues](#) in the determination;
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account; and
- shows how we have considered the [consultation responses](#).

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

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

# Key issues of the decision

## 1. Site Location and Surroundings

Alison's Farm is situated approximately one kilometre east of the village of Great Ponton, Lincolnshire. The site is approximately centred on National Grid Reference SK 93922 31008.

The Applicant submitted a plan showing the site of the Installation and its extent. We consider this plan is satisfactory. It is included in Schedule 7 to the Permit, and the Operator is required to carry out the permitted activities within the Installation boundary.

We have undertaken screening to identify potentially sensitive receptors in the area surrounding the Installation. This identified the following.

- The nearest human receptor is Railway Farm which is approximately 600m from the permit boundary. There is a village of Great Ponton located approximately 1,100m from the installation boundary.
- There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA), or Ramsar sites within 5km screening distance of the Installation boundary.
- There are two Sites of Special Scientific Interest (SSSI) within the 5km screening distance of the Installation boundary.
- There are 20 Local Wildlife Sites (LWS), Ancient Woodlands (AW) or Local Nature Reserves (LNR) within the 2km screening distance of the installation boundary.

As explained throughout the decision document, we have taken into consideration the potential environmental impact of the Alison's Farm on all of these sensitive receptors where relevant.

## 2. New Intensive Rearing of Poultry or Pigs BAT Conclusions document

The new Best Available Techniques (BAT) Reference document (BREF) for the Intensive Rearing of Poultry or Pigs (IRPP) was published on the 21st February 2017. There is now a separate BAT Conclusions document which sets out the standards that permitted farms will have to meet.

The BAT Conclusions document is as per the following link:

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN>

Now the BAT Conclusions are published, all new installation farming permits issued after the 21<sup>st</sup> February 2017 must be compliant in full from the first day of operation.

There are some new requirements for permit holders. The Conclusions include BAT-Associated Emission Levels (BAT-AELs) for ammonia emissions, which will apply to the majority of permits, as well as BAT-AELs for nitrogen and phosphorous excretion.

For some types of rearing practices, stricter standards will apply to farms and housing permitted after the new BAT Conclusions were published.

### **New BAT Conclusions review**

There are 34 BAT conclusion measures in total within the BAT conclusion document dated 21<sup>st</sup> February 2017.

The Applicant has confirmed their compliance with all BAT conditions for the new installation in their document referenced 'Grantham Farm' received 02/09/19 with the permit application. This document has been referenced in Table S1.2 Operating Techniques of the permit.

The following is a more specific review of the measures the Applicant has applied to ensure compliance with the above key BAT measures:

| <b>BAT measure</b>  | <b>Applicant compliance measure</b>   |
|---|---|
| BAT 3 Nutritional management<br>- Nitrogen excretion  | The Applicant has confirmed it will demonstrate that the installation achieves levels of Nitrogen excretion below the required BAT-AEL of 0.6 kg N/animal place/year by an estimation using manure analysis for total Nitrogen content.<br><br>Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.                                    |
| BAT 4 Nutritional management<br>- Phosphorous excretion   | The Applicant has confirmed it will demonstrate that the installation achieves levels of Phosphorous excretion below the required BAT-AEL of 0.25 kg P <sub>2</sub> O <sub>5</sub> animal place/year by an estimation using manure analysis for total Phosphorous content.<br><br>Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions. |
| BAT 24 Monitoring of emissions and process parameters<br>- Total nitrogen and phosphorous excretion | Table S3.3 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.   |
| BAT 25 Monitoring of emissions and process parameters<br>- Ammonia emissions                        | Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.   |
| BAT 27 Monitoring of emissions and process parameters<br>- Dust emissions                           | Table S3.3 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.<br><br>The Applicant has confirmed they will report the dust emissions to the Environment Agency annually by multiplying the dust emissions factor for broilers by the number of birds on site.   |
| BAT 32 Ammonia emissions from poultry houses<br>- Broilers  | The BAT-AEL to be complied with is 0.08 kg NH <sub>3</sub> /animal place/year. The Applicant will meet this as the emission factor for broilers is 0.034 kg NH <sub>3</sub> /animal place/year.<br><br>The installation does not include an air abatement treatment facility, hence the standard emission factor complies with the BAT-AEL.   |

### **More detailed assessment of specific BAT measures**

#### **Ammonia emission controls – BAT conclusion 32**

The new BAT Conclusions include a set of BAT-AELs for ammonia emissions to air from animal housing for broilers.

### **3. Industrial Emissions Directive (IED)**

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February and came into force on 27 February 2013. These Regulations transpose the requirements of the IED.

This permit implements the requirements of the European Union Directive on Industrial Emissions.

## 4. Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's H5 Guidance states **that it is only necessary for the operator to take samples** of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be existing contamination and:

- The environmental risk assessment has identified that the same contaminants are a particular hazard; or
- The environmental risk assessment has identified that the same contaminants are a hazard and the risk assessment has identified a possible pathway to land or groundwater.

H5 Guidance further states that it is **not essential for the operator** to take samples of soil or groundwater and measure levels of contamination where:

- The environmental risk assessment identifies no hazards to land or groundwater; or
- Where the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- Where the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

The site condition report (SCR) for Alison's Farm (dated 26/08/19) demonstrates that there are no hazards or likely pathway to land or groundwater and no historic contamination on site that may present a hazard from the same contaminants. **Therefore, on the basis of the risk assessment presented in the SCR, we accept that they have not provided base line reference data for the soil and groundwater at the site at this stage and although condition 3.1.3 is included in the permit no groundwater monitoring will be required.**

## 5. Dust and Bioaerosols

The use of Best Available Techniques and good practice will ensure minimisation of emissions. There are measures included within the permit (the 'Fugitive Emissions' conditions) to provide a level of protection. Condition 3.2.1 'Emissions of substances not controlled by an emission limit' is included in the permit. This is used in conjunction with condition 3.2.2 which states that in the event of fugitive emissions causing pollution following commissioning of the installation, the Operator is required to undertake a review of site activities, provide an emissions management plan and to undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.

In addition, conditions 1.1.1 and 2.3 within the Permit provide additional protection. Condition 1.1.1 is a general management condition stating that the operator shall manage operate the activities in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and using sufficient competent persons and resources. Condition 2.3 'Operating Techniques' states that 'activities shall, subject to the conditions of the permit, be operated using the techniques and in a manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing...', and this ties the Operator specifically to the specific details submitted in support of the Application.

Our guidance on our website concludes that Applicants need to produce and submit a dust and bioaerosol management plan beyond the requirement of the initial risk assessment, with their applications only if there are relevant receptors within 100 metres of their farm, e.g. the farmhouse or farm worker's houses. Details can be found via the link below:

[www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols](http://www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols).

There is 1 sensitive receptor within 100m of the installation boundary. This is staff housing for the site which is located over 25m from the nearest shed. The next nearest receptor is approximately 600m away from the permit boundary.

As there are receptors within 100m of the installation, the Applicant was required to submit a dust and bioaerosol management plan in this format (reference: Bio Aerosol Emissions at Grantham Farm, received: 02/09/19, and the Dust Management Plan, dated: August 2019).

In the guidance mentioned above it states that particulate concentrations fall off rapidly with distance from the emitting source. This fact, together with the proposed good management of the installation (such as keeping areas clean from build-up of dust and other measures in place to reduce dust and the risk of spillages) all reduce the potential for emissions impacting the nearest receptors. The Applicant has confirmed the following measures in their operating techniques to reduce dust:

- The poultry feed will be delivered to the site in sealed systems.
- No feed milling is undertaken on site.
- Dust socks will be fitted to the feed silo exhaust pipes.
- There will be a closed system delivery of feed from the silo to the poultry houses.
- Any feed spills will be cleared promptly.
- Bedding materials will not be blown into the poultry houses.
- The bedding material shall consist of dust extracted shavings.
- The bedding shall be of a sufficient depth to absorb moisture during the crop cycle.
- Top up bedding shall be stored in sealed plastic bales.
- Humidity will be controlled within the poultry houses in the range of 55-65%.
- Litter will be removed carefully during the cleanout to minimise dust emissions, and the vehicles shall be located close to the poultry shed doors.
- Trailers with litter on shall be sheeted before leaving the installation.
- High speed ventilation systems are designed and operated to achieve optimum internal environmental conditions, and fans are able to run at greater rates to enable better dispersion of air and dust.

### Conclusion

We are satisfied that the measures outlined in the bioaerosol risk assessment and dust management plan are in accordance with the measures stated in EPR 6.09 'How to comply with your environmental permit for intensive farming', and will minimise the potential for dust and bioaerosol emissions from the Installation. We have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

## **6. Ammonia**

The Applicant has demonstrated that the housing will meet the relevant ammonia Best Available Technique Annual Emission Limit.

Given the nature of the proposed activity, there is the potential for atmospheric ammonia to be released into the environment and impact nearby sensitive habitats and species. For this reason we have carried out our own assessment, of the environmental risk from ammonia on habitats and human health, in addition to reviewing detailed modelling carried out by the applicant.

### **6.1 Ammonia Impact on Habitats**

Ammonia emissions from farms may lead to both direct and indirect effects on vegetation. Nitrogen deposition can lead to acidification of the ecosystem or act as a fertiliser, leading to nutrient enrichment and subsequent changes in the structure of the habitat.

There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA), or Ramsar sites located within the relevant 5 kilometres screening distance of the installation boundary.

There are 2 Sites of Special Scientific Interest (SSSI) located within the 5 km screening distance of the installation boundary. The assessment of these is covered in section 6.1.1 below.

There are 20 Local Wildlife Sites (LWS), Ancient Woodlands (AW), Local Nature Reserves (LNR) within 2 km of the installation. We have therefore considered the potential impact of ammonia on the SSSIs and local habitat sites below. The assessment of these is covered in section 6.1.2 below.

### 6.1.1 Ammonia assessment – SSSI

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

- If the process contribution (PC) is below 20% of the relevant critical level (CLE) or critical load (CLO) then the farm can be permitted with no further assessment.
- 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 SSSI.

#### Kirton Wood SSSI

Screening by the Environment Agency using the ammonia screening tool version 4.5 has indicated that emissions from Alison's Farm will only have a potential impact on a SSSI with a precautionary CLE of  $1\mu\text{g}/\text{m}^3$  if they are within 1,348 metres of the emission source.

Beyond 1,348m the PC is less than  $0.2\mu\text{g}/\text{m}^3$  (i.e. less than 20% of the precautionary  $1\mu\text{g}/\text{m}^3$  CLE) and therefore beyond this distance the PC is insignificant. In this case one of the SSSIs is beyond this distance (see table below) and therefore screens out of needing any further assessment.

Where the precautionary level of  $1\mu\text{g}/\text{m}^3$  is used and the PC is assessed to be less than 20%, the site automatically screens out as insignificant and no further assessment of CLO is necessary. In this case the  $1\mu\text{g}/\text{m}^3$  level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these sites.

**Table 1 – SSSI Assessment**

| Name of SSSI     | Approximate distance from the centre of the farm (m) |
|------------------|--|
| Kirton Wood SSSI | 4,325  |

#### Woodnook Valley SSSI

Screening using the detailed modelling (reference: Preliminary Ecological Appraisal - Appendix 7.1: Ammonia Dispersion Modelling Methodology) has indicated that the PC for Woodnook Valley SSSI is predicted to be less than 20% of the critical level for ammonia emissions, nitrogen deposition and acid deposition therefore it is possible to conclude no damage. The results of the detailed modelling are given in the tables below.

**Table 2 – Ammonia emissions**

| Site                 | Ammonia Cle ( $\mu\text{g}/\text{m}^3$ ) [1] | PC ( $\mu\text{g}/\text{m}^3$ ) | PC % critical level |
|----------------------|--|---------------------------------|---------------------|
| Woodnook Valley SSSI | 1  | 0.10                            | 10                  |

Note [1] A precautionary level of  $1\mu\text{g}/\text{m}^3$  has been used during the screen.

**Table 3 – Nitrogen deposition**

| Site                 | Critical load kg N/ha/yr. [1] | PC kg N/ha/yr. | PC % critical load |
|----------------------|-------------------------------|----------------|--------------------|
| Woodnook Valley SSSI | 15                            | 0.79           | 5.27               |

Note [1] Critical load values confirmed using the APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 05/05/2020

**Table 4 – Acid deposition**

| Site                 | Critical load keq/ha/yr. [1] | PC keq/ha/yr. | PC % critical load |
|----------------------|------------------------------|---------------|--------------------|
| Woodnook Valley SSSI | 4.856                        | 0.06          | 1.16               |

Note [1] Critical load values confirmed using the APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 05/05/2020

### 6.1.2 Ammonia assessment - LWS/AW/LNR

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

- If the process contribution (PC) is below 100% of the relevant critical level (CL<sub>e</sub>) or critical load (CL<sub>o</sub>) then the farm can be permitted with no further assessment.

#### Local Habitats Screening Out Through the Environment Agency Assessment

We carried out an initial screening using the ammonia screening tool version 4.5, which indicated that emissions from Alison's Farm will only have a potential impact on the LWS/AW/NNR habitat sites with a precautionary CL<sub>e</sub> of 1µg/m<sup>3</sup>, if they are within 462 metres of the emission source.

Beyond 462m the PC is less than 1µg/m<sup>3</sup> and therefore beyond this distance the PC is insignificant. In this case all but one of the LWS/AW/LNRs are beyond this distance (see table below) and therefore screen out of needing any further assessment.

**Table 5 – LWS/AW/LNR Assessment**

| Name of SAC/SPA/Ramsar                        | Approximate distance from the centre of the farm (m) |
|---|--|
| Boothby Great Wood LWS                        | 1,247  |
| Great Ponton BR Site LWS                      | 1,922  |
| Great Ponton A1 Road Verges LWS               | 1,744  |
| Stoke Rochford Pumping Station LWS            | 1,890  |
| Great Ponton Marsh LWS                        | 1,683  |
| River Witham, Great Ponton to Easton Park LWS | 1,054  |
| Pit Lane Road Verges LWS                      | 978  |
| Great Ponton Quarry Road Verge LWS            | 771  |
| Great Ponton Marsh LWS                        | 1,166  |
| Great Ponton Railway Cutting LWS              | 799  |
| Ponton Great Wood LWS                         | 1,010  |
| River Witham, Little Ponton LWS               | 1,091  |
| Little Ponton Grassland LWS                   | 1,089  |
| Little Ponton Quarry LWS                      | 1,528  |
| Salterford Valley LWS                         | 1,877  |
| Old Somerby Road Verge South LWS              | 1,582  |
| Ponton Great Wood AW                          | 1,011  |
| Boothby Great Wood AW                         | 1,249  |

#### Ponton Park Wood LWS & AW

Screening using the applicants detailed modelling (reference: Preliminary Ecological Appraisal - Appendix 7.1: Ammonia Dispersion Modelling Methodology) has determined that the PC on the LWS/AW for ammonia

emissions, nitrogen deposition and acid deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. See results below.

**Table 6 - Ammonia emissions**

| Site                      | Critical level ammonia $\mu\text{g}/\text{m}^3$ | Predicted PC $\mu\text{g}/\text{m}^3$ | PC % of critical level |
|---------------------------|---|---------------------------------------|------------------------|
| Ponton Park Wood LWS & AW | 3 [1]   | 0.52                                  | 17.36                  |

Note [1] CLe 3 applied as no protected lichen or bryophytes species were identified.

**Table 7 – Nitrogen deposition**

| Site                      | Critical load kg N/ha/yr. [1] | Predicted PC kg N/ha/yr. | PC % of critical load |
|---------------------------|-------------------------------|--------------------------|-----------------------|
| Ponton Park Wood LWS & AW | 5                             | 4.06                     | 81.14                 |

Note [1] Critical load values confirmed on APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 05/05/2020

**Table 8 – Acid deposition**

| Site                      | Critical load keq/ha/yr. [1] | Predicted PC keq/ha/yr. | PC % of critical load |
|---------------------------|------------------------------|-------------------------|-----------------------|
| Ponton Park Wood LWS & AW | 10.829                       | 0.25                    | 2.31                  |

Note [1] Critical load values confirmed on APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – 05/05/2020

We have reviewed the Applicant's detailed modelling and we are satisfied with how the modelling has been conducted.

To support this conclusion, the Environment Agency carried out a screening assessment on 05/05/2020 using the conservative ammonia screening tool version 4.5. This assessment looked at the ammonia, nitrogen deposition and acid deposition impact on the different broadleaved and coniferous sections of woodland within Ponton Park Wood LWS & AW. This screening assessment also concluded that the PC % of critical level and critical loads will be less than 100% for the habitat.

We therefore agree with the applicant's conclusion that the PC % of critical level and critical loads will be less than 100% at Ponton Park Wood LWS & AW. We are satisfied that, following our standard procedures, all non-designated habitats screen out with process contributions less than 100%. No further assessment is required.

## 6.2 Ammonia Impacts - Human Health

The Health Protection Agency (now Public Health England) has stated (Position Statement, Intensive Farming 2006) that it is unlikely that ammonia emissions from a well-run and regulated farm would be sufficient to cause ill health.

Whilst the potential adverse effects of ammonia include respiratory irritation and may also give rise to odour complaints, levels of ammonia in ambient air will decrease rapidly with distance from a source.

The Applicant did not submit a quantitative assessment of the potential impact on human health from ammonia. However, the Environment Agency has carried out an assessment using conservative assumptions with regards to ammonia. The assessment (report reference: H1710 RP01) that demonstrates that farms with up to 600,000 broilers in houses with high velocity roof fans, will not cause human health issues for human receptors > 25m from the nearest livestock building. We have confirmed with the applicant that the nearest receptor, which shall be staff housing, is in excess of 25m from the nearest shed.

We conclude that ammonia from the Installation is unlikely to have a significant health impact on human receptors. Furthermore, condition 3.2 of the Permit applies to substances not controlled by emissions limits, also known as fugitive emissions. The Operator will be required to manage its activities so that they do not cause pollution.



### 6.3 Ammonia Impacts - Water Bodies

We will currently only assess the atmospheric impact and deposition impact for ammonia, nitrogen and acid on terrestrial features, and will not consider the impact on aquatic features. This is due to the absence of scientific information on direct damage to aquatic vegetation, and the likely dominance of other (diffuse, aquatic) sources of nitrogen. The application of a critical level for atmospheric ammonia to water bodies is not considered defensible at this time. No further assessment is required.

## 7. Odour

Intensive farming is by its nature a potentially odorous activity. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance ([http://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/297084/geho0110brsb-e-e.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297084/geho0110brsb-e-e.pdf)).

Condition 3.3 of the environmental permit reads as follows:

"Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the Operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour."

Under section 3.3 of the guidance an Odour Management Plan (OMP) is required to be approved as part of the permitting process if, as is the case here, sensitive receptors (sensitive receptors in this instance excludes properties associated with the farm) are within 400m of the installation boundary.

The nearest sensitive receptor to the site is Railway Farm which is approximately 600m away from the permit boundary. Beyond this receptor is the village of Great Ponton located approximately 1,100m from the installation boundary.

As there are no receptors within 400m, an Odour Management Plan was not required for the application. However the Operator has assessed the potential impact of odour in a risk assessment. This risk assessment outlines the management practices that the Operator shall undertake to result in the risk of odour pollution from the site to be low.

The risk assessment for the installation provided with the application lists key potential risks of odour pollution beyond the installation boundary. These activities are as follows:

- Broiler rearing.
- Litter quality.
- Carcass storage.
- Depopulating of the poultry sheds.
- De-littering of the poultry sheds.
- Cleaning operations.
- Wash water management.

The operator shall use the following measures to minimise the risk of odour pollution / nuisance:

- Litter within the poultry houses shall be kept friable.
- Non leaking drinker systems shall be used, and water lines shall be checked daily to avoid leaks and spills.
- Feed shall be delivered into sealed silos, and delivered into poultry houses using sealed augers.
- The operator shall maintain the correct house temperature and use of high speed roof ventilation. The litter quality shall be checked daily for correct humidity and to add further bedding if required.
- De-populating vehicles shall be covered.
- Vehicles shall be parked close to houses during loading.
- De-littering vehicles shall be covered, and the poultry sheds shall be sealed during and after the clean out. The ventilation shall also be reduced to a minimum during the clean out period.
- Use of DEFRA approved chemicals.
- On a daily basis, odour levels at the installation will be monitored for high housekeeping odours. This will consist of twice daily site boundary checks.

- Dead birds are removed from the house and stored in sealed containers awaiting regular collection.
- Dirty water tanks shall be emptied immediately following the wash down to prevent stagnation.

The site will operate high speed ventilation for the sheds. Insufficient ventilation capacity can lead to excessively high room temperatures which increase slurry/manure decay rates and hence odour emissions.

Once odorous emissions leave the source they undergo dilution and dispersion in the atmosphere downwind of the installation. Where odours are released at height, they are likely to be more effectively dispersed than those released at a low level. High speed roof (apex) vents produce better dispersion of odorous releases than those positioned along the side of buildings (side wall vents). Increasing the height of vent discharge points above roof level may also give better dispersion.

Dust emissions may be a problem particularly for larger birds. Odorous compounds may be adsorbed onto dust particles and the particles themselves may decompose releasing volatile compounds. It is important to control the generation of dust within the house through management of litter moisture content and air quality. The management of dust emissions has been covered in section 5 of the Key Issues.

### Conclusion

We have assessed the H1 risk assessment for odour and conclude that we are satisfied that the proposed mitigation measures will minimise the risk of odour pollution / nuisance.

If the Operator is notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, the Operator shall submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour. This is in accordance with condition 3.3.2 of the permit.

## **8. Noise**

Intensive farming by its nature involves activities that have the potential to cause noise pollution. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance. Condition 3.4 of the permit reads as follows:

Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable to minimise the noise and vibration.

Under section 3.4 of this guidance, a Noise Management Plan (NMP) must be approved as part of the permitting determination if there are sensitive receptors within 400m of the installation boundary. The nearest sensitive receptor of noise to the site is approximately 600m away from the permit boundary. A Noise Management Plan was therefore not required for this application, but the Operator has assessed the potential impact of noise from the site in a risk assessment.

The risk assessment for the installation provided with the application lists key potential risks of noise pollution beyond the installation boundary. These activities are as follows:

- Ventilation fans
- Feed and fuel deliveries
- Alarm system
- Bird catching
- Clean out operations
- Standby generator

The operator shall use the following measures to minimise the risk of noise pollution / nuisance:

- Fans shall only be operated intermittently, and shall be regularly maintained
- Time restricted deliveries of feed shall be used if required
- There shall be no audible alarms on site. The only alarm systems use silent messaging to the Operator.
- Plastic bird crates shall be used for depopulating

- Clean out operations shall be carried out during normal working hours
- The generator is housed within insulated building
- Equipment shall be regularly maintained including fans which shall be serviced each crop cycle

### Conclusion

We have assessed the H1 risk assessment for noise and conclude that we are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of noise pollution / nuisance.

If the Operator is notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, the Operator shall submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise. This is in accordance with condition 3.4.2 of the permit.

## **9. Drainage**

### **9.1 Clean surface run-off from the site area**

All farms permitted under the Environmental Permitting Regulations must make sure that there's no pollution from the design and management of drainage systems and run-off from the site.

Surface run-off from the following sources are considered clean water:

- Rain water on the impermeable surfaces laid around the poultry sheds during normal operational times, and excluding times of site cleaning or there being any spillages on the surfaces; and,
- The roof water from the poultry sheds. Roof water is considered clean due to the roof fan ventilation being high speed.

This clean water from the site is channelled to a nearby drainage ditch to the west of the site boundary. The drainage system shall be maintained on a weekly basis to ensure that gulleys and the sediment trap are clean, and guttering and downspouts shall be checked.

### **9.2 Contaminated water**

The only planned contaminated dirty water on site shall occur during wash out periods from the shed or wash down of the impermeable surfaces outside the sheds. This dirty water shall be directed in a sealed system to one of three dirty water storage tanks using a diverter valve. These dirty water tanks shall be located at least 10 metres from other surface drainage features. The dirty water shall then be removed from the site by a licenced waste carrier. This dirty water shall not enter the clean drainage water system for the site which discharges to the drainage ditch.

The carcass storage area and wheel wash shall be connected to the dirty water drainage system. Additionally the areas beneath the gable end fans shall be concreted, and the surface drainage shall be diverted to the dirty water tanks.

The diverter valves shall be checked on a weekly basis for operation and integrity. The operator shall ensure catchment tanks are empty prior to wash down, and shall monitor the tanks during washdown periods to ensure a 30cm freeboard is maintained, preventing overflow.

There is the potential for surface water from the site to become contaminated due to accidental spillages of fuel oil, feed or chemicals.

#### **9.2.1 Fuel storage**

To prevent any leaks or spills the fuel oil storage tank is bunded. The bund meet the requirements of the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) Regulations 2010 (SSAFO Regulations) and meet the requirements outlined in SGN EPR6.09 'How to comply with your environmental permit for intensive farming'. The tank will be regularly inspected, and the bunding shall be checked on a weekly basis. There are also collision protection barriers to prevent vehicles from damaging the fuel tanks.

If a fuel leak or spillage were to occur, the operator shall use the diverter valves to prevent the fuel from entering the clean water drainage system. Small fuel spillages can be soaked up using wood shavings/sawdust.

#### 9.2.2 Feed

Feed silos shall be sealed and shall be protected using collision protection barriers. Feed shall be delivered into poultry houses using a sealed pipe. Should any minor spillages occur, then this can be cleared up by the Operator using on site equipment.

#### 9.2.3 Chemicals

Pesticides and veterinary medicines will be kept in a store capable of retaining spillage, resistant to fire, dry, frost free and secure. Small spills can be dealt with by use of chemical spill kit, located in chemical store.

## 10. Site Name

The initial permit application, received on 2 September 2019, named the site Grantham Farm Poultry Unit. The applicant requested on 30 May 2020 to name the site as Alison's Farm within the permit. The permit has therefore been issued as Alison's Farm, but supporting documents within the application may still make reference to Grantham Farm Poultry Unit. This change will not affect the operating techniques that the Operator has agreed to operate the site by.

# Decision checklist

| Aspect considered                            | Decision  |
|--|---|
| <b>Receipt of application</b>                |   |
| Confidential information                     | A claim for commercial or industrial confidentiality has not been made.   |
| Identifying confidential information         | We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on confidentiality.  |
| <b>Consultation</b>                          |   |
| Consultation                                 | <p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>We sent copies of the Application to the following bodies, which includes those with whom we have “Working Together Agreements”:</p> <ul style="list-style-type: none"> <li>• South Kesteven Council (Environmental Health)</li> <li>• Public Health England (PHE)</li> <li>• Director of Public Health</li> <li>• Health and Safety Executive (HSE)</li> </ul> <p>We also published this application on our webpages on GOV.UK and made available electronic copies of the application on that webpage from 16 January 2020 - 13 February 2020. This allowed for members of the public or other organisations to provide comments on the application.</p> <p>The comments, and our responses to the comments, are summarised in the <a href="#">consultation section</a> at the bottom of this document.</p> |
| <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 our guidance on legal operator for environmental permits.  |
| <b>The facility</b>                          |   |
| The regulated facility                       | <p>We considered the extent and nature of the facility at the site in accordance with RGN2 ‘Understanding the meaning of regulated facility’.</p> <p>The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.</p>  |
| <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. The plan is included in the permit.   |
| Site condition report                        | The Operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports.  |
| Biodiversity, heritage, landscape and nature | The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.  |

| Aspect considered                    | Decision  |
|--------------------------------------|---|
| conservation                         | <p>The following habitats were considered as part of our determination process:</p> <ul style="list-style-type: none"> <li>• There are no Special Area(s) of Conservation (SAC), Special Protection Area(s) (SPA), or Ramsar sites located within 5 kilometres of the installation which we have had to consider.</li> <li>• There are 2 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation.</li> <li>• There are also 20 Local Wildlife Sites (LWS), /Ancient Woodlands (AW), Local Nature Reserves (LNR) within 2 km of the installation, the closest of which is Ponton Park Wood LWS &amp; AW which is approximately 350m from the permit boundary.</li> </ul> <p>We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p> <p>We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.</p> |
| <b>Environmental risk assessment</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>Please see the <a href="#">key issues</a> section for further information on dust and bioaerosols (section 5), ammonia (section 6), odour (section 7), noise (section 8), site drainage (section 9), flooding (section 10) and litter management (section 11).</p>   |
| <b>Operating techniques</b>          |   |
| General operating techniques         | <p>We have reviewed the techniques used by the Operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.</p> <p>The operating techniques that the Applicant must use are specified in table S1.2 in the environmental permit.</p> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs.</p>   |
| <b>Permit conditions</b>             |   |
| Emission limits                      | <p>ELVs based on BAT have been set for ammonia, nitrogen excretion and phosphorus excretion. Please see the BAT conclusion review of the <a href="#">key issues</a> section for further information.</p>  |
| Monitoring                           | <p>We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.</p> <p>These monitoring requirements have been imposed in accordance with the BAT conclusions.</p>   |

| Aspect considered                               | Decision   |
|---|--|
| Reporting                                       | We have specified reporting in Table S4.1 of the permit, to meet the requirements of the BAT conclusions.  |
| <b>Operator competence</b>                      |  |
| Management system                               | <p>There is no known reason to consider that the Operator will not have the management system to enable it to comply with the permit conditions.</p> <p>The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.</p>  |
| Relevant convictions                            | <p>The Case Management System has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found. The Operator satisfies the criteria in our guidance on operator competence.</p>  |
| Financial competence                            | There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.  |
| <b>Growth Duty</b>                              |  |
| Section 108 Deregulation Act 2015 – Growth duty | <p>We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to vary this permit.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”</p> <p>We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.</p> <p>We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the Operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.</p> |

## Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

### Responses from organisations listed in the consultation section

|   |
|---|
| <b>Response received from</b>   |
| Public Health England, dated 24/01/20   |
| <b>Brief summary of issues raised</b>   |
| <p>The main emissions of potential public health significance are emissions to air of bioaerosols, and dust including particulate matter and ammonia.</p> <p>Given the proximity to sensitive receptors the Environment Agency should ensure that the applicant's dust, bioaerosol, and odour management plans are robust and appropriate.</p>  |
| <b>Summary of actions taken or show how this has been covered</b>   |
| <p><b>1. The impact of dust and bioaerosols on human health.</b></p> <p>The impact of dust and bioaerosols on human health has been addressed in section 5 of the <a href="#">key issues</a>. We are satisfied that the measures outlined in the bioaerosol risk assessment and dust management plan are in accordance with the measures stated in EPR 6.09 'How to comply with your environmental permit for intensive farming', and will minimise the potential for dust and bioaerosol emissions from the Installation. We have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.</p> <p><b>2. The impact of ammonia on human health.</b></p> <p>The full review of the ammonia impact has been addressed in section 6 of the <a href="#">key issues</a>. We are satisfied with the modelling carried out by the applicant. We have further carried out a conservative assessment using the ammonia screening tool version 4.5, which supports the conclusions of the applicant's detailed ammonia modelling.</p> <p><b>3. The impact of odour.</b></p> <p>The full review of the odour impact has been addressed in section 8 of the <a href="#">key issues</a>. We have assessed the H1 risk assessment for odour and conclude that we are satisfied that the proposed mitigation measures will minimise the risk of odour pollution / nuisance.</p> <p>If the Operator is notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, the Operator shall submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour. This is in accordance with condition 3.3.2 of the permit.</p> |

### Representations from community and other organisations

|   |
|---|
| <b>Response received from</b>   |
| The Woodland Trust, dated 13/02/20  |
| <b>Brief summary of issues raised</b>   |
| <p>Nitrogen pollution is one of the most significant and immediate threats to ancient woodlands and other semi-natural ecosystems in the UK.</p> <p>The Trust is concerned about the Environment Agency's use of a 100% PC to ancient woodlands when considering permitting applications, and its use within the decision-making of planning authorities across</p> |



England for all intensive livestock and poultry developments that do not require environmental permitting.

The Trust believes that an application must be able to demonstrate that any resulting increase in the levels of ammonia and nitrogen deposition will be insignificant (<1% of the critical level and load) at all ancient woodland sites.

**Summary of actions taken or show how this has been covered**

The full review of the ammonia impact has been addressed in section 6 of the [key issues](#). The issue raised by the Woodland Trust is not specific to this application, and our approach in assessing the ammonia impacts has been consistent with our usual standards. The Environment Agency has sought to confirm our processes with the Woodland Trust.

**Representations from individual members of the public**

**Brief summary of issues raised**

**Not considered as part of the environmental permit determination**

The following issues were raised by members of the public, but have not been considered as part of the permit determination, as they are not relevant to the decision to issue an environmental permit:

**The visual impact on the landscape caused by new site / buildings**

Scale, visual impact, location and land use is a matter for consideration during the planning process. Location is relevant for permitting but only in so far as its potential to have an adverse impact on sensitive receptors. The environmental impact has been assessed and it is not considered that the installation will give rise to significant pollution of the environment or harm to human health.

**The environmental impact of the construction phase of the site**

This cannot be taken into account during the determination of an Application for a permit. This may come under any local planning permission. Guidance on the interaction between planning and pollution control is given in the National Planning Policy Framework. It says that the planning and pollution control systems are separate but complementary. We are only able to take into account those issues which fall within the scope of our regulatory powers.

**The storage or spreading of litter from the facility once it has been exported**

In accordance with the Regulatory Guidance Note 2: Appendix 3 – Interpretation of Intensive Farming Installations, land spreading and the transport of manure from the installation to fields is not to be considered part of the permitted site activity, and has therefore not been considered as part of the permit determination.

**Vehicle movements and access to the site, outside of the permit boundary**

Offsite traffic movements are outside of our remit for the determination of the Application. They may, however, be a relevant consideration for the granting of planning permission.

On-site noise, including that generated by traffic is relevant to our determination and has been considered elsewhere in this document (key issues, section 8). In summary, following a review of the information provided by the Applicant and the conditions present within the Permit; the Environment Agency is satisfied that appropriate measures are in place to minimise the risk that noise emissions (including on-site vehicle movements) from the Installation and these will not significantly impact on the surrounding locality or cause disruption to local residents.

Further, we have consulted Public Health England (PHE) and the Director of Public Health (Nottinghamshire County Council) on the Application in line with our guidance. Public Health England and the Director of Public Health have not raised any concerns.

The Environment Agency is satisfied that on-site traffic will not give rise to significant pollution of the environment or harm to human health.

### **Considered as part of the environmental permit determination**

The following issues were raised by members of the public:

1. The impact of dust and bioaerosols on human health and habitats.
2. The impact of ammonia on habitats and human health, and the approaches used in the detailed modelling ammonia assessment.
3. The general impact of the site on habitats.
4. The impact of odour.
5. Water from the site causing pollution.
6. The risk of flooding.
7. The management of litter.
8. The application document consistency.

A summary of how these issues have been considered as part of the permit determination is provided below.

### **Summary of actions taken or show how this has been covered**

#### **1. The impact of dust and bioaerosols on human health and habitats.**

The impact of dust and bioaerosols on human health and habitats has been addressed in section 5 of the [key issues](#). We are satisfied that the measures outlined in the bioaerosol risk assessment and dust management plan are in accordance with the measures stated in EPR 6.09 'How to comply with your environmental permit for intensive farming', and will minimise the potential for dust and bioaerosol emissions from the Installation. We have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

#### **2. The impact of ammonia on habitats and human health, and the approaches used in the detailed modelling ammonia assessment.**

The full review of the ammonia impact has been addressed in section 6 of the [key issues](#). We are satisfied with the modelling carried out by the applicant. We have further carried out a conservative assessment using the ammonia screening tool version 4.5, which supports the conclusions of the applicant's detailed ammonia modelling.

#### **3. The general impact of the site on habitats.**

The general impact of the site on habitats (written in the 'biodiversity, heritage, landscape and nature conservation' section of the [decision checklist](#)).

#### **4. The impact of odour.**

The full review of the odour impact has been addressed in section 8 of the [key issues](#). We have assessed the H1 risk assessment for odour and conclude that we are satisfied that the proposed mitigation measures will minimise the risk of odour pollution / nuisance.

If the Operator is notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, the Operator shall submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour. This is in accordance with condition 3.3.2 of the permit.

#### **5. Water from the site causing pollution.**

The full review of the water management on site has been addressed in section 9 of the [key issues](#). We have reviewed the applicants proposal and we are satisfied that the measures in place to prevent contaminated

water from being emitted from the site.

#### **6. The risk of flooding.**

The permit is not situated in a location considered as a flood risk area (flood zone 2 or 3) and is wholly sited in an area designated Flood Zone 1. A Flood Zone 1 area is considered to have a low probability of fluvial flooding.

Additionally, the suitability of a site for a proposed use is a matter for the Local Planning Authority.

Local Planning Authorities consult with those organisations whose opinions they consider appropriate to inform their decisions. In any particular case that may include the Environment Agency with regard to flood risk. A flood risk assessment (FRA) is a requirement where a site is greater than 1 hectare in size and sits within a Flood Zone 1 and it would be expected that this would be a part of any planning application.

With regards to surface water flooding, surface water (including Sustainable Drainage System (SuDS) is dealt with by the Lead Local Flood Authority (LLFA). Overall given the low risk of fluvial flooding to the site, and the scale and nature of the proposed development, we would expect the LLFA to lead on and approve the detailed surface water drainage design. Flood risk from surface water is managed by the local authority whose responsibilities extend to surface water, groundwater, and ordinary watercourses (smaller rivers, streams and ditches). Whilst the EA and local authority each have their responsibilities these are complementary rather than contradictory.

#### **7. The management of litter.**

Litter shall be collected during clear out periods for the sheds, and shall be exported from the site on covered vehicles. Litter shall not be permitted to be stored on site. Contingency arrangements are in place with surrounding farms to accept the manure in case of an emergency.

#### **8. The application document consistency.**

Consistency of the supporting documents was also raised as an issue. We requested that the operator amend these inconsistencies where we deemed that it may lead to issues in enforcement, or where it may impact the environmental risk. The operator's full environmental management system shall be reviewed by the Environment Agency prior to them commencing operations.

The operator must use all operating techniques stated within table S1.2 of the permit. If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.