

Permitting decisions

Bespoke permit

We have decided to grant the permit for Hollyfield Farm operated by LJ Heywood Limited.

The permit number is EPR/KP3733JQ.

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
- 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

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 will set 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 21st 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 for ammonia emissions which will apply to the majority of permits, as well as BAT associated levels 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 are published.

New BAT conclusions review

There are 33 BAT conclusion measures in total within the BAT conclusion document dated 21st February 2017.

The Applicant has confirmed their compliance with all BAT conditions for the new installations in their document '010 Establishing Best Available Techniques' received 15/03/18.

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

BAT measure	Applicant compliance measure
BAT 3 - Nutritional management Nitrogen excretion	<p>The Applicant has confirmed it will demonstrate it 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.</p> <p>This confirmation was provided in their document '010 Establishing Best Available Techniques' received 15/03/18 which has been referenced in Table S1.2 Operating Techniques of the Permit. The applicant will implement a multiphase feeding strategy.</p> <p>Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.</p>
BAT 4 Nutritional management Phosphorous excretion	<p>The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL of 0.25 kg P₂O₅ animal place/year by an estimation using manure analysis for total Phosphorous content.</p> <p>This confirmation was provided in their document '010 Establishing Best Available Techniques' received 15/03/18 which has been referenced in Table S1.2 Operating Techniques of the Permit. The applicant will implement a multiphase feeding strategy.</p> <p>Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.</p>
BAT 24 Monitoring of emissions and process parameters	<p>Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions</p>

BAT measure	Applicant compliance measure
<ul style="list-style-type: none"> - Total nitrogen and phosphorous excretion 	
BAT 25 Monitoring of emissions and process parameters <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> -Dust emissions 	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions. Example text: 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. This confirmation was provided in their document '010 Establishing Best Available Techniques' received 15/03/18 which has been referenced in Table S1.2 Operating Techniques of the Permit. The applicant will implement a multiphase feeding strategy.
BAT 28 Monitoring of emissions and process parameters linked to <ul style="list-style-type: none"> - Ammonia, Odour and Dust emissions 	Table S3.3 Processing monitoring requires the operator either to pursue Ammonia, Odour and Dust emission monitoring in line with BAT 25 and 27 criteria as detailed above
BAT 32 Ammonia emissions from poultry houses <ul style="list-style-type: none"> - Broilers 	The BAT-AEL to be complied with is 0.08 kg NH3/animal place/year. The Applicant will meet this as the emission factor for broilers is 0.034 kg NH3/animal place/year. 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

A BAT Associated Emission Level (AEL) provides us with a performance benchmark to determine whether an activity is BAT.

BAT conclusion 32

The new BAT conclusions include a set of BAT-AEL's for ammonia emissions to air from animal housing for broilers.

'New plant' is defined as plant first permitted at the site of the farm following the publication of the BAT conclusions.

All new bespoke applications issued after the 21st February, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

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.

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 Hollyfield Farm (dated 12/03/18) 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.**

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).

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. It is appropriate to require an OMP when such sensitive receptors have been identified within 400m of the installation to prevent, or where that is not practicable, to minimise the risk of pollution from odour emissions.

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:

- the manufacture and selection of feed
- feed delivery or storage
- poor or poorly designed ventilation leading to high humidity, wet litter and poor dispersal of odours
- the use of insufficient or poor quality litter
- the spillage of water from drinking systems and disease outbreaks leading to wet litter
- the housing system installed relating to retention times and depth of litter
- inadequate storage of carcasses on site
- the de-littering and disinfection of the houses
- storage and transport of litter
- standing dirty water

The OMP includes odour control measures, specifically but not limited to:

- Daily olfactory checks
- No milling of feed on site
- Feed supplied only from UK Agricultural Supply Trade Association (UKASTA)
- Feed delivery systems are sealed to minimise release
- The ventilation and heating system is regularly adjusted to match the age and requirements of the flock
- The ventilation system is designed to efficiently remove moisture from the house
- Use of nipple drinkers with drip cups to minimise spillage
- Insulated walls and ceilings to prevent condensation
- Concrete floors to prevent water ingress
- Stocking levels retained at optimum to prevent overcrowding
- Carcasses are stored in locked chillers, located away from sensitive receptors
- Carcasses are disposed of off-site using a DEFRA approved contractor
- During clean out:
 - Litter is carefully placed into trailers positioned at the entrance to each house. When full, the trailer is covered.
 - Only approved and suitable products are used
 - Wash water tanks are emptied to avoid overflowing
 - Clean out carried out as soon as possible following destocking
 - Dirty water from houses together with lightly contaminated yard wash is directed to the underground storage tanks, before being removed off site and spread to land under control of a 3rd party
- No storage of litter on site at any time
- Litter is transported in covered trailers
- Litter is used by local farmers for spreading onto land
- Working areas around houses are concreted and kept clean during production cycle

Odour Management Plan Review

There is the potential for odour pollution from the installation, however the operator's compliance with their Odour Management Plan, submitted with this application, should minimise the risk of odour pollution beyond the installation boundary. The risk of odour pollution at sensitive receptors beyond the installation boundary is not considered significant. We, the Environment Agency, 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.

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.

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.

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.

There are sensitive receptors within 400 metres of the Installation boundary as stated in the section above. The Operator has provided a noise management plan (NMP) as part of the Application supporting documentation, and further details are provided in the section below.

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:

- vehicle movement going to and within the installation
- delivering feed
- catching of birds at end of growing period
- removal of used litter from houses
- removal of dirty water from underground tanks
- feed transfer from lorry to feed bins
- ventilation fans
- standby generator tests
- the chickens; heightened during periods of chicken movement and disturbance
- personnel on site
- general repairs and servicing

The NMP includes noise control measures, specifically but not limited to:

- All vehicles are required to be driven onto and off the site with due consideration for neighbours
- Catching of birds often has to take place at night, but all vehicles are maintained so as to minimise engine noise and are driven slowly to and from the site
- Roadways of a well maintained surface with no pot-holes
- Engines to be switched off when not in use
- Vehicles are well maintained and are designed so that noise during feed transfer is minimised
- Efficient extractor fans are only used in Houses 5, 6 and proposed House 7. Fans are maintained in good condition to avoid excessive noise
- Weekly system test (required by law) is carried out each Friday morning – timed in order to minimise nuisance to neighbours
- All electrics and equipment are routinely maintained so that the back-up systems rarely need to be used in practice
- During loading of birds at the end of the growing cycle, bird noise is minimised by careful handling and by prompt removal of the lorry from the site when full
- Staff, catchers and other contractors are required to carry out their work without creating excessive noise from shouting, use of radios etc.
- If repairs to the site are required, the work is undertaken with due regard for possible noise nuisance and during the normal working day
- In the event of major repair work being undertaken which is likely to cause significant noise and disruption, neighbouring residents will be notified in advance

Noise Management Plan Review

There is the potential for noise from the installation beyond the installation boundary, however the operator's compliance with the Noise Management Plan, submitted with this application, should minimise the risk of noise

pollution beyond the installation boundary. The risk of noise pollution at neighbouring properties, is therefore not considered significant.

Conclusion

We have assessed the NMP and the H1 risk assessment for noise and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 5 'Noise management at intensive livestock installations'. 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.

Dust and Bio aerosols

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.

There is one sensitive receptors within 100m of the Installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 35 metres to the south of the installation boundary.

Guidance on our website concludes that applicants need to produce and submit a dust and bio aerosol 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.

As there are receptors within 100m of the Installation, the Applicant was required to submit a dust and bio aerosol risk assessment in this format.

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 risk of spillages (e.g. litter and feed management/delivery procedures) all reduce the potential for emissions impacting the nearest receptors. The Applicant has confirmed the following measures in their operating techniques to reduce dust:

Source of Dust	Potential Risks and Problems	Actions taken to minimise dust and dust risks
Poultry Feed	<ul style="list-style-type: none"> Dust from feed silos 	<ul style="list-style-type: none"> Silo exhaust is blown into water buckets catching any excess feed and dust. Contaminated water (with feed) is cleaned into underground dirty water tanks.
	<ul style="list-style-type: none"> Dust extraction in feed mill areas 	<ul style="list-style-type: none"> No on-site milling and mixing.
	<ul style="list-style-type: none"> Dust from feed spill and created during feed delivery 	<ul style="list-style-type: none"> Crash barriers to protect feed silos from damage. Any spillage of feed around the bin is immediately swept up. Feed deliveries are monitored to avoid dust and spills.

	<ul style="list-style-type: none"> Dust from the storage of feed 	<ul style="list-style-type: none"> Use of sealed feed silos to contain any dust created. Minimal feed is stored in silos and feed is not kept for longer than the manufacturer's recommendation to avoid build-up of dust.
	<ul style="list-style-type: none"> Dust from feed delivery system into poultry housing 	<ul style="list-style-type: none"> Feed delivery systems are sealed to minimise atmospheric dust. The condition of feed delivery system is checked frequently so that any damage or leaks can be identified.
	<ul style="list-style-type: none"> Dust created by suitable feed form, fat content and poor quality feed ingredient 	<ul style="list-style-type: none"> Feed specifications are prepared by the feed compounder's nutrition specialist. Feed is supplied only from UKASTA accredited feed mills, so that only approved raw materials are used.
	<ul style="list-style-type: none"> Dust created by feeding method and over administration to birds 	<ul style="list-style-type: none"> Correct feeding regime for age of birds to avoid spilled food on floor creating dust particles. Controls on feed and ventilation help to maintain litter quality and reduced dust.
Bedding Material	<ul style="list-style-type: none"> Dust from different types and quality of bedding material 	<ul style="list-style-type: none"> Bulk green sawdust is carried and spread directly into sheds with precision purpose-built spreading machine for minimal dust creation.
	<ul style="list-style-type: none"> Bedding management during production to minimise dust 	<ul style="list-style-type: none"> Maintain a suitable humidity level (40-60%) to balance reduced dust production and keeping low enough to maintain dry, odour-free litter whilst reducing pododermatitis and hock marks.
Ventilation	<ul style="list-style-type: none"> Gable end fans transporting dust to neighbours 	<ul style="list-style-type: none"> Gable end fans positioned in Houses 5, 6 & proposed house 7 are only used for catching which occurs predominantly at night.
	<ul style="list-style-type: none"> Poor ventilation causing a build-up of dust within the shed instead of periodically releasing airborne dust 	<ul style="list-style-type: none"> The ventilation and heating system is regularly adjusted to match the age and requirements of the flock. Increasing airflow with the age of the birds helps prevent airborne dust build-up.
House Cleaning	<ul style="list-style-type: none"> Good Management to contain dust during house cleaning 	<ul style="list-style-type: none"> Thorough cleaning with high pressure washers internally converts all dust into washings which is stored in underground tanks prior to spreading by local farmers. Concrete floors to enable washing of all internal areas.
	<ul style="list-style-type: none"> Creation of dust associated with litter removal from houses 	<ul style="list-style-type: none"> Clean out takes place as soon as possible after destocking. Litter is carefully placed into trailers positioned at the entrance to each house. When full, the trailer is covered. Sheds are internally blown out during litter removal so that dust is contained within the litter prior to high pressure washing.

Used Litter	<ul style="list-style-type: none"> Dust from the storage of used litter on site. 	<ul style="list-style-type: none"> There is no storage of used litter on site at any time. There is no double handling Litter is used by local farmers for spreading onto land.
Bird Stocking	<ul style="list-style-type: none"> Stocking density and depopulation 	<ul style="list-style-type: none"> Stocking density at optimal levels to prevent overcrowding. Free range broiler production has a maximum stocking rate of 27.5kg/m² resulting in less feed, litter and fewer birds resulting in less activity to produce dust airborne. Free Range does not thin the flock resulting in less dust created from forklift and catchers movements within litter in the sheds Less birds mean less forklift movement during depopulation resulting in reduced dust from litter.
Carcass Disposal	<ul style="list-style-type: none"> Dust and feathers from dead birds 	<ul style="list-style-type: none"> Dead birds are immediately collected in bags and chilled prior to collection by a DEFRA approved contractor for incineration to contain dust.
Monitoring	<ul style="list-style-type: none"> Requirement to measure dust 	<ul style="list-style-type: none"> Dust levels are monitored on a daily basis on the crop record spreadsheet. This is done using the sensory evaluation method.

Conclusion

We are satisfied that the measures outlined in the Application will minimise the potential for dust and bio aerosol emissions from the Installation.

Biomass boilers

The applicant is applying to include in their permit 4 biomass boilers with a net rated thermal input of 0.549 MW.

The Environment Agency has assessed the pollution risks and has concluded that air emissions from small biomass boilers are not likely to pose a significant risk to the environment or human health providing certain conditions are met. Therefore a quantitative assessment of air emissions will not be required for poultry sites where:

- the fuel will be derived from virgin timber, miscanthus or straw, and;
- the biomass boiler appliance and installation meets the technical criteria to be eligible for the Renewable Heat Incentive, and;

For poultry:

- the aggregate boiler net rated thermal input is less than or equal to 4 MWth, and no individual boiler has a net thermal input greater than 1 MWth, and;
- the stack height must be a minimum of 5 metres above the ground (where there are buildings within 25 metres the stack height must be greater than 1 metre above the roof level of buildings within 25 metres (including building housing boiler(s) if relevant) and;
- there are no sensitive receptors within 50 metres of the emission point(s).

This is in line with the Environment Agency's document "Air Quality and Modelling Unit C1127a Biomass firing boilers for intensive poultry rearing", an assessment has been undertaken to consider the proposed addition of the biomass boilers.

Our risk assessment has shown that the biomass boilers should meet the requirements of the criteria above, and are, therefore, considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

Ammonia

The applicant has demonstrated that the housing will meet the relevant NH3 BAT-AEL.

There is one Special Areas of Conservation (SAC) site located within 10 kilometres of the installation. There is one Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 16 Local Wildlife Sites (LWS) within 2 km of the installation.

Updated ammonia screening has been completed during the determination of the permit on 31/08/18 as a result of there being a number of removals and additions in terms of conservation site designations since the initial ammonia screening was carried out for the application site on 01/09/17. The updated ammonia screening has been used as a basis of the ammonia assessment of the application site detailed below.

Ammonia assessment – SAC/SPA/Ramsar

The following trigger thresholds have been designated for the assessment of European sites:

- If the process contribution (PC) is below 4% 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 10 km of the SAC.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Hollyfield Farm will only have a potential impact on the SAC site with a precautionary critical level of 1µg/m³ if they are within 2484 metres of the emission source.

Beyond 2484 metres the PC is less than 0.04µg/m³ (i.e. less than 4% of the precautionary 1µg/m³ critical level) and therefore beyond this distance the PC is insignificant. In this case the SAC is beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m³ is used, and the process contribution is assessed to be less than 4% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the 1µg/m³ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely significant effect.

Table 1 – SAC Assessment

Name of SAC	Distance from site (m)
Culm Grasslands	4059

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.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Hollyfield Farm will only have a potential impact on SSSI sites with a precautionary critical level of 1µg/m³ if they are within 1037 metres of the emission source.

Beyond 1037m the PC is less than 0.2µg/m³ (i.e. less than 20% of the precautionary 1µg/m³ critical level) and therefore beyond this distance the PC is insignificant. In this case the SSSI is beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m³ is used, and the process contribution is assessed to be less than 20% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the 1µg/m³ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these site.

Table 2 – SSSI Assessment

Name of SSSI	Distance from site (m)
Hare's Down, Knowstone & Rackenford Moor	4059

Ammonia assessment - LWS

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 (CLE) or critical load (CLO) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Hollyfield Farm will only have a potential impact on the LWS sites with a precautionary critical level of 1µg/m³ if they are within 433 metres of the emission source.

Beyond 433m the PC is less than 1µg/m³ and therefore beyond this distance the PC is insignificant. In this case the following 15 LWS are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 3 – LWS Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)
Lewis Farm Wood	1,508
Farside Copse	722
Tidderson Cross	1,287
Down Wood	1,658
Mountpleasant	1,499
Langdon Copse	543
Lower South Coombe Wood	1,726
North Coombe Cross	1,130
Landfoot Copse East	762
Holmhead Woods	1,674
Rixley Plantation	1,730
Higher West Moor	1,296
Higher Mogworthy Cross	1,781

Middlecott (N)	2,070
Bulworthy Knap (N)	2,074

Screening using detailed modelling: 'A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Free Range Broiler Chicken Rearing Houses at Hollyfield Farm, near Rackenford in Devon, 30th November 2017' has demonstrated that the PC on the remaining LWS 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.

Modelled ammonia emissions, nitrogen deposition and acid deposition that would result from the application site was used to present the impact on LWS sites that did not screen out in the original 'Initial screening using ammonia screening tool version 4.5' which was carried out for the application site on 01/09/17. An updated 'Initial screening' has been completed during the determination of the permit on 31/08/18 as a result of there being a number of removals and additions of LWS site designations within the screening distance of the application site since the 01/09/17 screening. This has meant that the site that did not screen out using the 31/07/18 screening wasn't explicitly detailed in the provided detailed modelling report. However, the provided detailed modelling report presented isopleths of the ammonia emissions and nitrogen deposition rates (from which acid deposition rates were calculated by the Environment Agency) in the locale of the site. Following review of these isopleths, the modelling has demonstrated that there will not be any exceedence of the 100% significance thresholds at the LWS. See results below:

Table 4 - Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of critical level
Lower Tidderson LWS	3**	No more than 1.5	No more than 50%

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

Table 5 – Nitrogen deposition

Site	Critical load kg N/ha/yr. [1]	Predicted PC kg N/ha/yr.	PC % of critical load
Lower Tidderson LWS	20	No more than 5	No more than 25%

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – 31/07/18

Table 6 – Acid deposition

Site	Critical load keq/ha/yr. [1]	Predicted PC keq/ha/yr.	PC % of critical load
Lower Tidderson LWS	5.07	No more than 0.7	No more than 14%

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – 31/07/18

The detailed modelling provided by the applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU) and we have confidence that we can agree with the report conclusions.

No further assessment is required.

Decision checklist

Aspect considered	Decision
Receipt of application	
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.
Consultation	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> • Food Standards Agency • Local Planning Authority • Environmental Health • Health and Safety Executive • Public Health England • Department for Public Health <p>The comments and our responses are summarised in the consultation section.</p>
Operator	
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.
The facility	
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', Appendix 2 of RGN 2 'Defining the scope of the installation'.</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>
The site	
Extent of the site of the facility	The operator has provided plans which we consider are 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 and baseline reporting under the Industrial Emissions Directive.
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>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> <p>In accordance with the Environment Agency's Air Quality Technical Advisory Guidance 14: "for combustion plants under 5MW, no habitats assessment is required due to the size of combustion plant". Therefore this proposal is considered acceptable and no further assessment is required.</p> <p>A Habitats Directive HRAS assessment was sent to Natural England for information only on 30/08/18. An Appendix 4 form has been saved on our internal database for the SSSI sites.</p>
Environmental risk assessment	
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.</p>
Operating techniques	
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 key operating techniques are as follows:</p> <ul style="list-style-type: none"> • the operator has confirmed that they will be able to meet all requirements of 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 • all housing will be constructed to Best Available Technique (BAT) • drainage from animal housing and water from cleaning out will be collected in underground storage tanks. The tanks will be built to specification as detailed in SGN EPR6.09 <p>The key operating techniques for the biomass boilers are as follows:</p> <ul style="list-style-type: none"> • the fuel is derived from virgin timber • the biomass boiler appliance and it's installation meets the technical criteria to be eligible for the Renewable Heat Incentive • the stacks are 1m or more higher than the apex of the adjacent buildings <p>The proposed techniques for priorities for control are in line with the benchmark</p>

Aspect considered	Decision
	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.
Odour management	<p>We have reviewed the odour management plan in accordance with our guidance on odour management.</p> <p>We consider that the odour management plan is satisfactory – See key issues for further information.</p>
Noise management	<p>We have reviewed the noise management plan in accordance with our guidance on noise assessment and control.</p> <p>We consider that the noise management plan is satisfactory - See key issues for further information.</p>
Permit conditions	
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Raw materials	<p>We have specified limits and controls on the use of raw materials and fuels.</p> <p>We have specified that only virgin timber (including wood chips and pellets), straw, miscanthus or a combination of these, are acceptable. These materials are never to be mixed with or replaced by, waste.</p>
Emission limits	<p>Technical measures [based on BAT] have been set for the following substances:</p> <ul style="list-style-type: none"> • Nitrogen • Phosphorus • Ammonia <p>See key issues 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 order to comply with the relevant BAT measures. See key issues for further information.</p>
Reporting	We have specified reporting in the permit. We made these decisions in accordance with the relevant BAT measures. See key issues for further information.
Operator competence	
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>

Aspect considered	Decision
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
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

Response received from
Local Planning Authority and Environmental Health
Brief summary of issues raised
No issues raised. The LPA confirmed that there is no noise or amenity related conditions placed on any of the planning applications approved at the site and there have not been any complaints received by the Planning Authority or any enforcement investigations with regard to amenity. The Environmental Health team also advised that there have been no recorded noise complaints at the site in the last three years.
Summary of actions taken or show how this has been covered
None required

Response received from
Public Health England
Brief summary of issues raised
Comments from PHE: The installation has the potential to cause pollution such as fugitive emissions (ammonia, bio-aerosols and particulates) and pollution to ground and surface water in the form of leachate and spillages. Furthermore, the potential exists to cause nuisance in respect of odour and noise. PHE would expect operational and environmental permit conditions to minimise fugitive emissions from the installation. The area is predominantly rural with the nearest residential dwelling being some 275m from the site boundary. Other residential receptors appear to be more than 600m from the site. On the basis of the submitted documentation we are satisfied that the nearest residential receptors are further than the PHE recommended separation distance of 250m. We note that the installation is already in operation and that the dust and odour management plans are already operating at the site. We expect the operator to have robust plans in place to deal appropriately with any odour complaints. The human nose is very sensitive to odours and often detects odorous chemicals at low concentrations in air which pose no toxicological risk to health. However it is acknowledged that chronic environmental odours can be unpleasant and affect wellbeing, hence it is very important that all odour producing activities on site are well managed and regulated. We would recommend that the Regulator ensures that all control measures and management plans are sufficient to keep fugitive emissions to a minimum. The waste litter from the site is spread on nearby farmland and no documentation was submitted discussing this element of the application. As the site is already in operation we recommend that you liaise with the local environmental health department to determine if there are any existing odour concerns and how these may best be addressed by appropriate permit or other regulatory controls. It is assumed by Public Health England that the site will comply in all respects with the Environmental Permitting (England and Wales) Regulations 2016. Compliance with the legislation, together with good management, should ensure that site will present a low risk to local human receptors.
Summary of actions taken or show how this has been covered
Refer to Bioaerosols and dust and noise and odour sections within 'Key Issues' above.

In addition, the following standard permit conditions will sufficiently address the concerns of Public Health England:

3.1 Emissions to water, air or land

3.2 Emissions of substances not controlled by emissions limits

3.5 Monitoring

Please also refer to the operating techniques section of the key issues above, which outlines how the proposal meets BAT.

As detailed above, the Local Planning Authority and Environmental Health teams have confirmed that there have been no historic or current amenity issues arising from the existing operation.

No responses were received from:

- Food Standards Agency
- Health and Safety Executive
- Department for Public Health