

Permitting decisions

Bespoke permit

We have decided to grant the permit for Air Station Farm operated by Mr Duncan West and Mrs Claire West (trading as D C West Farms).

The permit number is EPR/LP3634JP.

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 <u>key issues</u> in the determination
- summarises the decision making process in the <u>decision checklist</u> 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.

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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.

We have sent out a not duly made request requiring the Applicant to confirm that the new installation complies in full with all the BAT conclusion measures.

The Applicant has confirmed their compliance with all BAT conditions for the new installation in their document reference 'Air Station Farm' (saved on EDRM as 'BAT AEL details'), received 26/02/18.

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	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.
	This confirmation was in response to the Not Duly Made Request for Further Information, received 26/02/18, which has been referenced in Table S1.2 Operating Techniques of the Permit.
	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 Phosphorous excretion	The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL of 0.25 kg P_2O_5 animal place/year by an estimation using manure analysis for total Phosphorous content.
	This confirmation was in response to the Not Duly Made Request for Further Information, received 26/02/18, which has been referenced in Table S1.2 Operating techniques of the Permit.
	Table S3.3 of the Permit concerning process monitoring requires the operator to undertake relevant monitoring that complies with these BAT Conclusions.

BAT measure	Applicant compliance measure
BAT 24 Monitoring of emissions and process parameters - Total nitrogen and phosphorous excretion	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT Conclusions
BAT 25 Monitoring of emissions and process parameters - 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 26 Monitoring of emissions and process parameters - Odour emissions	The approved OMP includes the following details for on Farm Monitoring and Continual Improvement: • Twice daily olfactory checks coinciding with stock inspections (normally 07.00-10.00 hrs and 16.00-18.00hrs) any abnormalities recorded and investigated – see Air Station Farm contingency plan and as per routine inspection and maintenance schedule
BAT 27 Monitoring of emissions and process parameters -Dust emissions	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions. 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 in response to the Not Duly Made Request for Further Information, received 26/02/18, which has been referenced in Table S1.2 Operating techniques of the Permit.
BAT 32 Ammonia emissions from poultry houses - Broilers	The BAT-AEL to be complied with is 0.01 – 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.

<u>Ammonia emission controls – BAT conclusion 32</u>

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 Air Station Farm (dated 28/12/17) 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.

There are 4 sensitive receptors within 400m; two residential properties located approximately 340m to the south west of the installation boundary and two residential properties located approximately 360m to the south of the installation boundary.

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:

- Odour from the manufacture and selection of feed
- Odour from feed delivery or storage
- Odours arising from problems with housing ventilation system, inadequate air movement within house leading to high humidity and wet litter. Inadequate system design, causing poor dispersal of odours
- Litter management: odours arising from wet litter. The use of insufficient or poor quality litter. Spillage of water from drinking systems. Disease outbreaks, leading to wet litter.
- · Carcass disposal: inadequate storage of carcasses on site.
- House clean out (de littering)
- House clean out (disinfection and fumigation)

The mitigation measures proposed by the applicant, together with the location of the sensitive receptors, taking into consideration the predominant wind direction will be from the south west, should reduce the risk of odour pollution at the sensitive receptors.

Conclusion

We have assessed the OMP and the H1 risk assessment for odour and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 4 'Odour 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 odour pollution / nuisance.

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 odour 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 NMP review 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:

- Noise Issues from large vehicles travelling to and from farm
- Large vehicles delivering/collecting from site, litter removal, removal of dirty water
- Small vehicle movements
- Feed transfer from lorry to bins
- Ventilation Fans
- Alarm System/Standby Generator
- Chickens
- Personnel
- Repairs and Servicing

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 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.

There are no sensitive receptors within 100m of the Installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is approximately 340 metres to the south east of the installation boundary.

Guidance on our website concludes that applicants need to produce and submit a dust and bioaerosol 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:

 $\underline{www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit\#air-emissions-dust-and-bioaerosols.}$

As there are no receptors within 100m of the Installation, the Applicant has not submitted a dust and bioaerosol 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:

- Feed is stored in purpose built covered feed silos located next to the broiler sheds.
- No milling or mixing of feed takes place at the farm. All feed is delivered to the farm by lorry from feed suppliers.
- Feed is blown directly from the lorry into the storage silos.
- Feed is piped from the silos to the sheds minimising dust emissions.
- Dust is controlled through the management of litter and air quality
- Ventilation systems are operated to achieve optimum humidity levels for the stage of production in all
 weather and seasonal conditions.
- Control of minimum ventilation rates is planned to avoid the build-up of moisture in the house. Ventilation is appropriate to the age and weight of the animal.
- The sheds are managed to maintain the poultry litter in as dry and friable condition as possible.
- All broiler houses will have roof ventilation outlets. Rainwater run-off will be collected by the French
 drains and routed to the attenuation pond.
- Litter is not stored on the site.

Conclusion

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

Biomass boiler

The applicant is applying for a permit which includes two biomass boilers with a net rated thermal input of 0.975 MWth each, with the aggregated thermal input being 1.95 MWth.

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;
- 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 meet the requirements of the criteria above. The net thermal input individually is < 1MWth and aggregated is < 4MWth. In addition the nearest sensitive receptors are more than 300m from the stacks. We therefore consider it not likely to pose a significant risk to the environment or human health and no further assessment is required.

Ammonia

There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsar sites located within 10 kilometres of the installation. There are no Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are three Local Wildlife Site(s) (LWS) and one Ancient Woodland (AW) within 2 km of the installation.

Ammonia assessment - LWS/AW

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 Air Station Farm will only have a potential impact on the LWS and AW sites with a precautionary critical level of $1\mu g/m^3$ if they are within 470 metres of the emission source. Beyond 470 m the PC is less than $1\mu g/m^3$ and therefore beyond this distance the PC is insignificant. In this case all LWSs and AWs are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 1 - LWS/AW Assessment

Name of LWS/AW	Distance from site (m)
Oliver's & Dodd's Woods LWS	1952m
Langmere Green LWS	1966m
St Clement's Common LWS	1616m
OLIVERS WOOD ancient woodland	1952m

No further assessment is necessary

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	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.	
	The application was publicised on the GOV.UK website.	
	We consulted the following organisations:	
	South Norfolk Council Environmental Health	
	Health and Safety Executive	
	No responses were received.	
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	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility'.	
	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.	
The site		
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 and baseline reporting under the Industrial Emissions Directive.	
Biodiversity, heritage, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.	
	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.	
	Ammonia assessment	
	We consider that the application will not affect any sites of nature conservation,	

Aspect considered	Decision
Aspect considered	landscape and heritage, and/or protected species or habitats identified.
	See Key Issues of the decision, 'Ammonia' section for further information.
	We have not consulted Natural England on the application. The decision was taken in
	accordance with our guidance.
	Biomass boiler assessment
	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.
	See Key Issues of the decision, 'Biomass boiler' section for further information.
Environmental risk assess	ment
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.
	The operator's risk assessment is satisfactory.
	The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment, all emissions may be categorised as environmentally insignificant.
Operating techniques	
General operating techniques	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.
	The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.
	The operating techniques are as follows:
	 Poultry houses 1 – 6 are ventilated by high velocity roof fans and all houses have gable end fan outlets used infrequently for temperature control in hot weather
	Litter is exported off site and is spread on land owned/controlled by the operator
	Dirty wash water is exported off site and spread on land owned/controlled by the operator
	Roof water drains to an attenuation pond
	Sealed and collision-protected feed storage bins
	 Carcasses are collected daily and stored in a secure container on site prior to removal off site by a licenced contractor
	Phosphorous and protein levels are reduced over the production and growing cycle by providing different feeds
	the biomass boiler fuel is derived from virgin timber,
	the biomass boiler appliance and it's installation meets the technical criteria to be

Aspect considered	Decision
	eligible for the Renewable Heat Incentive; and
	the biomass boiler stacks are 1m or more higher than the apex of the adjacent buildings.
	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.
Odour management	We have reviewed the odour management plan in accordance with our guidance on odour management.
	We consider that the odour management plan is satisfactory.
Noise management	We have reviewed the noise management plan in accordance with our guidance on noise assessment and control.
	We consider that the noise management plan is satisfactory.
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	We have specified limits and controls on the use of raw materials and fuels.
	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.
Emission limits	We have decided that emission limits are not required in the permit.
Monitoring	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.
	These monitoring requirements have been imposed in accordance with BAT 3, 4, 24, 25, 26, 27 and 32. Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions We made these decisions in accordance with BAT conclusions.
Reporting	We have specified reporting in the permit.
	We made these decisions in accordance with the new Best Available Techniques (BAT) Reference Document (BREF) for the Intensive Rearing of poultry or pigs (IRPP) published on the 21st February 2017.
Operator competence	
Management system	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.
	The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Relevant convictions	The Case Management System has been checked to ensure that all relevant

Aspect considered	Decision
	convictions have been declared.
	No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.
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	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.
	Paragraph 1.3 of the guidance says:
	"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."
	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.
	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.

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

South Norfolk Council Environmental Health and Health and Safety Executive were consulted, with a deadline for responses of 05/04/18, but no responses were received.