Environment Agency permitting decisions

Variation

We have decided to issue the variation for Oakstone Farm Poultry Unit operated by Thriveunique Limited.

The variation number is EPR/WP3037MK/V003

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Description of the changes introduced by the variation
- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

Description of the changes introduced by the Variation

This is a Substantial Variation.

The variation authorises the following change:

To increase the permitted number of animal places at Oakstone Farm Poultry Unit to 260,000 broiler places from 178,500 places. This has resulted in the construction of two extra poultry sheds – numbered 5 and 6. There are now six poultry sheds on site. There has been no extension to the installation boundary as a result of this variation. The variation also adds and additional biomass boiler to the site, bringing the number of boilers to two.

Changes to the original permit as a result of consolidation

As part of this variation and consolidation, several changes have been made to the permit, including in particular the following:

- Amendment of table S1.1 activities
- Amendment of table S1.2 operating techniques
- Amendment of table S3.1 point source emissions to air
- Amendment of table S3.2 point source emissions to water (other than sewer)
- Amendment of site plan in Schedule 7
- Removal of table S3.3 ‘point source emissions to land’, and the information within this former table consolidated with table S3.2 ‘point source emissions to water (other than sewer) and land’

Key issues of the decision

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 Oakstone Farm (received 06/06/2006) 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.**

Biomass boilers

The applicant is varying their permit to include 2 biomass boiler(s) with a net rated thermal input of 0.383 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;
- the aggregate boiler net rated thermal input is:
    A. less than 0.5MWth, or;
    B. less than 1MWth where the stack height is greater than 1 metre above the roof level of adjacent buildings (where there are no adjacent buildings, the stack height must be a minimum of 3 metres above ground), and there are:
        - no Special Areas of Conservation, Special Protection Areas, Ramsar sites or Sites of Special Scientific Interest within 500 metres of the emission point(s);
        - no National Nature Reserves, Local Nature Reserves, ancient woodlands or local wildlife sites within 100 metres of the emission point(s), or;
    C. less than 2MWth where, in addition to the above criteria for less than 1MWth boilers, there are:
        - no sensitive receptors within 150 metres of the emission point(s).

This is In line with the Environment Agency's May 2013 document "Biomass boilers on EPR Intensive Farms", an assessment has been undertaken to consider the proposed addition of the biomass boilers.

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

Dust and bioaerosols

There are measures included within the permit (the 'Fugitive Emissions' conditions) to provide a level of protection. The use of Best Available Techniques and good practice will ensure minimisation of emissions. Furthermore, 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.

The closest residential receptor is located within the installation boundary and is occupied by the residents of Oakstone Farm Poultry Unit.

Good management of the installation, keeping areas clean from build-up of dust, other measures in place to reduce dust and risk of spillages, such as litter and feed management/delivery procedures all reduce the potential for emissions impacting the nearest receptor.

The applicant has also submitted a Dust Management Plan (reference 'Bio Aerosol Emissions at Oakstone Farm Poultry Unit'), written in accordance with Environment Agency's EPR 6.09 How to Comply with your Environmental Permit for Intensive Farming Appendix 11 guidance. We consider this acceptable as a bioaerosol risk assessment and that the measures outlined in the plan will minimise the potential for dust and bioaerosol emissions from the installation.

Odour

There are several sensitive receptors within 400 metres of the installation (excluding the farmers own residential property). Therefore an Odour Management Plan (OMP) is required under our guidance.

The operator has provided an odour management plan as part of the application supporting documentation.

Operations with the most potential to cause odour nuisance have been assessed as those involving manufacture and selection of feed, feed delivery and storage, ventilation system, litter management, carcass disposal, house clean out, used litter and dirty water management. The odour management plan covers control measures for each of these potential odour hazards.

The residences occupied by people associated with the farm are not considered as a sensitive receptors, for odour, as it is unlikely that odour will be perceived as a nuisance. There are other properties and businesses within 400m – There are no history of odour complaints from this site.

There is potential for odour from the installation, beyond the installation boundary. However, the risk of odour beyond the installation boundary is considered unlikely to cause a nuisance.

Noise

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour section. The operator has provided a noise management plan (NMP) as part of the application supporting documentation.

Operations with the most potential to cause noise nuisance have been assessed as those involving delivery vehicles travelling to and from the farm, vehicles on site, feed transfer from lorries to bins, testing of the alarm system and standby generators, operation of ventilation fans, noise from birds on site, staff and contractors, and repairs. The noise management plan covers control measures for each of these potential noise hazards.

As for odour, the residences occupied by people associated with the farm are not considered as a sensitive receptors as it is unlikely that noise will be perceived as a nuisance. There are other properties and businesses within 400m – There are no history of odour complaints from this site.

There is the potential for noise from the installation, beyond the installation boundary. However, the risk of noise beyond the installation boundary is considered unlikely to cause a nuisance.

Ammonia emissions

There are 3 Special Area(s) of Conservation (SAC),/Special Protection Area(s) (SPA),/Ramsar sites located within 10 kilometres of the installation. There are 5 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 3 Local Wildlife Site(s) (LWS),/Ancient Woodland(s) (AW), Local Nature Reserve(s) (LNR) within 2 km of the installation.

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/SPA/Ramsar.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Oakstone Farm Poultry Unit will only have a potential impact on the SAC/SPA/Ramsar sites with a precautionary critical level of 1µg/m^3 if they are within 6116 metres of the emission source.

Beyond 6116m the PC is less than 0.04µg/m^3 (i.e. less than 4% of the precautionary 1µg/m^3 critical level) and therefore beyond this distance the PC

is insignificant. In this case the River Avon SAC is beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m^3 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/m^3 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)
River Avon	9957

Screening using Detailed modelling (A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Broiler Chicken Rearing Houses at Oakstone Farm Poultry Unit, Oakstone Farm, Bratton Road, near West Ashton in Wiltshire) has determined that the PC on the Salisbury Plain SAC and SPA for ammonia emissions from the application site are under the 4% significance threshold and can be screened out as having no likely significant effect. See results below.

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.

Table 2 – Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted PC µg/m^3	PC % of Critical level
Salisbury Plain SAC and SPA	1*	0.008	0.8

*A precautionary critical level of 1 µg/m^3 has been assigned to this site. Where the precautionary level of 1 µg/m^3 is used, and the PC is assessed to be less than the 4% insignificance threshold in this circumstance it is not necessary to further consider nitrogen deposition or acid deposition critical load values.

No further assessment is necessary.

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 Oakstone Farm Poultry Unit will only have a potential impact on SSSI sites with a precautionary critical level of 1µg/m^3 if they are within 2554 metres of the emission source.

Beyond 2554m the PC is less than 0.2µg/m^3 (i.e. less than 20% of the precautionary 1µg/m^3 critical level) and therefore beyond this distance the PC is insignificant. In this case the SSSIs are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m^3 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/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 3 – SSSI Assessment

Name of SSSI	Distance from site (m)
Salisbury Plain SSSI	3290
Upton Cow Down	4900

Screening using detailed modelling (A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Broiler Chicken Rearing Houses at Oakstone Farm Poultry Unit, Oakstone Farm, Bratton Road, near West Ashton in Wiltshire) has indicated that the PC for Bratton Downs SSSI and Picket and Clanger Wood SSSI is predicted to be less than 20% of the critical level for ammonia emissions therefore it is possible to conclude no damage. See results below.

Table 4 – Ammonia emissions

Site	Ammonia Cle (µg/m^3)	PC (µg/m^3)	PC % critical level
Bratton Downs SSSI	1*	0.029	2.9
Picket and Clanger Wood SSSI	1*	0.055	5.5

A precautionary level of 1 µg/m^3 has been used during the screen. Where the precautionary level of 1 µg/m^3 is used, and the process contribution is assessed to be less than the 20% insignificance threshold in this circumstance it is not necessary to further consider nitrogen deposition or acid deposition critical load values. In these cases the 1 µg/m^3 level used has not been confirmed, but it is precautionary.

Steeple Ashton SSSI (approximately 1968m from Oakstone Farm Poultry Unit) is a geological conservation review site and there is not data present on APIS.

No further assessment is required.

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 Oakstone Farm Poultry Unit will only have a potential impact on the LWS/AW sites with a precautionary critical level of 1µg/m^3 if they are within 1066 metres of the emission source.

Beyond 1066m the PC is less than 1µg/m^3 and therefore beyond this distance the PC is insignificant. In this case all LWS/AW are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 5 – LWS/AW Assessment

Name of LWS/AW	Distance from site (m)
Kettle Lane Wood LWS	2053
KETTLE LANE WOOD AW	2075
PICKET/CLANGER/ROUND WOOD AW	1667

Steeple Ashton (Old Quarry) and Blue Circle Cement Work LWS were captured within the pre-application ammonia assessment in May 2016. However, as of January 2017, these sites are not designated any longer. Notwithstanding this, these sites were 1944m and 1118m away from the emission source, respectively. As stated above, beyond 1066m the PC is less than 1µg/m^3 and therefore beyond this distance the PC is insignificant.

No further assessment is necessary

Annex 1: decision checklist
This document should be read in conjunction with the application, supporting information and permit/notice.

Aspect considered	Justification / Detail	Criteria met Yes
Receipt of submission		
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 commercial confidentiality.	✓
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements. For this application we consulted the following bodies: • Public Health England • Director of Public Health, Wiltshire Council • Environmental Health Department, Wiltshire Council • Health and Safety Executive	✓
Responses to consultation, web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
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 what a legal operator is.	✓
European Directives		
Applicable	All applicable European directives have been considered	✓

Aspect considered	Justification / Detail	Criteria met Yes
directives	in the determination of the application.	
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. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the site. We have not formally consulted on the application. The decision was taken in accordance with our guidance.	✓
Environmental Risk Assessment and operating techniques		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory.	✓
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The operating techniques include the following: • Poultry houses 1-4 are ventilated by side fan outlets and roof mounted ridge vents. • Poultry houses 5 & 6 are ventilated by high velocity roof fan outlets. • Litter is exported off site and is spread on land owned by third parties • Dirty wash water is exported off site and spread on third party owned land	✓

Aspect considered	Justification / Detail	Criteria met Yes
	• Phosphorus and protein levels are reduced over the production and growing cycle by providing different feeds • Carcasses are collected daily and stored in a secure container on site prior to collection by a licensed renderer. • The fuel to be used for the biomass boilers is derived from virgin timber. • The biomass boiler appliance and its 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. • Roof water is directed to an onsite swale, which acts as a soakaway, via French drains. All wash water is directed, via diverter bungs, to underground dirty water tank. The proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions. 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.	
The permit conditions		
Updating permit conditions during consolidation.	We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit(s). The operator has agreed that the new conditions are acceptable.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
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, which was developed in consultation with industry having regard to the relevant legislation.	✓
Raw materials	We have specified limits and controls on the use of raw materials and fuels.	✓
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.	✓
Emission limits	No emission limits have been added, amended or deleted as a result of this variation.	✓
Operator Competence		
Environment management system	There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with our guidance on what a competent operator is.	✓

Annex 2: External Consultation and web publicising

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

Response received from
Public Health England – 15 December 2016
Brief summary of issues raised
We have received the above substantial variation application to construct 2 additional poultry houses at Oakstone Poultry Farm to Best Available Techniques (BAT) standards and increase the number of broiler chickens. This is an existing installation operating at the site which is located in a rural area with surrounding land being predominantly used for arable and livestock farming. The installations have 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, potential exists to cause nuisance in respect of odour and noise from the operation itself and any application being granted needs to ensure these are managed. The applicant has submitted risk assessments and management plans to manage fugitive emissions, bio-aerosols and odours from this site which have been reviewed and our comments are below: We are concerned about the close proximity of residential properties that are within 250m for bio-aerosols and 400m for odour of the site. The HPA position statement on intensive farming (which has been adopted by Public Health England) describes the main public health risks from this type of activity and notes that published studies indicate bio-aerosols are generally reduced to background levels within 250m of the facility and exceptions to 250m are allowed if effective mitigation techniques are employed. There were no details in the application or the bio-aerosol risk assessment that detailed mitigation techniques will be employed and the only information provided related to mechanisms to control dust nuisance. Therefore, we are unable to comment upon the effectiveness of any mitigation mechanisms in relation to bio-aerosol emissions. The regulator needs to be satisfied that there are adequate controls on all airbourne particles that contain living organisms, fragments, toxins and waste products and any monitoring would need to consider the impacts on the community and occupational exposure. There was also no information contained in the application or dust management plan concerning the conditions of the road and therefore the regulator needs to ensure that the condition of the roads at these sites will not result in a source of particulate matter being created and deposited off site. In relation to the odours, there was no information in the application pertaining to complaints being received for the existing activities. Therefore, the regulator needs to be satisfied that any local amenity concerns are identified

and can be mitigated due to their close proximity. The odour management plan has included controls to minimise the production of odour at the source and they have a management system to capture complaints and we would ask that the regulator ensures the system includes a process for identifying and mitigating the source of any odour following substantiated complaints, and this could include details of any monitoring which might be undertaken.
Summary of actions taken or show how this has been covered
To prevent significant emissions from the site the Operator has proposed appropriate measures to manage dust and bioaerosols - a site specific risk assessment has been provided by the Operator. This includes the use of appropriate housing design and management and appropriate containment of feedstuff. We are satisfied that these measures will appropriately mitigate emissions to prevent a significant impact from the site. We only require an Operator to produce a dust and bioaerosol risk assessment with an application if there are relevant receptors within 100m of the farm e.g. farmhouse or farm worker's houses, or other receptors outside of the installation boundary – the Operator has provided an appropriate risk assessment. In this case, the only receptor within 100m of this site is an on-site mobile home used by the farm employees. This is an agreed standard, established, and used consistently with such applications. The Operator has also provided an updated Technical Standards document that details operational procedures on site, including making it clear that areas around buildings will be kept free from build-up of manure, slurry or spilt feed. Notwithstanding the above, Condition 3.2 of the environmental permit also deals with emissions of substances not controlled by emission limits. Under this condition, if notified by the Environment Agency that the activities are giving rise to pollution, the Operator must submit an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits. The Operator has also provided a comprehensive odour management plan. We have no record of odour complaints as a result of operations from this site.

We also consulted with the Director of Public Health, Wilshire Council, and the Environmental Health Department, Wiltshire Council, along with the Health and Safety Executive. No responses were received within the appropriate timeframe. No public comments were received.