Permitting decisions

Variation

We have decided to grant the variation for Little Hales Manor Poultry Farm operated by H. Timmis (Farms) Limited.

The variation number is EPR/GP3836NG/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 provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken in to account.

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 and the variation notice. The introductory note summarises what the variation covers.

Description of the main features of the Installation

Little Hales Manor Poultry Farm is situated approximately two kilometres south of Newport and five kilometres north-east of Telford. The installation is approximately centred on National Grid Reference SJ 74916 16428 and is operated by H. Timmis (Farms) Limited.

This variation increases the permitted broiler places at the site from 200,000 to 320,000 with the addition of two poultry houses, making a total of six poultry houses at this farm. The installation boundary has extended around these two new poultry houses to the north-east of the site, and it has also increased to the south west of poultry shed 1 to include the carcass bins within the installation boundary. The two new poultry houses (5 & 6) will have high velocity fans as well as a "Full House Ventilation" system whereby air extracted from the sheds is cleaned (scrubbed) mixed with air from outside, preheated to the desired temperature and re-introduced into the shed via inlets under the eaves. The scrubber unit will produce dirty water from the scrubbing process and clean water from the adiabatic and incoming supply side. Dirty water from the scrubber unit will go to the dirty water storage tank and clean water to the surface water drain.

This variation also removes all reference of the swale as this was never constructed. The water draining from the yard (excluding poultry house wash out periods) and roof water from poultry houses 1-6 are both intercepted by french drains (running parallel with all the poultry houses) prior to discharge to a land drain which discharges to the surface water ditch west of the installation boundary. Diverter bunds and drain mats are used during wash down periods to prevent contamination of clean water systems and to divert wash waters to the dirty water tanks. The ventilation from the existing poultry houses 1-4 has also been updated with this variation to high velocity fans to correct the error in the previous permits.

Day old chicks are brought in, grown on for an average crop cycle of 40 days and then transported to a processing plant. At the end of the growing period the houses are cleaned out, washed down and disinfected over a seven day period ready for the next crop. Houses are pre-warmed to 31 ˚C using a closed loop ground source heat pump as the principal energy source with LPG as back-up. Underground tanks collect wash waters and their contents and, along with poultry house litter, is spread onto adjoining farm land in accordance with a manure management plan.

The facility is required to be permitted as a scheduled activity under Environmental Permitting Regulations as follows;

Section 6.9 A (1) (a) (i) Rearing of poultry intensively in an installation with more than 40,000 places

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.

The Applicant has confirmed their compliance with the BAT conditions for the new housing in this variation, in their e-mail dated 22/03/2017.

In relation to table 3.2 the lower end of the range for BAT-AEL applies here with the use of an air cleaning system (see footnote 2 in the table below).

Table 3.2: BAT-AEL for ammonia emissions to air from each house for broilers with a final weight of up to 2.5 kg

Parameter	BAT-AEL (1) (2) (kg NH_3/animal place/year)
Ammonia expressed as NH_3	0.01 – 0.08
(1) The BAT-AEL may not be applicable to the following types of farming: extensive indoor, free-range, traditional free-range and free-range - total freedom, as defined in Commission Regulation (EC) 543/2008. (2) The lower end of the range is associated with the use of an air cleaning system.	

A mist eliminator and condensing scrubber has been included in the operating techniques for the 2 new sheds.

- The standard emission factor for broilers is 0.034.
- The AEL for broilers with an air cleaning system should be close to 0.01.
- In practice emission factor for 2 new sheds is calculated with 75 % abatement efficiency, supplied by Applicant, for ammonia as 0.034 * 0.25 = 0.0085.

Hence the new farm house emission factor is compliant with relevant AEL of 0.01.

Odour

There are four 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 nearest residential properties are as follows:

1. 1 New Cottage, residential, owned by the operator, located approximately 320 metres to the north east of the installation boundary.

2. 2 New Cottage, residential, owned by the operator, located approximately 320 metres to the north east of the installation boundary.

3. Wrens Nest, residential, located approximately 370 metres to the north east of the installation boundary.

4. Littlehales Lodge, residential, owned by the operator, located approximately 380 metres to the south of the installation boundary.

5. Flats 1-5, Littlehales Manor Farm, privately owned/rented, located approximately 115 metres to the south of the installation boundary.

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 and heating system, litter management, carcass disposal, house clean out/dust, used litter/manure management, manure spreading, dirty water management, and fugitive emissions. 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 no history of odour complaints from this site.

"Littlehales Manor Farm is the only receptor predicted to experience an odour level slightly in excess of the threshold level for "moderately offensive odour"". Therefore including Flats 1-5 of Littlehales Manor Farm in this statement, it has been concluded that, given there have been no odour complaints from this site previously, the general wind direction (south west) from this farm will take odour emissions away from these properties, and a robust OMP is in place, no further action is required at this time.

Many assumptions are made when modelling odour, and therefore model predictions are associated with a number of uncertainties. Predictions therefore are indicative only, and it is necessary to consider wider odour management at any site when making permitting decisions. As stated above, a robust OMP is in place, so no further action is required at this time.

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 large vehicles travelling to and from the farm 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 no history of noise 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 is 2 Special Area of Conservation (SAC),/Ramsar sites located within 10 kilometres of the installation. There are 3 Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 5 Local Wildlife Sites (LWS)/Ancient Woodlands (AW) 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 application.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Little Hales Manor Poultry Farm will only have a potential impact on the SAC/Ramsar sites with a precautionary critical level of 1µg/m^3 if they are within 4177 metres of the emission source.

Beyond 4177 metres 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 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)
Mottey Meadows SAC	9232

Midland Meres and Moses Phase 2 Ramsar is 3757 metres from the site so is within the 4177 metres distance as discussed above. 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 Little Hales Manor, Littlehales Road, Lilleshall in Shropshire) has determined that the PC on the Midland Meres and Mosses Phase 2 Ramsar 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.

Different scenarios were modelled in this report, however we were interested in scenario 2 (The existing housing with 213,333 birds + the proposed houses with 106,666 birds (emission unabated via the stacks on the climate control/scrubber unit – to represent scrubber failure). This was because there is limited evidence on the removal rates of ammonia with scrubbers currently, therefore if the site screened out without this technology we could be confident the site would not impact on the Ramsar. In reality with the scrubbers in place the ammonia levels may be lower.

Table 2 – Ammonia emissions

Midland Meres and Mosses Phase 2 Ramsar			
X, Y coordinate pair at Midland Meres and Mosses	**Critical level ammonia µg/m^3**	**Predicted PC µg/m^3**	**PC % of Critical level**
376812, 319701	1*	0.036	3.6
376089, 320116	1*	0.035	3.5
376635, 320693	1*	0.025	2.5
378300, 320199	1*	0.024	2.4
377455, 320770	1*	0.023	2.3

*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 10km of the application.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Little Hales Manor Poultry Farm will only have a potential impact on SSSI sites with a precautionary critical level of 1µg/m^3 if they are within 1432 metres of the emission source.

Beyond 1432 metres 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 all SSSI's 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 1 – SSSI Assessment

Name of SSSI	**Distance from site (m)**
Muxton Marsh SSSI	4300
Newport Canal SSSI	2989
Aqualate Mere SSSI	3757

No further assessment is necessary.

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 Little Hales Manor Poultry Farm will only have a potential impact on the LWS/AW sites with a precautionary critical level of 1µg/m^3 if they are within 491 metres of the emission source.

Beyond 491 metres 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 2 – LWS/AW Assessment

Name of LWS/AW	Distance from site (m)
Quarry at Barracks Lane LWS	1352
Lilleshall Hill LWS	1991
Abbey Wood AW	1473
Abbey Wood AW	1945
Greens Wood AW	737

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/Engagement	
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: Health and Safety Executive Telford Environmental Health The comments and our responses are summarised in the consultation section.
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 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. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified. We have not consulted Natural England on the application. The decision was taken in accordance with our guidance. Natural England were sent a copy of the Appendix 11 for information only.

Aspect considered	Decision
Environmental risk assessment	
Environmental impact assessment	In determining the application we have considered the Environmental Statement.
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	
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 1-6 are ventilated by high velocity fans with roof outlets. • Poultry houses 5 & 6 have a "Full House Ventilation" system whereby air extracted from the sheds is cleaned (scrubbed) mixed with air from outside, preheated to the desired temperature and re-introduced into the shed via inlets under the eaves. • The scrubber unit will produce dirty water from the scrubbing process and clean water from the adiabatic and incoming supply side. Dirty water from the scrubber unit will go to the dirty water storage tank and clean water to the surface water drain. • Litter is spread on adjoining land under a manure management plan. • Dirty wash water is spread on adjoining land under a manure management plan. • 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 water draining from the yard (excluding poultry house wash out periods) and roof water from poultry houses 1-6 are both intercepted by french drains (running parallel with all the poultry houses) prior to discharge to a land drain which discharges to surface water west of the installation boundary. • Diverter bunds and drain mats are used during wash down periods to prevent contamination of clean water systems and to divert wash waters to the dirty water tanks. 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.

Aspect considered	Decision
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.
Operating techniques for emissions that screen out as insignificant	Emissions of ammonia have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation. We consider that the emission limits included in the installation permit reflect the BAT for the sector.
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	
Updating permit conditions during consolidation	We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permits.
Emission limits	No emission limits have been added, amended or deleted as a result of this variation.
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.

Consultation

Reponses not received

The Health and Safety Executive (HSE) and Telford Environmental Health were consulted; however, no consultation responses were received.

The application was also advertised on the www.gov.uk website, from the 03/02/2017 until 03/03/2017, but no comments were received.