Environment Agency permitting decisions

Bespoke permit

We have decided to issue the variation for Lower Cleeve Farm Poultry Unit operated by Mr Jonathan Hay

The variation number is EPR/YP3331ZW/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 main features of the installation.
- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising

Description of the changes introduction with this variation

This is a substantial variation as the broiler number increase is greater than the Environmental Permitting Regulation threshold for this activity as follows:

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

The changes linked to this variation are as follows:

- An increase in broiler numbers from 220,000 to 340,000. In order to achieve this three new poultry
 houses are to be added (poultry houses 7 to 9), with associated drainage and feed bins The poultry
 house design is based on high velocity roof fans and heating via LPG heaters.
- The installation boundary is extended to include the area associated with the three new poultry houses.
- There are no changes to the existing installation facilities linked to this variation.

Installation location

The installation is within 400 metres of residential properties and hence there is a requirement for odour and noise management plans in line with our intensive farming sector guidance EPR 6.09.

In addition there are relevant residential properties within the 100 metres threshold for the requirement for the consultation with Public Health England/Director of Public Health.

Key issues of the decision

Environmental Impacts

1.Ammonia Emissions

There are six European/Ramsar statutory sites within the 10 km screening distance from this installation. There are three Sites of Special Scientific Interest within the 5 km screening criteria. There are twelve other conservation sites within the 2 km of this installation.

The assessment below concludes that the installation impacts on all of the relevant habitat sites within screening distances screens out as having insignificant environmental impacts on the basis of our Ammonia Screening Tool AST v.4.5 assessment dated 27/09/16.

<u>Ammonia Assessment – SAC / SPA / Ramsar sites</u>

The following trigger thresholds have been designated for assessment of European sites including Ramsar 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 overlapping in combination assessment will be completed where existing farms are identified within 10km of the application.

Screening using the AST screening tool has determined that the Process Contribution (PC) on the SAC/SPA/Ramsar sites for ammonia, acid and N deposition from the application site are under the 4% significance threshold and can be screened out as having no likely significant effect.

The data is based on our Ammonia Screening Tool AST v.4.5 (report dated 27/09/16).

See results below:

A precautionary level of 1µg/m³ for Critical Level for ammonia has been used during the screen for the SAC site.

Screening indicates that beyond **4349 m** distance, the Process Contribution at conservation sites is less than 4 % of the 1 μ g/m3 critical level for ammonia. In this case the habitat sites below in Table 1 are beyond this distance.

Table 1- Distance from source

Table 1 Dictarios II cili cource	
Site	Distance (m)
SAC England – Wye Valley Woodlands	6,424
SAC Wales - Wye Valley Woodlands	6 424

On the basis of distances above there is no further requirement for assessment as installation impacts on these habitat sites are concluded to have no likely significant effect.

Where a CLe of $1\mu g/m^3$ is used, and the process contribution is assessed to be less than the 4 % insignificance threshold in these circumstances it is not necessary to further consider Nitrogen Deposition or Acidification Critical Load values.

Wye Valley and Forest of Dean Bat Site (SAC England and Wales)

The habitat is designated for bats only and in line with our guidance no ammonia critical level is required.

On this basis, no further assessment is required.

River Wye (SAC England and Wales)

This site is within 250 metres of the installation boundary. In accordance with guidance from Natural England we consulted with them regarding whether River Jelly Lichen are present along with the stretch of the River Wye closest to this installation in according to assess whether an ammonia critical level is to be applied.

River Wye SAC (nearest point to the installation is National Grid Reference SO 58314 23354). The stretch of River Wye nearby stretches from SO 58354 23504 (NW of the installation) to SO 58229 23296 (SW of the installation).

The River Jelly lichen is not on this stretch of the river. We have this after a confirmation from Natural England dated 13/10/16.

Hence, without such River Jelly Lichen, ammonia critical levels do not apply for aquatic features. Therefore, no further assessment is required.

Ammonia Assessment – SSSIs

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 in-combination assessment and/or detailed modelling may be required.

Our screening assessment dated 27/09/16 indicated that the PCs for the following SSSIs are predicted to be less than 20% CLe/CLo for ammonia, acid and N deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool v4.4 are given in the tables below.

A precautionary CLe of 1µg/m³ for ammonia has been used during the screen.

Screening indicates that beyond distance 1491m the PC at SSSIs is less than 20 % of the $1\mu g/m^3$ critical level for ammonia. In this case the SSSIs below in Table 1 are beyond this distance.

Table 1 - Distance from source

Table 1 Distance ironi course	
Site	Distance (m)
Coughton Wood and Marsh	2,015

The PCs for ammonia at these sites has been screened out as insignificant. It is therefore possible to conclude that any impact will be insignificant at these sites and therefore no further assessment is required. Where a CLe of $1\mu g/m^3$ is used, and the PC is assessed to be less than the 20% insignificance threshold, in these circumstances it is not necessary to further consider Nitrogen Deposition or Acidification Critical Load values. In these cases the $1\mu g/m^3$ level used has not been confirmed, but it is precautionary.

Wilton Bluff, Ross on Wye SSSI

This is a Geological SSSI and therefore there are no mechanisms for impact. The selected site has no features in the APIS database. Therefore, no further assessment is required.

River Wye (SSSI)

This site is within 250 metres of the installation boundary. There are no bryophytes present in the local stretch of the River. However, ammonia critical levels do not apply for aquatic features. Therefore, no further assessment is required.

Ammonia assessment - LWS/AW/LNR.

There are twelve other conservation sites within 2 km of this installation. The following trigger thresholds have been applied for the assessment of these sites.

- 1. If PC is < 100% of relevant Critical Level or Load, then the farm can be permitted (H1 or ammonia screening tool)
- 2. If further modelling shows PC <100%, then the farm can be permitted.

The PCs on the Local Wildlife Sites(LWS) for ammonia, acid and Nitrogen deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. A precautionary CLe of 1µg/m³ for ammonia has been used during the screen.

Screening using AST 4.5 dated 27/09/16 indicates that beyond **511 m** distance, the PC at conservation sites is less than 100 % of the $1\mu g/m^3$ critical level for ammonia. In this case, the other conservation sites below in Table 2 are beyond this distance.

Table 2 - Distance from Source

Site	Distance (m)
Wilton Bluff LWS	1,104
Marsh near Bridstow Church LWS	1,795
Coughton Wood and Marsh LWS	1,961
Disused railway line, Ross to Keme Bridge LWS	774
Chase and Merrivale Woods LWS	1,305
Northern end of Coughton Marsh LWS	1,292
Coneygare Wood AW	1,732
Rough Pasture AW	1,943
Merryvale Wood AW	1,426
Chase Wood AW	1,382
Wells Brook	1,266

Conclusion

On the basis of distances above there is no further requirement for assessment as installation impacts on these habitat sites are concluded to have no likely significant effect.

Where a CLe of $1\mu g/m^3$ is used, and the process contribution is assessed to be less than the 100% insignificance threshold in these circumstances it is not necessary to further consider Nitrogen Deposition or Acidification Critical Load values.

River Wye LWS

This habitat site is with 250m of the installation, however it screens out as it is designated only for aquatic features, in line with our guidance.

No further assessment needed.

Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain condition 3.1.3 relating to groundwater monitoring. However, the Environment Agency's H5 Guidance states that it is only necessary for the applicant to take samples of soil or groundwater and measure levels of contamination where the 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 your risk assessment has identified a possible pathway to land or groundwater.

H5 Guidance further states that it is **not essential for the applicant** 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 is within the application supplementary information Appendix 2, dated July 2016.

It includes completion of H5 template plus an installation boundary with locations of farm buildings, drains, diesel tank and dirty water tank.

The installation site is located to the south of the existing farm buildings and has been used for turkey farming previously. This operation was previously not part of the installation.

Our technical review of this specific land usage is as follows.

- There is no record of installation area land contamination.
- There is no record of any usage of the installation area except for turkey farming.
- The site is not within a Source Protection Zone.

Therefore the conclusion is there is a low risk of historic groundwater and land contamination due to former activities within installation boundary.

Therefore, although condition 3.1.3 is included in the permit, no groundwater monitoring will be required at this installation as a result.

Odour

There are multiple sensitive receptors within 400 metres of the installation (excluding the farmers own residential property). The closest is approximately 240 metres to the east of the installation boundary at NGR SO 58675 22929, excluding properties owned by the operator/farm workers.

Therefore, an Odour Management Plan is required under our guidance.

An Odour Management Plan (OMP) is included within appendix 6 of the application duly making responses including a list of sensitive receptors within 400 metres of the installation boundary, an assessment of feed and litter management plus ventilation controls and poultry building design to minimise the risk of odour pollution beyond the installation boundary.

Further, the OMP covers building clean out and spent litter removal procedures plus a contingency plan to minimise the risk of odour pollution linked to abnormal installation activities and a complaints procedure. The OMP also includes a summary of an odour tour and sniff test to follow up in the case of specific odour complaints to identify source of problem and allow creation of an action plan for odour pollution minimisation.

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

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour review. The applicant has hence provided a revised noise management plan in their duly making responses.

Operations with the most potential to cause noise nuisance have been assessed as those involving ventilation fans, biomass boiler flue, feed deliveries, feeding systems and broiler catching, building clean outs plus noise emissions from the standby generator, farm building ventilation fans, delivery of supplies and materials plus automated feed lines.

The noise management plan covers control measures for each of these potential noise hazards.

The revised duly making noise management plan added specific time limits (during day time hours) for feed and fuel deliveries.

Overall, there is the potential for noise from the installation beyond the installation boundary. However, the risk of noise beyond the installation boundary is considered insignificant.

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 <i>not</i> been made	✓
Identifying confidential information	We have not identified information provided as part of the application that we consider 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. The application was sent for consultation with Hereford Environmental Health Department Health and Safety Executive (HSE). Public Health England /Director of Public Health There are sensitive receptors within 100 metres from the installation boundary. As such a dust assessment and associated consultation with Public Health England/ Director of	~
Responses to consultation and web publicising	Public Health is required. The web publicising and consultation responses (Annex 2) were taken into account in the decision. No points of concern were received from the consultation responses. 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 directives	All applicable European Directives have been considered in the determination of the application.	✓
	The site	
Extent of the site of the facility	The Applicant 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 Applicant is required to carry on the permitted activities within the site boundary.	√
Site condition report	The Applicant has provided a description of the condition of the site. We consider this description is satisfactory. There is an increase to the installation boundary with this variation, which is covered in the revised site condition report, discussed in more detail in the key issues section of this document. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED – guidance and templates.	√
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant screening 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 site has been carried out as part of the permitting process. The key issues section provides a list of these sites. In addition an ammonia emissions review is included in key issues section of this document. In conclusion installation environmental impacts on the surrounding habitat sites are considered not significant. An Appendix 11 ,dated 04/11/16, has been sent to Natural England and NRW for information only.	~

Aspect considered	Justification / Detail	Criteria met
		Yes
	Environmental Risk Assessment and operating techniques	
Environmental risk	We have reviewed the Applicant's assessment of the environmental risk from the facility. The Applicant'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	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The operator has confirmed that all farm facilities and operating techniques will be in compliance with our sector guidance EPR 6.09. General operating procedures include:	✓
	The application supporting information includes operating techniques covering the addition of 3 new poultry houses new feed bins plus updated site drainage for the new poultry houses. Heating for the new buildings is to be via usage of LPG heaters and no additional biomass boilers.	
	 The application supporting information includes a new site drainage plan for the three new poultry houses. 	
	The duly making responses including updated Odour Management , Noise Management and Dust Management plans.	
	The proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN EPR 6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions.	
	The 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, which was developed in consultation with industry having regard to the relevant legislation.	√
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	We have decided that emission limits should be not set in the permit.	✓
	Applicant Competence	
Environment management system (EMS)	There is no known reason to consider that the Applicant will not have the management systems to enable it to comply with the permit conditions. The Applicant has chosen to utilise their own management system without external certification.	✓

Annex 2: Consultation and web publicising responses

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

Response 1 received from Public Health England dated 21/11/16

- Overall comment is no reason not to permit
- General comment to ensure controls of odour /noise /dust emissions

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

Odour/noise/dust management plans are in place to control emissions. No further action required

This proposal was also publicised on the Environment Agency's website for 4 weeks (deadline for responses 21/11/16) but no representations were received during this period.