

# Environment Agency permitting decisions

## Variation

We have decided to issue the variation for **Manor Farm Pig Unit** operated by **Harvey Farms (Winterbourne) Limited**.

The variation number is **EPR/LP3539UR/V006**.

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

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

## Structure of this document

- Key issues If applicable see OI/notes below
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising (delete as appropriate) responses

## Key issues of the decision

The Operate is applying for a variation for the following reasons:-

- To increase the number of sows from 700 to 950, this will lead to the addition of a scheduled activity.
- Build a new fully slated farrowing house.
- To use a reduced crude protein diet for the pigs to reduce the ammonia emissions.
- To increase the installation boundary to include a track and hard standing used to store dead stock awaiting collection.
- To update the site layout plans to reflect the changes. The pig houses will now be mixture of natural and fan ventilated. The weaner accommodation will be the only straw based housing, all other houses will be a slated based system.

The application is considered a substantial variation as the sow numbers will increase to over 750.

In addition we have corrected an error in the original application. The original permit did not include a directly associated activities

- The rearing of pigs up to 30 kgs. The application was for 2250 pigs (>30 kgs) and assessed on this basis

This activity has now been added to the table 1.1 and the error corrected.

We have also corrected table 3.1 Point source emission to air to remove reference to the ARM buildings which are no longer part of the installation ( removed by variation EPR/LP3539UR/V002) and to include a hospital house.

### **Protein reduction**

The diets fed to the pigs have been formulated with reduced levels of crude protein to reduce ammonia emissions. Based on research by Ajinomoto Animal Nutrition a **1% reduction in crude protein equates to a 10% reduction in nitrogen excretion**. The maximum crude protein reduction we accept is 2% which equals a 20% reduction in ammonia emissions.

The operator has committed to ensuring the different types of pigs are only fed on a diet with a particular maximum crude protein content as outline below:

Ration Type	Current diet crude protein within the feed(%)	Proposed maximum crude protein within the feed (%)
Gestation Sow	18.05	14.95
Post Weaning Sow	19.71	16.71
Pig 15-25 kg	24.90	21.71
Pig 25-60 kg	22.85	19.36
Pig 60 -110kg	21.06	17.36

The Operator has also provided details of the previous diet which was used to show a comparison . The crude protein reduction for all ration types exceeds 2%, however a maximum of 2% reduction is being claimed by the Operator.

The Operator has committed to the reduced protein diet and declared a maximum protein level they will be feeding each animal. This has been incorporated in the Operating techniques table S1.2.

A reporting condition and S4.3 – performance parameters’ and S4.4 ‘reporting forms’ have been added to the notice.

The net emissions of ammonia from the site as a result of this reduced protein diet (including the increase in pig numbers and the slurry store which was omitted from the original ammonia assessment) is calculated as follows:

Permit	Animal housing Type	Emission factor (kg/animal place/year)	Pig places	Total ammonia emissions by pig class (kg/NH3/year)
Original permit EPR/LP3539UR/A001 issued 08/04/08	Sows – Solid Floor	4.57	700	3,325
	Growers- Fully slated floor	1.59	1350	2,146.5
	Finishers – Fully Slatted Floor	4.14	5280	21,859.2
	Weaners – Fully Slated Floor	0.29	900	261
Slurry Storage		600m <sup>2</sup>	0.7	420
				<b>28,012</b>

Permit	Animal housing Type	Emission factor (kg/animal place/year)	Pig places	Total ammonia emissions by pig class (kg/NH3/year)
Variation EPR/LP3539UR/V005	Sows – Solid Floor	3.656	950	3473.2
	Farrowers (including piglets) – fully slatted floor or partially slatted floor	2.24	200	448
	7-15 kg– solid floor	0.168	900	151.2

	15-30kg – solid floor Floor	0.912	1,350	1,231.2
	Pigs >30kg and unserved gilts – fully slatted floors	3.312	5,280	17,487.36
Slurry Storage		600m <sup>2</sup>	0.7	420
				<b>23,211</b>

Therefore it is concluded that the net ammonia emission from the pig houses on site will (taking into account the increased pig numbers proposed as part of this variation and the slurry store) decrease from 28,012 to 23,211 kg /NH<sub>3</sub> / year – a decrease of approximately 17 %

### Annex 1: decision checklist

This document should be read in conjunction with the application and supporting information and notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
<b>Receipt of submission</b>		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
<b>Consultation</b>		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements. The following were consulted :- Local Authority – Environmental Health Health and Safety Executive	✓
Responses to consultation, and 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.	✓
<b>The facility</b>		
The regulated facility	The extent/nature of the facilities taking place at the site required clarification.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>A directly associated activity was omitted from the original permit in error and we have now corrected the error.</p> <p>We have included</p> <ul style="list-style-type: none"> <li>The rearing of pigs up to 30 kgs. The application was for 2250 pigs (&gt;30 kgs) and assessed on this basis</li> </ul>	
<b>European Directives</b>		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
<b>The site</b>		
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.	✓
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED–guidance and templates (H5).</p> <p>The new areas of the site have the same history as the original Site Condition Report.</p>	✓
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <ul style="list-style-type: none"> <li>All pigs will now be fed on reduced protein diets to reduce the ammonia emissions.</li> <li>The operator will need to provide evidence on a 6 monthly basis to confirm the lowered protein diet regime.</li> <li>The new farrowing building will be compliant with BAT (BREF 4.6.2.3)</li> </ul> <p>The proposed techniques/emission levels for priorities for control are in line with the benchmark levels contained in the SGN EPR 6.09 How to comply with your environmental permit for intensive farming and we consider them to represent appropriate techniques for the</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	facility.	
<b>The permit conditions</b>		
Updating permit conditions during consolidation.	<p>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).</p> <p>The operator has agreed that the new conditions are acceptable.</p>	✓
Incorporating the application	<p>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.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p> <p>We have included the operator's declaration of the maximum crude protein content of the pig feed. This means the Operator is bound to their permit to operate their site in accordance with this lowered protein diet regime.</p>	✓
Reporting	<p>We have specified reporting in the permit.</p> <p>A reporting conditions and S4.3 and S4.4 have been included in the permit, to require the operator to provide evidence of the lowered protein diet.</p>	✓
<b>Operator Competence</b>		
Environment management system	<p>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 RGN 5 on Operator Competence.</p>	✓
Relevant convictions	<p>The National Enforcement Database has been checked to ensure that all relevant convictions have been declared.</p> <p>Relevant convictions were found and declared in the application</p> <p>The operator satisfies the criteria in RGN 5 on Operator Competence.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓

## 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. (Newspaper advertising is only carried out for certain application types, in line with our guidance.)

Response received from
Local Authority Environmental Control & Protection Team and Public Health Bourne Hill Salisbury Wiltshire SP1 3UZ
Brief summary of issues raised
They provided a record of 4 complaints of odour from the site buildings between 16/09/2005 and 03/08/2011, they commented that the site needs to control odour more effectively.
Summary of actions taken or show how this has been covered
The Operator has provided an updated Odour management plan which it will comply with and is committed to :- <ul style="list-style-type: none"><li>• A low protein diet for the pigs and relevant information will be made available to provide reassurance that excessive protein levels are not being fed.</li><li>• The slurry store will be covered ( clay balls). The system will be monitored and maintained on a regular basis.</li><li>• Wind direction will be observed when slurry is removed and removal will be minimised in windy condition and when the wind direction is towards sensitive receptors.</li><li>• Slurry will be removed from the buildings every 4 weeks so as to always maintain a void beneath the slatted floors and reduce the ammonia permeating the slats into the room. If there are odour from the buildings the slurry will be removed within 12 hours.</li><li>• Yard surfaces will be properly maintained and cleaned. Pens and buildings will be checked for cleanliness daily and cleaned out in accordance with a written plan.</li></ul>

There was no response to our web publication.