Environment Agency permitting decisions

Variation

We have decided to issue the variation for Lower Hill Farm operated by G. W. Allen, C. T. Allen, S. E. Allen, and E. P. Allen (Trading as Allen (Lower Hill Farm)).

The variation number is EPR/BP3933RS/V002

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.

Description of the changes introduced by the Variation

This is a Substantial Variation.

This variation authorises the operator to extend the permitted boundary to the west at Lower Hill Farm and to construct a new pig unit. The new pig unit will house both sows (80) and farrowing sows (24) with their piglets. The building will be constructed with a fully slatted floor and is ventilated by high velocity roof ridge fans (10 m/s). Slurry will drop into shallow impermeable slurry pits and will be removed frequently via vacuum tanker and transported to the on-site slurry store at Hooks Bottom Farm. Slurry is either exported from site or is spread onto the operator's own land. Increased odour emissions and dust emissions have been assessed under this variation. A new odour management plan and dust risk assessment is in place.

This variation also results in reduction in ammonia emissions from the intensive farm. Previous pig production levels have been reduced from 6,885 to 6,660. This reduction in combination with the increased ammonia and odour dispersion from the new pig unit contributed to the reduction in emissions.

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

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

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 the extension of land at Lower Hill Farm (dated 14 September 2015) 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 base line reference data for the soil and groundwater at the site are not required at this stage.

Odour Management

We, the Environment Agency, have reviewed and approved the Odour Management Plan (OMP) 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 OMP has been written to ensure that odours will remain minimal and that there are sufficient measures to address any substantiated odour pollution incidents. The OMP includes the following:

- An assessment of the sensitive receptors within 400 m of Lower Hill Farm.
- Identification of the potential sources and risks of odour throughout the growing cycle to post-dispatch of livestock off site.
- A detailed description of actively implemented odour control measures to minimise odours from the specified sources.
- Identification and description of contingency measures in the event of a substantiated odour incident as a result of complaints or abnormal operations.
- Complaints procedure.

There have been no previous odour complaints from the existing site, the operator must work in accordance with the odour management plan and there is additional regulatory control through condition 3.3.1 of the permit. Taking this into account, we consider that there are sufficient controls in place to ensure that the installation can be operated without causing odour pollution

Ammonia Emissions

The changes permitted by this variation will result in a reduction in ammonia emissions. Ammonia emissions were not screened using the Environment Agency's 'Ammonia Screening Tool v4.4' during the application determination. The operator has calculated their new ammonia emissions as a result of the changes and the mass balance table below demonstrates that there will be a 1.31% reduction in ammonia emissions based on their previous emissions. The operator calculated the total ammonia emissions (in Kg NH_3/year) using the standard livestock and housing emission factors as stated in the Environment Agency guidance 'Pollution inventory reporting: intensive farming guidance'. Total emissions are derived from the total animal type numbers and standard emission factors and determined by comparing the previous emissions and the new emissions.

In addition the operator has installed high velocity roof extraction fans to provide ventilation in the new pig unit. This will also help reduce localised ammonia emissions and result in greater dispersion.

Relevant habitats and conservation sites (Sites of Special Scientific Interest and Special Areas of Conservation) have been identified as within the relevant distances for assessment. As outlined, the changes made under this variation will result in a reduction in ammonia emissions and will therefore not lead to significant likely effects at the habitats and conservation sites.

Permit	Animal/ Housing Type	Emission factor	Animal Places	Ammonia Emissions (Kg NH3/year)
Previous emissions EPR/KP3839UP/V002	7-15kg	0.22	1,125	248
	15-30kg	1.19	1,800	2,142
	30kg +	3.11	6,885	21,412
	Slurry Store (existing uncovered)	1.4	417	584
			Total	**24,386**
Variation EPR/BP3933RS/V002	7-15kg	0.22	1,125	248
	15-30kg	1.19	1,800	2,142
	30kg +	3.11	6,660	20,713
	sows and served gilts	3.01	80	241
	farrowers	5.84	24	140

	Slurry Store (existing uncovered)	1.4	417	584
			Total	**24,067**

Predicted new emissions as a percentage of previous emissions	**98.69 %**
Percentage Reduction from previous to variation	**1.31 %**

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
Consultation		
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. For this application we consulted the following bodies: • Local Planning Authority • Health and Safety Executive • Local Authority Environmental Health • Public Health England and Director for Public Health	✓
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.	✓
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 EPR RGN 1 Understanding the meaning of operator.	✓
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 operator has provided plans which we consider to be satisfactory, showing the extent of the site of the facility. Plans are included in the permit and the operator is	✓

Aspect considered	Justification / Detail	Criteria met Yes
	required to carry on the permitted activities within the site boundary.	
Site condition report	The operator has provided a description of the condition of the site. 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).	✓
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 sites. Assessment of the impact on the specified SSSIs is recorded within the key issues section. We concluded that there are no likely significant effects from this proposal. 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. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant. There will be no increase in emissions as a result of this variation, and consequently no increase in environmental risk.	✓

Aspect considered	Justification / Detail	Criteria met Yes
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The proposed techniques for control are in line with the benchmark levels contained in the Sector Guidance Note EPR 6.09 'How to comply with your environmental permit for intensive farming (version 2)' Technical Guidance Note and we consider them to represent appropriate techniques for the facility. The key operating techniques for the proposed change are as follows: • Housing design, ventilation and management will be in accordance with BAT (EPR 6.09). • The new pig unit is fan ventilated using high velocity roof extraction fans. • Pig unit has a fully slatted floor. All slurry and dirty water from the new unit is collected in shallow slurry pits below the building. Slurry is removed frequently. • Feed selection and use is in accordance with BAT (EPR 6.09). • Slurry will be stored in line with NVZ regulations.	✓
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.	✓
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,	✓

Aspect considered	Justification / Detail	Criteria met Yes
	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 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.

Public Health England

Response received on 19 October 2015 from
Public Health England (PHE) – Centre for Radiation, Chemicals and Environmental Hazards, Didcot.
Brief summary of issues raised
PHE noted that their response was based on the assumption that the installation will comply in all respects with the requirements of all relevant domestic and European legislation, including: • Environmental Permitting (England and Wales) Regulations 2010; • Groundwater Regulations (2009) and the European Groundwater Directives (80/68/EEC and 2006/118/EC); and • European Air Quality Framework Directive 96/62/EC and daughter directives and new Air Quality Directive 2008/50/EC. It was further noted that compliance with the legislation, together with good management and regulation, should ensure that emissions present a low risk to human health. The main potential issues of relevance from a health perspective were reported to be diffuse emissions to air (including ammonia, bioaerosols and particulate matter), and emissions which may cause nuisance (including noise and odour). PHE also noted that they assume that the use of BAT will ensure dust minimisation and recommend that the applicant be asked to report any dust complaints. It was also noted that further evidence on the potential of intensive farming industries to result in PM10 emissions is anticipated to become available over the next few years. Consequently PHE requested the opportunity to incorporate such evidence into future reviews of this permit. PHE noted they belief that there is significant potential for the generation of bioaerosols at intensive farming installations. It was acknowledged that limited direct evidence is currently available of levels of bioaerosol emissions specifically from intensive farming processes. Existing studies were noted to suggest that exposure levels may vary within individual parts of industry (specific reference was made to individual parts of the waste treatment industry), suggesting that there is potential to reduce exposure, and hence risk of health effects, through good practice. It is anticipated that further evidence on the potential for farm installations to cause bioaerosol emissions, and of the potential health effects of these

emissions on nearby communities, will become available over the next few years. This is a research area for both the Environment Agency (EA) and PHE. The comments were made based upon the information contained within the submitted application and the following assumptions: • the permit holder uses Best Available Techniques (BAT); • further comments are sought from the Food Standards Agency (FSA) for matters relating to impact on human health of pollutants deposited on land used for food production; and • comments are sought from the Director of Public Health regarding any wider public health impacts.
Summary of actions taken or show how this has been covered
The Director of Public Health was consulted as part of the standard consultation process. Conditions 3.2.1, 3.3.1 and 3.4.1 concerning noise, odour and fugitive emissions are included in permit. We have also assessed an odour management plan, noise management plan and dust-bioaerosol risk assessment as part of the application. We are confident that as long as the operator operates to BAT and to the appropriate operating techniques, these fugitive emissions will be minimised.

Director of Public Health

Response received on 28 October 2015 from
Director of Public Health – Oxfordshire County Council
Brief summary of issues raised
The response stated that the Director of Public Health has no significant concerns regarding the risk to the health of the local population from this installation; however, any future recommendations from Public Health England (PHE) should be sent to the Director of Public Health.
Summary of actions taken or show how this has been covered
None required

Reponses not received

The Health and Safety Executive (HSE), Local Authority planning department and Local Authority environmental health department were also consulted; however, consultation responses from these parties were not received.