

Environment Agency permitting decisions

Variation

We have decided to issue the variation for Burgh Le Marsh operated by LJ Fairburn & Son Ltd

The variation number is TP3832FM/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 Normal Variation.

This variation authorises the following changes, the installation of shed number 4 at March Farm, housing 71,000 pullets and the inclusion into the permit of a new farm site called Nettle Hill Farm comprising 4 sheds housing 44000 organic pullets.

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, web publicising

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 Burgh Le Marsh Poultry Unit dated 18/11/2011 and the updated version dated 20/08/2015 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 they have not provided base line reference data for the soil and groundwater at the site at this stage.**

Ammonia emissions - Ecological

There are 2 Special Area(s) of Conservation (SAC) and 2 Special Protection Area(s) (SPA) which are also Ramsar sites located within 10 kilometres of the installation. There is 1 Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 4 Local Wildlife Sites within 2 km of the installation.

Ammonia assessment – SAC/SPA/Ramsar sites

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 (CL_e) or critical load (CL_o) 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 v4.4 has indicated that emissions from Burgh Le Marsh will only have a potential impact on the SPA and RAMSAR site with a precautionary critical level of 1µg/m³ if they are within 8379metres of the emission source.

Initial screening indicates that beyond 8379m the PC is less than 0.04µg/m³ (i.e. less than 4% of the precautionary 1µg/m³ critical level) and therefore beyond this distance the PC is insignificant. The Wash SPA/Ramsar is beyond this distance (see table below) and therefore screens out of any further assessment.

Where the precautionary level of 1µg/m³ 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/m³ 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/SPA/Ramsar Assessment

Name of SPA/Ramsar	Distance from site (m)
The Wash	8477

Screening using the ammonia screening tool (version 4.4) has determined that the PC on the SPA for ammonia, acid and nitrogen deposition from the application site are under the 4% significance threshold and can be screened out as having no likely significant effect. See results below.

Table 2 – Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of Critical level
The Wash & North Norfolk Coast	3**	0.057	1.9

**e.g. Natural England advised that a CLe of 3 for ammonia should be applied across the The Wash & North Norfolk Coast.

Table 3 – Nitrogen deposition

Site	Critical load kg N/ha/yr [1]	Predicted PC kg N/ha/yr	PC % of critical load
The Wash & North Norfolk Coast	20	0.298	1.5

Note [1] Critical load values taken from Air Pollution Information System (APIS) website (www.apis.ac.uk)

APIS also stated that The Wash & North Norfolk Coast is not sensitive to Acid Deposition.

No further assessment is necessary.

Screening using the ammonia screening tool (version 4.4) has determined that the process contributions of ammonia, acid and nitrogen deposition from the application site is over the 4% significance threshold. As such, it is not possible to conclude no adverse effect alone. Where the process contribution falls between 4% and 20%, Environment Agency guidance indicates that an in combination assessment should be undertaken.

There are no other farms acting in combination with this application. The PC is predicted to be <20% critical level / load significance threshold. It is possible to conclude no adverse effect to the site from the installation and therefore no further assessment is required. See results below.

Table 4 – Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted process contribution $\mu\text{g}/\text{m}^3$	% of critical level
Saltfleetby-Theddlethorpe Dunes & Gibraltar Point	1*	0.076	7.6
Gibraltar Point (SPA)	3**	0.061	2.0

Gibraltar Point (RAMSAR)	1*	0.061	6.1
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*A precautionary critical level of $1 \mu\text{g}/\text{m}^3$ has been assigned to Saltfleetby-Theddlethorpe Dunes & Gibraltar Point). Where the precautionary level of $1 \mu\text{g}/\text{m}^3$ is used, and the process contribution 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.

** APIS confirms a critical level of $3 \mu\text{g}/\text{m}^3$

Table 5 – Nitrogen deposition

Site	Critical load kg N/ha/yr [1]	Predicted PC kg N/ha/yr	PC % of critical load
Saltfleetby-Theddlethorpe Dunes & Gibraltar Point	8	0.397	5
Gibraltar Point (SPA)	8	0.318	4
Gibraltar Point (RAMSAR) [2]	-	-	-

Note [1] Critical load values taken from APIS website (www.apis.ac.uk)

Note [2] APIS confirms features not sensitive to N Deposition

Table 6 – Acid deposition

Site	Critical load keq/ha/yr [1]	Predicted PC keq/ha/yr	PC % of critical load
Saltfleetby-Theddlethorpe Dunes & Gibraltar Point	1.278	0.028	2.2
Gibraltar Point (SPA)	1.278	0.023	1.8
Gibraltar Point (RAMSAR)	1.278	0.023	1.8

Note [1] Critical load values taken from APIS website (www.apis.ac.uk)

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 (CL_e) or critical load (CL_o) 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.

Initial screening using Ammonia Screening Tool v4.4 has indicated that emissions from Burgh Le Marsh Farm will only have a potential impact on SSSI site with a precautionary critical level of $1 \mu\text{g}/\text{m}^3$ if they are within 3469 metres of the emission source.

Initial screening indicates that beyond 3469m the PC is less than $0.2 \mu\text{g}/\text{m}^3$ (i.e. less than 20% of the precautionary $1 \mu\text{g}/\text{m}^3$ critical level) and therefore beyond this distance the PC is insignificant. Bratoft Meadows is beyond this

distance (see table below) and therefore screens out of any further assessment.

Where the precautionary level of $1\mu\text{g}/\text{m}^3$ 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 $1\mu\text{g}/\text{m}^3$ 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)
Bratoft Meadows	4182

Ammonia assessment - LWS

There are 3 Local Wildlife Sites (LWS) within 2 km of Burgh Le Marsh Farm. 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.

For the following sites this farm has been screened out at stage 1, as set out above, using results of the ammonia screening tool (version 4.4).

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Burgh Le Marsh will only have a potential impact on sites with a critical level of $1\mu\text{g}/\text{m}^3$ if they are within 1438 metres of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than $1\mu\text{g}/\text{m}^3$. $1\mu\text{g}/\text{m}^3$ is 100% of the $1\mu\text{g}/\text{m}^3$ CLe and therefore beyond this distance the PC is insignificant. In this case the LWS named below are beyond this distance.

Table 1 – distance from source

Site	Distance (m)
John Holden Charity Meadows	2120
Middlemarsh Farm	2077

The PC at these sites has been screened as insignificant. It is possible to conclude no significant pollution will occur at these sites and no further assessment is required.

For the following site, Whittons Two Acres this farm has not been screened out, as set out above.

Table 2 - Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of critical level
Whittons Two Acres	3*	8.829	294.3

e.g. * CLe 3 applied as no protected lichen or bryophytes species were found when checking easimap layer

Table 3 – Nitrogen deposition

Site	Critical load kg N/ha/yr [1]	Predicted PC kg N/ha/yr	PC % of critical load
Whittons Two Acres	15	45.858	305.7

Note [1] Critical load values taken from APIS website (www.apis.ac.uk)

Table 4 – Acid deposition

Site	Critical load keq/ha/yr [1]	Predicted PC keq/ha/yr	PC % of critical load
Whittons Two Acres	4.72	3.276	69.4

Note [1] Critical load values taken from APIS website (www.apis.ac.uk)

No further assessment for Acid deposition at Whittons Two Acres is required. However with regard to Ammonia emissions and Nitrogen Deposition further assessment was required.

The operator contacted Lincolnshire Environmental Records Centre who produced a report which states that Whittons Two Acres is a Site of Nature Conservation Interest (SNCI's). The Local Wildlife Site (LWS) status supercedes that of SNCI's, which have been identified on the basis of local knowledge and were selected without consideration of any formal criteria. This particular site has not been assessed, and therefore has no formal management strategy. After investigation using satellite imagery Whittons Two Acres was found to be a private dwelling including ancillary buildings and a tennis court along with associated garden areas. Within the SNCI boundary there is an area of deciduous woodland which is classed as a 'protected habitat screened for environmental permits'. However given the lack of information about the site generally and its current status, for the purposes of determining this application the Agency agrees the site should not be considered as an LWS as it has not been assessed as such.

No further assessment is required.

Ammonia emissions – Human Health

As part of the consultation process we consulted with Public Health England who raised concerns with regards to residential properties less than 100m

from the site. We contacted PHE, who stated that if the Ammonia assessment for sensitive habitats showed no significant impacts then they were satisfied that there would be no harm to human health. The operator was also asked to complete a bioaerosol risk assessment for the site in line with our current guidance for farms that have residential properties within 100m of their site.

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	<p>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.</p> <p>For this application we consulted the following external bodies:</p> <p>Local Authority (planning dept)</p> <p>Local Authority (Env Health dept)</p> <p>HSE</p> <p>FSA</p> <p>PHE</p> <p>Director of Public Health</p> <p>And the following internal body</p> <p>Groundwater and contaminated Land</p> <p>Fisheries and Biodiversity</p>	✓
Responses to consultation, web publicising	<p>The web publicising and consultation responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
Operator		
Control of the facility	<p>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.</p>	✓
European Directives		
Applicable directives	<p>All applicable European directives have been considered in the determination of the application.</p>	✓
The site		
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility</p> <p>A plan is included in the permit and the operator is</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	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>	✓
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat .</p> <p>A full assessment of the application and its potential to affect the sites species/habitat has been carried out as part of the permitting process. We consider that the application will not affect the features of the site/species/habitat.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	✓
Environmental Risk Assessment and operating techniques		
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> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment [or similar methodology supplied by the operator and reviewed by ourselves], all emissions may be categorised as environmentally insignificant with the exception of Ammonia and Nitrogen Deposition on Whittons Two Acres, please see key issues for further explanation.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The proposed techniques for control are in line with the benchmarks contained in Sector Guidance Note EPR6.09 'How to comply with your environmental permit for intensive farming (version 2)' Technical Guidance Note and we consider them to represent appropriate</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>techniques for the facility.</p> <p>The operating techniques are as follows::</p> <ul style="list-style-type: none"> • Housing design and management will be in accordance with the sector guidance note (SGN) EPR6.09. • Feed selection and use will be in accordance with the sector guidance note (SGN) EPR6.09. • Nipple drinkers are used to reduce wastage of water and maintain dry litter; • All dirty water is collected in storage tanks and taken off site. <p>The permit conditions ensure compliance with relevant BREFs. We consider that the operating techniques specified in the permit to reflect the BAT for the installation.</p> <p>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.</p> <p>Operating Techniques for insignificant emissions</p> <p>Emissions of ammonia have been screened out as insignificant, and so the Environment Agency agrees that the Applicant's proposed techniques are BAT for the installation. (see key issues)</p>	
The permit conditions		
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	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	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	determination process. These descriptions are specified in the Operating Techniques table in the permit.	
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.	✓
Relevant convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓

Annex 2: External Consultation

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

Response received from
Public Health England
Brief summary of issues raised
Concerns around human health risks due to bioaerosols.
Summary of actions taken or show how this has been covered
Operator was asked to complete a bioaerosol risk assessment, this was assessed by the agency as satisfactory. Public Health England was satisfied that no further assessment for ammonia emissions was required as a previous assessment of the risk on sensitive habitat sites which have more stringent controls showed that emissions from the site would be unlikely to have a significant impact.

We also consulted with the

Local Authority (planning dept)
Local Authority (Env Health dept)
HSE
FSA
Director of Public Health

No further responses were received