

**From:** [Wray, Kate](#)  
**To:** [REDACTED]  
**Cc:** [Johnson, Louise Marie](#)  
**Subject:** EPR/BP3334CB/V006 - Falcons Hall Farm - revised ammonia screening  
**Date:** 08 November 2022 14:24:00  
**Attachments:** [image001.png](#)

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Hi Karl,

Further to our telephone call, based on medium velocity roof fans the outcome of the ammonia screening carried out at the pre-application stage has now changed. As a result you will need to submit detailed modelling with your application.

Grid Reference used for the assessment: 604468, 273504 (with a 395m buffer).

Category of livestock	Housing system	Number of animal places	Ammonia emission factor (kg NH3/animal place/year)
Pullets	Naturally ventilated or mechanically ventilated, fully littered floor, non-leaking drinkers  Roof ventilation only (vents greater than 3.5 metres high, fan efflux velocity at or greater than 2m/s)*	97,000	0.06

\* this

can include gable end fans that are used for heat extraction only during the summer months

### Screening Overview

The screening assessment has considered any Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites within 5km, any Sites of Special Scientific Interest (SSSI) within 5km and also any National Nature Reserves (NNR), Local Nature Reserves (LNR), ancient woodlands and Local Wildlife Sites (LWS) within 2km of the farm.

We have used the Environment Agency's Ammonia Screening Tool (AST v4.6) to assess the impact of your proposal at those sites identified within the above distance criteria.

We have applied a two stage screening criteria to the ammonia screening tool results:

For SAC, SPA, Ramsar and SSSIs the screening assessment has taken into account other intensive farms that could act in combination with the proposal, where applicable.

Where the ammonia screening tool predicts that emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) will be <Y% (see Table 1 below) of the relevant Critical Level (CLE) (ammonia) or Critical Load (CLO) (nutrient nitrogen or acid), the proposal screens out of the requirement for an ammonia assessment.

Further modelling is required where:

- emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are in excess of Z% of the relevant CLE or CLO at SSSIs and/or other nature conservation sites (e.g. NNR, LNR, LWS, ancient woodland);
- emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are in excess of Y% of the relevant CLE or CLO for a SAC, SPA or Ramsar site;
- there is the potential for an in-combination effect with existing farms at a SSSI if emissions are > Y% of

the critical level or critical load;

- the proposal is within 250m of a nature conservation site.

**Table 1 Screening thresholds**

Designation	Y%	Z%
SAC, SPA, Ramsar	4	20
SSSI	20	50
NNR, LNR, LWS, ancient woodland	100	100

The ammonia screening tool predicts that emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) will be between Y and Z% at the SSSI listed in the table below. However, there are currently other farms that could act in-combination with the proposal, therefore detailed modelling is required.

Table 2  
Assessment  
of  
ammonia  
emissions

Site Name	Designation / Status	Ammonia Critical Level ( $\mu\text{g}/\text{m}^3$ )	Process contribution (PC) ( $\mu\text{g}/\text{m}^3$ )	PC as % Critical Level
Westhall Wood and Meadow	SSSI	1	0.265	26.5

For SSSI, a permit may be issued where the ammonia screening tool or detailed modelling demonstrates that either:

- the process contribution is <20% Critical Level and Critical Load; or
- the process contribution plus contributions from other relevant intensive farms is <50% Critical Level or Critical Load;
- the process contribution plus contributions from other relevant intensive farms plus background is **below** the relevant Critical Level or Critical Load.

#### **Proposing ammonia emission reduction techniques**

- Where your modelling indicates the predicted process contribution is greater than the allowable thresholds your assessment and application should include ammonia reduction techniques to reduce the contribution to the allowable threshold.
- Where these criteria cannot be met a detailed assessment of the proposal will be carried out by the Environment Agency. For SSSI, we will need to consult with Natural England before the determination of the application can be completed.
- Factsheets and guidance about ammonia emissions to the atmosphere and nature conservation, the Environment Agency's assessment process and how to model ammonia emissions from intensive farms can be found on our website at:
- <http://webarchive.nationalarchives.gov.uk/20140328084622/http://www.environment-agency.gov.uk/business/sectors/40071.aspx>

Please advise as to how you wish to proceed with the application and we will then send out a 'not duly made' request for further information.

Kind regards  
Kate

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