

Determining BAT on Poultry Installation Review Jan 25

1.0 Site details	
Name of the permit holder	Sellmor Farming Limited
Activity address	North Farm Thorpe le Street York YO42 4LJ
National grid reference	483246, 444161

Document reference and dates for Site Condition Report at permit application and surrender	August 2018 HP3330AY
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Document references for site plans (including location and boundaries)	<ol style="list-style-type: none"> 1. Site Location Plan 2. Site Layout Plan
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Note: In question 5a of the application form, you must provide details of the site's location and provide a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report and the location and nature of the activities and/or waste facilities on the site
- Locations of receptors, sources of emissions/releases and monitoring points
- Site drainage
- Site surfacing.

If this information is not shown on the site plan required in question 5a of the application form then you should submit the additional plan or plans with this Site Condition Report.

House Design	
• Water leakage	Designed to prevent leakage and optimise water usage, consumption monitored
• Insulation of buildings	All the buildings have insulation that helps to maintain temperature and improve animal comfort. The U-value of above 0.4W/m ² being achieved
• Damp proof course	The floors have been constructed with an impermeable barrier under the concrete

<ul style="list-style-type: none"> The design has been used to optimise management and animal comfort 	The buildings are consistent in design, ensuring a modern, efficient building to provide a comfortable environment for the livestock.
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Free Range system	
Permitted activities	<ul style="list-style-type: none"> 160,000 free range laying hens. <p>Proposed manure store under cover within the installation boundary and in in-field heaps.</p> <p>There are no planned changes to pollution prevention measures anticipated to occur within six months of submitting this Site Condition Report to comply with BAT requirements.</p>
Ventilation	Naturally ventilated, with scratch area and non leaking drinkers
Document references for: <ul style="list-style-type: none"> Plan showing activity layout Environmental risk assessment 	Site Location Plan and Site Layout Plans

4.0 Laying Hens	
System in a multi tier with scratch area and range	Sheds are muck out twice weekly Nests are located above the muck belts Drinkers located above the muck belts
House management	
Nutritional Strategy – Nitrogen	<p>To reduce the crude content by using an N – balanced diet based on energy needs and digestible amino-acids</p> <p>Multiphase feeding taking in to consideration the bird needs and diet formulation as she progresses through the production period</p> <p>Use of authorised feed additives which reduce the total nitrogen excreted</p> <p>Max 0.8 kg N excreted per animal place per year</p>

	Estimated by using manure analysis for total N and phosphorus content.
Nutrition Strategy – Phosphorus	<p>Multiphase feeding taking in to consideration the birds needs and diet formulation as she progresses through the production period.</p> <p>Using knowledge from breed and feed experts and qualified veterinary advice.</p> <p>Max 0.45 kg P₂O₅ excreted per animal per year. Can be met and to be calculated annually.</p> <p>Estimated by using manure analysis for total N and phosphorus content.</p>
Drinkers designed and operate to prevent leak	Yes, usage monitored muck out twice a week
Reasonable steps taken to ensure litter is in a dry condition	Yes, climate condition and ventilation monitored, issues areas identified and dealt with by staff
Buildings in good state of repair, to minimise water leaks	Yes, sheds are monitored, and maintenance carried out as required
House floor	Floors are concrete and monitored for deterioration
Cleaning systems	Used twice weekly, to ensure optimise air flow, designed to allow good air flow
Minimise ammonia	Staff are trained in environmental issues such as ammonia and look for potential causes of issue climate in the sheds is monitored
Muck removal	Twice a week, ensures a dry friable litter is removed
Litter quality is monitored when the birds are walked the climate in the buildings is checked	Temperature, ventilation, humidity bird health, (drinking and excreting patterns) monitored and managed
Temperature and ventilation	
Temperature and ventilation	Temperature and ventilation is monitored and adjusted depending upon the crop cycle of the birds
Ventilation system	<p>The ventilation system operates to ensure air flow, monitoring is undertaken to ensure air flow is adequate in all areas of the shed.</p> <ol style="list-style-type: none"> 1. No noise issues from the ventilation reported. 2. Temperature setting is clearly identified in the managing computer 3. Air speeds are monitored and reassessed if issues are found

	<ol style="list-style-type: none"> 4. Ventilation rates and housing conditions are monitored to ensure there is enough clean air for the birds 5. House walls and buildings are checked regularly 6. Fan operation is checked and maintained as required 7. Thermostats are checked 8.
Pop-hole management	Pop-holes are managed to ensure there is no water standing near to the house and designed so rain can not enter the building. Stone or concrete is used to ensure the area outside of the pop-hole is kept clean
Floors and walls	A deep clean is undertaken at every flock cycle, the sheds are cleaned as required
Damage to floors	The condition of the floors is monitored and suitable action taken as required
BAT 24 N & P Monitoring	Estimation by using manure analysis for total N and total phosphorus
BAT 25 Monitoring Ammonia	Ammonia emissions are estimated by using a mass balance based on the excretion and the total N present
BAT 27 Dust emissions	Estimated by measuring the dust concentration and ventilation rate using EN standard methods or other methods. It should be noted that due to the costs of measurements this technique may not be generally applicable.
BAT-AEL BAT31	<p>Ammonia expressed NH₃, max 0.13 per animal place per year.</p> <p>Estimated using a mass balance based on the excretion and the total N present.</p>
BAT 15 Reducing emissions to soil and water from solid manure	<p>Store dried solid manure in a barn. Use a concrete silo for storage of solid manure.</p> <p>Store solid manure on solid impermeable floor equipped with a drainage system and collection tank for the run off.</p>

5.0 Notes to consider when looking at improvements

1. Emissions from poultry housing area affected by factors such as ventilation, temperature and management. Changes should only be introduced so as to not adversely effect poultry health and welfare
2. Ventilation should meet the poultry health and welfare needs for the age and number of birds. The target rates for different weather conditions should be calculated in conjunction with equipment provider and poultry advisor.
3. Temperature should meet both health and welfare needs for the age and number of birds. Age, flock size, floor type, air speed, feed and water intake can markedly affect temperature requirements and should be considered when determining the appropriate temperature.
4. Structural improvements, whether structures or buildings are replaced or modified will be a decision to be taken in conjunction with the inspector, depending upon the local needs for emission reduction.
5. Retro-fitting new structures to existing buildings, needs to be carefully considered and costed. Research suggests that it may be more cost effective to replace buildings or structures. Any replacements should give equivalent emission reduction to those techniques outlined in the rules for new houses and should be planned to fit the business cycle of the farm.