

Housing Review Lingar Hill Farm Poultry Unit

Further development proposed at Lingar Hill Farm Poultry Unit for a third purpose-built poultry house next to two existing poultry houses. Will be expanding the number of places for rearing broiler chickens intensively above the >40,000 threshold under the Environmental Permitting Regulations so the operators will be obliged to obtain an environmental permit before bringing the third poultry house into operation. Provided a review to make sure design and management of the poultry housing will meet best available techniques (BAT) standards in accordance with Environment Agency; EPR 6.09 Sector Guidance Note; How to comply; Version 2; pp23-25 and Appendix 7 Undertaking a housing review; Version 3; February 2012:

Name of building	Function	Is Building Management BAT or not BAT?	Is Building Design BAT or not BAT?	Is it identified in Housing Improvement Plan?
Poultry house Nos.1&2	Broiler chickens	BAT	BAT	No
Poultry house No.3	Broiler chickens	BAT	BAT	No

Housing improvement plan

Area needing improvement	What needs to be done – possible solutions	Proposed cost	Proposed timescale for completion	Timescale agreed with the Environment Agency
Design changes	N/a	N/a	N/a	N/a
Management changes	N/a	N/a	N/a	N/a

Table 1 Housing design – the route to BAT

Condition	Best available techniques (BAT) used
Does the housing design conform to a BAT standard as set out in How to Comply?	<ul style="list-style-type: none"> • Housing will be well insulated and with damp proof course to prevent water ingress. • Insulated to a U-value of 0.4W/m²/°C to eliminate condensation on the inner linings and minimise heat loss and solar gain. • Forced ventilation installed in all the poultry houses with high velocity extraction fans (vents greater than 5.5 metres high and fan efflux velocity greater than 7m/s) and computer controlled to remove moisture under all weather and seasonal conditions while meeting the physiological needs of the chickens. Computer controlled and regularly adjusting ventilation to match age, and weight and health requirements of the chickens, and to help keep droppings and litter dry and friable. • Optimising discharge conditions of exhaust air from all the poultry houses using a combination of techniques to disperse ammonia and odour emissions more quickly, including maximised outlet heights – exhausting air above roof level through the ridge, and maximised vertical outlet velocity - designed with uncapped outlet cones. • Nipple drinkers with drink cups to minimise water spillages.

Table 2 Housing management - the route to BAT

Condition	Best available techniques (BAT) used
Is litter managed to the standards in How to comply?	<ul style="list-style-type: none"> • Will be spreading a proprietary mixture of chopped straw and wood shavings over the whole floor surface. • Litter will be kept loose and friable and its quality will be inspected daily to ensure it does not become excessively wet or dry. • Any changes in quality will be investigated and steps take to rectify the problem, involving addition of extra litter or provision of heating to the problem area.
Is ventilation managed to the standards in How to comply?	<ul style="list-style-type: none"> • Ventilation will match the health and welfare needs for the age and number of birds. • Target ventilation rates for different weather conditions will be calculated in conjunction with the fan supplier • Air speeds across the house will not be largely different from one area to another, and the housing will be free from draughts. • Ventilation rates and house conditions will at all times be adequate to provide sufficient fresh air for the birds. In particular accumulations of ammonia, hydrogen sulphide, carbon dioxide and carbon monoxide and dust will be avoided.

Is temperature managed to the standards in How to comply?	<ul style="list-style-type: none"> • Temperature will meet the health and welfare needs for the age and number of chickens. • Extremes of temperature will be avoided, and draughts will be minimised. • Artificial heating will be provided and controlled to match heating needs to ventilation needs so heat is not wasted, by being drawn out of the buildings.
Does the general management conform to the standards in How to comply?	<p>Management described in EPR 6.09 Sector Guidance Note; How to comply...intensive farming; Version 2; 2010; Poultry housing design and management pp23-25 and Best Available Techniques (BAT) Reference Document, 2017:-</p> <ul style="list-style-type: none"> • Floors and walls will be kept clean, by washing and disinfecting end of each cycle approx every 7 weeks. • Any cracks and damaged areas of floors and walls will be repaired.

Created odour, noise, and dust & bio-aerosol management plans for approval with the permit application owing to sensitive receptors within 400 and 100 metres, respectively. Plans describe BAT design features and BAT management actions and contingency actions at Lingar Hill Farm to minimise odour, noise and dust emissions beyond the site boundary and risk of causing annoyance.