

2 NON-TECHNICAL SUMMARY

Lochwood Farm currently has 32,000 free-range egg laying hens and is planning to expand the unit to hold a total of 64,000 birds. The existing unit comprises of two 16,000 sheds with gable-end exhaust ventilation and the proposed new housing will be the same but it will also include manure drying on belts using forced air, this will help reduce ammonia emissions and meets Best Available Technique (BAT).

The sheds are aviary systems which are filled with birds at around 16 weeks old where they will stay and lay eggs until the shed is emptied, around 15 months later. Manure is to be collected and dried on manure belts (using piped forced air) and this is removed from the houses twice per week and collected in a trailer. It is then taken directly off-site. Once emptied, the sheds are deep-cleaned and wash water is contained in tanks within the buildings. Washwater is pumped out and taken offsite to be managed with manure.

Both sheds will have automatically controlled ventilation systems. Fresh air will be brought in via ten roof inlets, drawn through the building and exhausted via gable end vents situated at each end of the building. During warmer months (when temperatures reach over around 24°C), additional 'tunnel' ventilation can be utilised. Additional fresh air will be pulled in through side inlets near the packing room and exhausted via additional gable end ventilation fans. Gable end ventilation fans are fitted with louvre systems to deposit any particulate matter on the ground. The gable end areas are concreted to collect any dust which may run-off during rain events and this is treated by means of a swale which will be designed to meet the requirements of the CREW guidance, considered to be Best Available Technique (BAT). This system will treat all lightly contaminated rainwater run-off from site.

The main emission from the housing will be ammonia and the impact on nearby sensitive receptors, in particular nearby SSSI/SACs: Ashgrove Loch, Bogside Flats, Dykeneuk Moss, Cockinhead Moss, Western Gales and Backhead Moss which have habitats susceptible to acid/nitrogen pollution. However, the impacts of the existing and new sheds have been assessed using the Simple Calculation of Atmospheric Impact Limits (SCAIL) tool and it passes screening, so no ammonia modelling is required. Belt drying of manure will be installed within the new building to reduce ammonia emissions. There is also some existing tree planting which is to be increased and will include a tree shelterbelt at the gable-end of the building which should help reduce ammonia emissions further.

There is a sensitive receptor (i.e. residential housing) just within 400m of the proposed new house so dust and odour have also been considered. The operations within the existing house have not created any dust or odour complaints to date. Management practices in the new house will also meet BAT through minimisation of dust from regularly cleaning of yard areas, the use of crumbed food and dust-extracted coarse litter. In addition, the installation of a tree belt should help minimise dust emissions further. An Odour Management Plan is in place which ensures odour potential has been assessed, prevented and/or mitigated where possible, this also meets BAT.

Estimates of the amount of additional raw materials, water and energy consumed have been made and will be monitored as part of permit requirements. Similarly, the operator has estimated the volumes of waste likely to be produced on site.