

1 INTRODUCTION

This document provides supplementary information to support Woodend Farming Partnership's application for a PPC permit. The following information details operations on site and should be read with reference to SEPA's application form to vary a permit submitted in conjunction with this document.

Woodend Farm is located near Duns, Berwickshire, TD11 3QW.

2 NON-TECHNICAL SUMMARY

Woodend 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. One of the existing houses has a capacity for 16,000 birds with gable-end exhaust ventilation. The other existing house is newer, has a capacity for 16,000 birds and is ventilated by high velocity roof fans. The proposed house will have the capacity for 32,000 birds and will be ventilated by high velocity roof fans. As part of the application, manure will be dried on belts forced air, this will help reduce ammonia emissions and meets Best Available Technique (BAT). The location of the new shed has been chosen because of its proximity to the existing sheds. The new shed will be built on greenfield land.

All sheds will have automatically controlled ventilation systems. House 1 has gable end fans which discharge onto perforated metal panels which captures dust, minimising external emissions. Housing has been located to minimise impact on nearby sensitive receptors and has been designed in accordance with BAT in order to reduce ammonia emissions. Diets are formulated to match bird requirements to reduce excess nitrogen waste. Shed ventilation limits high-humidity conditions and maintaining controlled airflow and regular air exchange helps reduce the risk of concentrated ammonia build-up.

Sheds have optimised ventilation systems and are well insulated. They have low energy LED lights installed and renewable energy is used on site to power the poultry operations. Mains water is used within the sheds and water meters will be regularly monitored. Nipple drinkers are used within the sheds. Each shed has feed bins and these are fitted with dust cyclones. Manure is to be collected, dried on manure belts and removed from the houses twice per week. Stored manure is kept dry and processed onsite through a Bokashi fermentation process. Once emptied, the sheds are deep-cleaned and washwater is contained in tanks within the buildings. Washwater is removed off-site as required to be spread on land as a fertiliser. Washwater from the packing shed is discharged to the foul drainage system. Balanced diets with low crude protein levels are used.

The principal emissions from the unit will include ammonia and dust. The ammonia and dust impact of the installation has been evaluated using the SCAIL screening tool and as a result of pre-application discussions with SEPA, ammonia modelling has been carried out for the installation. The operations within the existing house have not created any dust or odour complaints within the last 5 years. Management practices meet BAT and minimise dust emissions. In addition, trees will be planted on each range to help screen the installation and help trap dust and reduce emissions. A set of management plans (including odour, noise, incidents, decommissioning) have been developed to complement this application.

Roof runoff from the existing sheds are treated through swales on site. It is proposed that the new house will capture roof and yard runoff in a settling tank before treating it through a reed bed system, prior to discharge from the site.

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.

3 UNIT CAPACITY, HOUSING DESIGN & INFRASTRUCTURE

House name	Type	Capacity	Year constructed
House 1	Laying – free range	16,000 birds	2012
House 2	Laying – free range	16,000 birds	2017
House 3	Laying – free range	32,000 birds	Proposed

Information regarding the infrastructure of the housing sheds is provided in the table below.