



Hook2Sisters Ltd

Environmental Management Plan

ODOUR MANAGEMENT PLAN – LANGHAM, AP3632YP

Introduction

This Odour Management Plan (OMP) has been prepared to support the overall Environmental Management System in place at Langham farm. The overriding principle of this OMP is to ensure the day-to-day activities are carried out in accordance with this document to help minimise the overall environmental impact. This OMP has been prepared as Best Practice.

The purpose of this OMP is to...

- Establish the likely source of odours arising from the farm.
- Set out procedures at the farm in order to mitigate or minimise the risk of odour.
- Formalise an effective method of dealing with any odour complaints quickly and efficiently.

Installation Background

The site is currently used for growing turkeys with flock lengths up to 21 weeks of age. An application has been made for a substantial variation for the permanent rearing of 720,000 broilers to replace 370,000 turkeys.

The entire site is to be redeveloped and will be comprised of 18 sheds refurbished to modern standards, all with high velocity ridge extraction.

Roof and side walls are clad profiled cement and timber sheeting. Feed is supplied to the birds via sealed auger systems and water via suspended nipple cup systems.

At the end of the growing cycle all birds are removed from site with the buildings being dry cleaned by means of compressed air to remove dust build up from the building internals and equipment before litter is removed and the sheds washed. All spent litter is removed from site as it is cleared from the sheds.

Each shed has drain in that directs wash water to underground holding tanks. Surface water run-off from roofs and concrete hardstanding is directed to surrounding grassland.

Carcasses are stored on-site in locked metal containers ready for collection as required and are disposed of in accordance with the current Animal By Products Regulations.

Sensitive receptors within 400m of the site boundary are:

1. Residential – Keepers Cottage, 200m, S (TF 99623 41755)
2. Residential – farm dwelling, 195m, S (TF 99849 41760)
3. Residential – Bluemount Barn, 235m, S (TF 99138 41222)
4. Industrial units, 322m, N (TF 99458 42825)



Potential Odour Sources

The following sources have been identified as contributing to a potential medium - high risk odour source.

- Odour emissions from compound feed selection
- Odour emissions from feed delivery and storage

- Odour emissions from ventilation techniques
- Odour emissions from litter conditions and management
- Odour emissions from carcass storage and disposal
- Odour emissions from drinking water systems
- Odour emissions from de-stocking
- Odour emissions from dirty water management

Pathways and Receptors

The pathway for all the above sources is via the atmosphere, with the most sensitive receptors being inhabitants of nearby residential dwellings. The wind direction will significantly influence how receptors are affected.

Odour Management and Control Measures

Odour Related Issue	Potential Risk and Problems	Actions taken to prevent and minimise risk
Manufacture and selection of compound foods	Milling and mixing of compound feeds Poor quality and odorous ingredients Feeds which are “unbalanced” in nutrients, leading to increased excretion, litter moisture and higher emissions of ammonia and other odorous compounds	No on-site milling or mixing. Feed specifications are prepared by the feed compounder’s nutrition specialist. The nutritionist ensures that protein and phosphorous content is reduced as the rations change throughout the flock cycle. Feed is only supplied by a UKASTA accredited feed mill, so that only approved raw materials are utilised in production. A feed sample for every load of feed delivered to the site is left and documented for both quality assessment and traceability. Samples are kept on site for a minimum of three months.
Feed Delivery and storage	Creation of dust during delivery	Feed delivery systems are sealed to minimise atmospheric dust. Dust catchment systems will be in place on all silos. Annual condition checks are carried out and documented.
Ventilation Techniques	Inadequate air movements within the buildings can lead to high humidity and subsequently high moisture levels within the litter. Inadequate control of inlet and fan controls leads to poor dispersal of potential odours.	The ventilation system is regularly adjusted either automatically or manually to aid optimum internal environmental conditions. The ventilation system is designed to efficiently control and, when required, remove humidity from within the buildings. Maintenance schedules are in place and are carried out in line with manufacture’s recommendation and guidance. This is to minimise the risk of any breakdowns

		during the flock cycle. In the event of a breakdown, an electrician is on call 24hrs a day.
Litter Conditions and Management	Building design and quality	All walls and ceiling voids have been insulated to prevent condensation and cold bridging. Should any aspect of the building structure fail, a full investigation will be carried to source and rectify any issues as they arise. Litter will be kept dry and friable.
Carcass disposal	Inadequate storage of carcasses on site Carcasses stored on site for prolonged period of time.	Carcasses are stored in lockable, sealed containers. Carcasses are removed at least weekly or at a higher frequency if required.
Destocking of livestock	Higher levels of odour release through increased ventilation Turning over of litter during machine access and in house movements	Ventilation controls to be used to control the release of odours while still maintaining optimum temperature control throughout the depletion process. Machinery movements to be kept to a minimum to help avoid the churning up of litter.
Clean out. (Litter removal, wash down and disinfection)	Creation of dust during clean down Heaping up and removal of large quantities of potentially high levels of odorous material Loading of lorries / trailers. Use of odorous products to disinfect buildings following wash down.	All internal areas are blown down using high pressure air lances to remove areas of trapped dust which in turns help reduce the amount of dirty water. Litter is to be removed as soon as reasonably practical following bird removal. Only DEFRA approved disinfectant and detergents are used on site and are applied by trained personnel.
Dirty Water management	Standing or open stored dirty water during the production cycle or clean-out Removal of dirty water form stores	Areas around the houses are to be kept clean throughout the flock cycle. Dirty water is removed from site using vacuum tankers with all removals being documented through transfer note. Routinely the storage tanks are checked before and after wash down.

Abnormal Conditions and Control Measures

Odour Related Issue	Potential Risk and Problems	Actions taken to prevent and minimise risk
Feed Delivery and storage	Spillages of feed during delivery and storage	Any spillages are cleaned up immediately.
Litter Conditions and Management	Odours arising from wet litter and poor management. Disease / virus outbreaks leading to poorly conditioned birds – excessive excretion leading to higher moisture content within the litter.	Controls on feed and ventilation help maintain litter quality additional controls include. Use of a veterinary health plan, with specialist veterinary input as necessary.
Management of drinking water systems	Spillages of surplus water from drinker systems	Use of nipple drinkers and drip trays to minimise the risk of spillages and water wastage. Systems to be checked daily by farm personnel and any abnormalities to be documented and rectified as required
Power outage	Loss of electrical supply to the site resulting in failure of ventilation system	The site is equipped with an emergency generator that can be used in the event of a power outage. The generator is tested weekly to ensure functionality in the event of an emergency.

On Farm Monitoring and Continual Improvement

- Internal relevant humidity, temperature and litter quality is to be monitored by farm personnel and recorded on each house card daily.
- Complaints and subsequent actions are to be logged on site.
- Staff are to receive training regarding Environmental Permitting Regulations – which will include odour management and any new company procedures.
- Staff will carry out weekly sniff testing around the site. In the event of odour complaints being received at the site this frequency may be increased or additional sniff surveys will be conducted by a person that is not regularly carrying out duties at the site.

Odour Complaints Procedures

Any odour complaints received in direct relation to the installation shall be recorded. Odour complaints shall be fully investigated and records available at future inspections. Complaints received directly from the public will be notified to the Environment Agency (EA).

Investigations shall consider...

- The activities taking place at the time of the complaint.
- The timing of the complaint.
- The weather conditions at the time of the complaint.
- Any non-routine operations on site.
- Any changes that may have been made to Standard Operating Procedures.
- The receptor and the impact that may have been caused.

Following all investigations into complaints, if the issue is caused by an operation at the site, a discussion will be had with the EA and any agreed mitigation measures will be implemented to help minimise the impact.

Review

This OMP will be subject to review following any EA substantiated complaint or every four years, whichever is sooner.