

Odour Management Plan

Overview

In the planning of the construction of the site layout consideration has been given siting main operational activities away from the nearest receptors to the west of the site, high velocity roof fans will be used to aid the dispersion of odour. Prevailing wind is from the southwest.

The following plan has been prepared as part of the EPR permit application.

The following tables highlight the likely sources of odour arising from poultry broiler production at Woodside Farm.

Actions and measures are listed that will prevent where possible or minimise odour emissions at Woodside Farm

Site plan shows all material storage areas and potential odour emission sources.

Plan to be reviewed every year from permit issue date, prior to any major changes to operations (to ensure effectiveness) or following any complaint, any changes to OMP or other management plans to be documented dated and signed and Area Officer notified.

Actions and preventative measures in OMP referenced from Odour Assessment Document and Fugitive Emissions Assessment in line with the H1 Risk Assessment, to be implemented in conjunction with the following key documents;

Emergency Plan

Technical Standards

Routine Maintenance Schedule

Key responsibility for the OMP and the referenced plans are the Operator or deputies who have been briefed on the requirements.

Example Odour Complaint form attached.

The table below lists all sensitive receptors with 400m.

Receptor Name	Description	Distance	Orientation	National Grid Reference
Hockerton Heights	Residences	283m	West	471601,356583
Church Lane	Residences	287m	West	471572,356472
Manor Farm	Residential	245m	West	471572,356391
Gables Farm	Residential	76m	Southwest	471746,356311
Cheverals	Residential	35m	South	472120,356089
Dwelling	Residential	28m	Southwest	471192,356206
Dwelling	Residential	391m	Southeast	472856,355788
Bungalow	Residential	207m	West	471723,356718
Willben House	Residential	234m	Northwest	471803,356864
Coachways	Residential	230m	North	472266,357547
Newfield Farm	Residential	360m	North	472283,357667

Dwelling	Residential	80m	West	471779,356466
Woodside Farm	Residential	54m	West	471841,356485
Woodside Farm	Residential	26m	West	471914,356456

Odour Related Issue	Potential Risks and Problems	Actions taken to minimise odour and odour risks at Woodside Farm	Completion date
Pullet Production	Odour levels	Twice daily olfactory checks coinciding with stock inspections (normally 07.00-10.00 hrs and 16.00-18.00hrs) any abnormalities recorded and investigated	In place
Manufacture and selection of feed	Milling and mixing of compound feeds. The use of poor quality and odorous ingredients. Feeds which are 'unbalanced' in nutrients, leading to increased excretion and litter moisture and emissions of ammonia and other odorous compounds to air.	No on-site milling and mixing. Feed specifications are prepared by the feed compounder's nutrition specialist. Feed is supplied only from UKAS accredited feed mills, so that only approved raw materials are used. Protein is reduced in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming' 'How to comply with your environmental permit for intensive farming'.	In place

<p>Feed delivery and storage</p>	<p>Spillage of feed during delivery and storage. Creation of dust during feed delivery.</p>	<p>Feed delivery systems are sealed to minimise atmospheric dust. Any spillage of feed around the bin is immediately swept up. The condition of feed bins is checked frequently so that any damage or leaks can be identified. Feed deliveries are monitored to avoid dust and spills.</p>	<p>In place</p>
<p>Ventilation and heating Systems/Dust</p>	<p>Inadequate air movement in the house, leading to high humidity and wet litter</p> <p>Inadequate system design, causing poor dispersal of odours. Extraction fans located close to sensitive receptors.</p> <p>Dust</p>	<p>Use of roof extraction fans to aid dispersion, checked prior to cycle commencement by qualified electrician who will provide 24hr breakdown cover The ventilation and heating system is regularly adjusted to match the age and requirements of the flock. The ventilation system is designed to efficiently remove moisture from the house. Use of wet acid air scrubbing systems on all houses. Humidity recorded daily and maintained in the range of 55 – 65% keeping a balance of dry litter and avoiding dust production. Stock inspections carried out by trained staff to avoid panicking birds creating dust.</p>	<p>In place</p>
<p>Litter management</p>	<p>Odours arising from wet litter (see above).</p>	<p>Controls on feed and ventilation (see above) help to maintain litter quality. Additional controls include:- Use of nipple drinkers with drip cups to minimise spillage. Daily checks of drinker height and pressures to</p>	<p>In place</p>

		<p>avoid capping. Insulated walls and ceilings to prevent condensation. Concrete floors to prevent ingress of water. Stocking levels at optimum to prevent overcrowding. Use of veterinarian bespoke health plan.</p>	
Carcase disposal	Inadequate storage of carcasses on site	Carcasses placed into plastic sealed bags, stored in sealed, shaded and vermin proof containers away from sensitive receptors. Twice weekly collection of carcasses..	In place
House clean out	<p>Creation of dust associated with litter removal from houses</p> <p>Use of odorous products during cleaning.</p>	<p>Houses sealed immediately following depletion of birds. Minimum ventilation employed during de-littering, houses sealed immediately following de-littering awaiting washing. Litter carefully placed into trailers positioned close to doors. Trailers sheeted before leaving fill position. Only DEFRA approved and suitable products used. Chemical containers triple washed at point of use. Wash water tank levels monitored during washing and emptied as required to prevent overflow. Litter out carried out within 24 hours following destocking per house (72 hours total for site)</p>	<p>In place</p> <p>In place</p>
Used litter	Transport of litter to third party.	All trailers sheeted before leaving fill position. Avoidance of double handling.	In place
Washing operations including vehicles	Loss of dirty water to land or watercourse	<p>Washing commenced within 24 hours of de-littering Use of specialist contractors for washing operations. Bespoke terminal hygiene program followed, detailing quantities of water and chemical dilution</p>	In place

		<p>rates.</p> <p>Key staff monitoring washing operations ensuring effective drainage to dirty water tanks.</p> <p>Dirty water tanks monitored during wash down to maintain freeboard.</p> <p>Washing operations completed within three days.</p> <p>Vehicle washing at designated wash point.</p> <p>All sediment traps and drains cleaned both before and after washing operations</p> <p>Concrete yard washings directed to dirty water drains by means of sloping concrete preventing run off.</p>	
Fugitive emissions	Leaks to doors, bin pipes, feed bins, fuel and chemical storage	<p>Checks to feed storage and fill pipes as per routine maintenance schedule.</p> <p>Fuel oil in approved bunded storage tank.</p>	In place
Dirty water management	<p>Standing dirty water during the production cycle or at clean out.</p> <p>Application of dirty water to land.</p>	<p>Working areas around houses are concreted and kept clean during production cycle.</p> <p>At clean out dirty water from houses together with lightly contaminated yard wash is directed to the underground storage tanks, before being removed off site to third parties.</p>	In place
Abnormal operations	<p>Water leak/pipe failure</p> <p>Bird health/sickness</p>	<p>Water consumption monitored daily ensuring early detection, wet area blanket covered with top up bedding material to prevent increased odour.</p> <p>Veterinarian contacted (24hour cover) Litter covered with fresh top up bedding to minimise increase in odour until bird health recovered.</p> <p>Abnormal events documented, dated and signed, appropriate plans reviewed and updated to prevent reoccurrence ie. Routine maintenance schedule, Technical standards</p>	In place

Waste production/storage	Odour from production or storage areas	No storage or production of odorous waste on site. Waste management plan in force detailing types and quantities produced along with disposal routes. Records kept on site.	In place
Materials/storage	Potential odour source	Feed delivered into sealed vermin proof silos. Sealed delivery system into poultry houses with no milling or mixing on site. Remaining feed at end of cycle stored in sealed silo and used on subsequent cycle. 3 month shelf life of feed negating the need for removal. Chemicals in secure bunded shed free from frost and unauthorised entry together with any veterinarian products/medicine (off site)	In place

Odour Monitoring Procedure

In addition to the twice daily checks by staff on site, monitoring by a person not directly involved with the poultry will be undertaken once a week at the four compass points at the site boundary, this will be recorded as no odour, slight, strong and severe, odour detection recorded above slight will result in staff being alerted to implement contingency measures, once implemented retesting will be redone to ensure levels have been reduced. In the event of complaints being received frequency of monitoring will be increased subject to agreement with Area Officer. All records will be held on site for inspection.

Odour Contingency					
Source	Potential Cause	Trigger Factor with immediate action	Mitigation Measures to be implemented and remain operative until cessation trigger verified	Additional Mitigation	Cessation Trigger
Feed delivery and storage	Pipe or bin failure causing leak	Daily inspection Immediate action	Repair to pipe work or feed bin with immediate effect, use other bins, spills cleaned up immediately. Integrity of pipe work and bin checking frequency reviewed and updated in routine maintenance and inspection document, with changes recorded and dated.	Bin/pipework replaced within 48 hrs	Visual inspection
Carcase storage	Storage container	Daily	Carcases removed	Collection by	Visual Inspection

and disposal	failure/damage	Inspection Immediate action	from damaged container into additional container, damaged container replaced/repared immediately.	licensed renderer within 24hrs	
Variations in stocking density/bird growth	Rapid bird growth or poor growth due to illness.	Deviation in predicted growth Action within 12 hrs	Bird growth monitored Daily Ventilation and heating controls advanced to account for additional live-weight within house. Veterinarian advice sought immediately for bird illness with additional bedding added to prevent/minimise odour release. Document and record abnormalities. Ensure stocking density complies with BAT standards and bird permit places.	Potential for early bird depletion timescale dependant on integrator	Growth rates normal
Ventilation System	Fan/system failure	System fully alarmed, Immediate	Alternative ventilation fan used, electrician call out	Mobile generator sourced within 4	Repairs effected and documented

		action		hrs	
Drinker systems	Leaky systems/pipe failure	Deviation in expected water consumption Immediate action	Any leaks isolated and repaired immediately. Wet areas covered with additional bedding to minimise odour. Arrange system integrity testing at cycle end, findings to be documented and recorded, pipe work/system parts to be replaced as per report.	Potable water tankered in within 12hrs	Normal consumption
Bird depletion	Fugitive odour release	OMP monitoring Immediate action	Minimum ventilation rate to prevent fugitive release of odour, review OMP with any changes documented and recorded and submitted to Environment Agency Area Officer for approval.	Area within houses where forklift has been operating blanket covered with shavings	OMP monitoring recording reduced low levels
Litter Removal	Fugitive odour release from poultry houses	Raised odour levels during OMP	Minimum ventilation rate to prevent fugitive release of	Review of littering out procedures	OMP monitoring levels returned to normal

		monitoring Immediate action	odour, review OMP with any changes documented and recorded and submitted to Environment Agency Area Officer for approval.	within 1 week Area officer notified	
Washing operations/dirty water	Odour release from drainage/storage Delay in dirty water removal Blocked drains	Raised odour levels during OMP monitoring immediate action Washing procedure monitoring immediate action Immediate action	Arrange drainage integrity testing and drain cleaning, record and document findings. Dirty water tanks filled with clean water and agitated prior to removal to remove any possible sediment/stagnation. Washing operations suspended, agreement with neighbouring farms for dirty water removal Blockage cleared	Ventilation rates increased within 1hr Licensed waste disposal contractor used within 24hrs Specialist drainage contractor	OMP monitoring levels normal Normal washing resumed after visual inspection

				called out within 24hrs	
Litter/manure	Wet litter	Raised odour levels during OMP monitoring Immediate action	Additional bedding applied to maintain dry friable litter. Initiate olfactory checks to ensure effectiveness.	Additional ventilation and heating implemented to dry litter within 4hrs	OMP monitoring levels normal

The contingency measures above, when implemented, will be verified for effectiveness by means of visual inspection of equipment or additional checks at odour monitoring points.

Complaints Procedure

'In the event of odour being recorded the site staff will be alerted to implement contingency measures' and 'Re-testing at the site boundary will be conducted following any actions implemented to ensure the effectiveness of recorded actions implemented' as detailed in the document 'Monitoring procedures at Manor Farm Site.

In the event of any strong odour detected the cause would be investigated and actions taken listed in the odour/contingency plans to cease the release. Area officer would be notified immediately, a review of the OMP conducted at the earliest opportunity with any changes communicated to Area officer for approval. Complainant will be contacted following an investigation and notified of the cause and the remedial action that was undertaken. A complaints report would be filled out and retained on site.

Odour Complaint Form

Installation Name	Date Recorded	Reference Number
Name and Address of caller:		
Tel. No. of caller		
Location of caller in relation to Installation		
Time and Date of complaint		
Date, Time and duration of Offending odour		
Callers description of odour		

Has the caller any other Comments about the odour?	
Weather conditions	
Wind strength and direction	
Any previous complaints Relating to this odour?	
Any other relevant information	
Potential odour sources that could give rise to the complaint	
Operating conditions at the time offending odour occurred	

Follow up Date and time caller contacted			
Action taken			
Amendment requirement to Odour Management Plan			
Form completed by		Signed	

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