

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 production at Fulbeck Farm.

Actions and measures are listed that will prevent where possible or minimise odour emissions at Fulbeck 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/Location	Description	Distance	Orientation	National Grid Reference
South Heath Lane	Residential	10m	North	495404,349999
The Barn	Residential	85m	Southeast	495489,349847
South Heath Lane Fulbeck	Residential	60m	Northwest	495283,350284
South Heath Lane Fulbeck	Residential	77m	Northwest	495265,350084
South Heath Lane Fulbeck	Residential	102m	Northwest	495241,350091
South Heath Lane Fulbeck	Residential	136m	Northwest	495210,350104
South Heath Lane Fulbeck	Residential	154m	Northwest	495192,350111
South Heath Lane Fulbeck	Residential	169m	Northwest	495176,350108
South Heath Lane Fulbeck	Residential	180m	Northwest	495164,350107

South Heath Lane Fulbeck	Residential	197m	Northwest	495148,350108
South Heath Lane Fulbeck	Residential	208m	Northwest	495137,350112
South Heath Lane Fulbeck	Residential	233m	Northwest	495113,350120
South Heath Lane Fulbeck	Residential	244m	Northwest	495103,350124
South Heath Lane Fulbeck	Residential	196m	Northwest	495170,350164
South Heath Lane Fulbeck	Residential	211m	Northwest	495158,350172
South Heath Lane Fulbeck	Residential	240m	Northwest	495129,350179
South Heath Lane Fulbeck	Residential	260m	Northwest	495110,350187
South Heath Lane Fulbeck	Residential	270m	Northwest	495102,350192
South Heath Lane Fulbeck	Residential	282m	Northwest	495091,350196
South Heath Lane Fulbeck	Residential	318m	Northwest	495055,350026

South Heath Lane Fulbeck	Residential	340m	Northwest	495032,350211
South Heath Lane Fulbeck	Residential	355m	Northwest	495017,350214
South Heath Lane Fulbeck	Residential	371m	Northwest	495001,350217
South Heath Lane Fulbeck	Residential	390m	Northwest	494982,350222
South Heath Lane Fulbeck	Residential	373m	Northwest	495015,350249
South Heath Lane Fulbeck	Residential	392m	Northwest	495002,350264
South Heath Lane Fulbeck	Residential	385m	Northwest	494997,350241
Barn Farm	Residential	149m	South	495436,349766

Odour Related Issue	Potential Risks and Problems	Actions taken to minimise odour and odour risks at Fulbeck Farm	Completion date
Pullet Production	Odour levels	Weekly olfactory checks by sniff testing at the installation boundary by persons not involved with the poultry, 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

Feed delivery and storage	Spillage of feed during delivery and storage. Creation of dust during feed delivery.	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 twice weekly so that any damage or leaks can be identified. Feed deliveries are monitored to avoid dust and spills.	In place
Ventilation and heating Systems/Dust	Inadequate air movement in the house, leading to high humidity and wet litter Inadequate system design, causing poor dispersal of odours. Extraction fans located close to sensitive receptors. Dust	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. 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.	In place
Litter management	Odours arising from wet litter (see above).	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 avoid capping. Insulated walls and ceilings to prevent	In place

		condensation. Concrete floors to prevent ingress of water. Stocking levels at optimum to prevent overcrowding. Use of veterinarian bespoke health plan.	
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 under waste disposal contract.	In place
House clean out	Creation of dust associated with litter removal from houses Use of odorous products during cleaning.	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)	In place In place
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	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 rates. Key staff monitoring washing operations ensuring	In place

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

Monitoring by a person not directly involved with the poultry will be undertaken once a week 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 and disposal	Storage container failure/damage	Daily Inspection	Carcases removed from damaged container into	Collection by alternative licensed	Visual Inspection

		Immediate action	additional container, damaged container replaced/repared immediately.	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 action	Alternative ventilation fan used, electrician call out	Mobile generator sourced within 4 hrs	Repairs effected and documented

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 following bird thinning only within 2 hrs	OMP monitoring recording reduced low levels
Litter Removal	Fugitive odour release from poultry houses	Raised odour levels during OMP monitoring	Minimum ventilation rate to prevent fugitive release of odour, review OMP	Review of littering out procedures within 1 week	OMP monitoring levels returned to normal

		Immediate action	with any changes documented and recorded and submitted to Environment Agency Area Officer for approval.	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 called out within	OMP monitoring levels normal Normal washing resumed after visual inspection

				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.

Key responsibilities

Task	Staff position responsible
Olfactory Checks	Sniff testing by persons not directly involved in the poultry production
Overseeing /monitoring feed deliveries	Site Manager
Sweeping up spillages around feed bins	Site Manager
Checking condition of feed bins	Site Manager
Adjusting ventilation and heating system	Site Manager
Stock inspections	Site Manager

Daily checks on drinker height & pressures	Site Manager
Carcass disposal	Site Manager
Checking Carcass bins for damages/leaks	Site Manager
Monitoring wash water tank levels and organising emptying of tanks	Site Manager
Cleaning of sediment traps/drains	Site Manager
Checks to feed storage and fill pipes	Site Manager
Monitoring water consumption to detect leaks/pipe failure	Site Manager
Documenting /reviewing abnormal events	Site Manager
Reviewing annual plans	Site Manager
Complaints log	Site Manager

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 Fulbeck Poultry Unit.

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.

If substantiated odour complaints are received over a one-month period without resolution to odour problem a formal action plan with measures and timescales for relevant odour issues shall be presented to the Environment Agency for approval.

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	