

## **Odour Management Plan**

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 Ivy Farm Poultry Unit.

Actions and measures are listed that will prevent where possible or minimise odour emissions at Ivy Farm Poultry Unit.

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;

Ivy Farm Emergency Plan

Technical Standards

Routine Maintenance/Inspection Schedule

Health Plan

Ivy Farm Contingency Plan

Environmental Management

Incidents/Abnormal Operations

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 nearby.

Receptor Name	Description	Distance	Orientation	National Grid Reference
Residential	Residential	47m	West	357706, 166219
Residential	Residential	101m	West	357647, 166191
Residential	Residential	121m	West	357628, 166188
Residential	Residential	153m	West	357596, 166178
Residential	Residential	134m	West	357616, 166216
Residential	Residential	163m	West	357601, 166267
Residential	Residential	131m	West	357622, 166165
Residential	Residential	147m	West	357603, 166169
Residential	Residential	128m	West	357626, 166231

Commercial	Commercial	19m	West	357755, 166217
Commercial	Commercial	24m	West	357728, 166181
Commercial	Commercial	81m	West	357668, 166191
Commercial	Commercial	83m	West	357668, 166220
Commercial	Commercial	155m	West	357622, 166286
Residential	Residential	227m	West	357522, 166218
Residential	Residential	256m	West	357525, 166190
Residential	Residential	246m	West	357503, 166201
Residential	Residential	250m	West	357498, 166209
Residential	Residential	207m	West	357542, 166213
Residential	Residential	374m	West	357474, 166203

Residential	Residential	300m	West	357448, 166198
Residential	Residential	315m	West	357434, 166212
Residential	Residential	346m	West	357402, 166203
Residential	Residential	361m	West	357387, 166197
Residential	Residential	399m	West	357349, 166206
Residential	Residential	389m	West	357364, 166261
Residential	Residential	397m	West	357358, 166275

<b>Odour Related Issue</b>	<b>Potential Risks and Problems</b>	<b>Actions taken to minimise odour and odour risks at Ivy Farm Poultry Farm</b>	<b>Completion date</b>
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 – see Ivy Farm contingency plan and as per routine inspection and maintenance schedule	In place

<p>Manufacture and selection of feed</p>	<p>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.</p>	<p>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'.</p>	<p>In place</p>
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<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 – As per routine inspection and maintenance schedule. See site plan.</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>Use of high velocity roof extraction fans with an efflux velocity of 11m/s and release height greater than 5.5m, to aid dispersion, checked prior to cycle commencement by qualified electrician who will provide 24hr breakdown cover – See electrical service reports. Both ventilation and heating have sophisticated alarm systems, on the ventilation, any fan which fails during its required operation will trigger alarm notifying operator immediately of malfunction enabling corrective actions being implemented eg. Contacting electrician for breakdown repair/replacement. Temperature is monitored within the houses (recorded daily) with alarm settings 3 degrees above and below required house temperature, any deviation outside these parameters will trigger an alarm status. The ventilation and heating system is adjusted daily along with alarm settings to match the age and requirements of the flock. Alarm functionality is checked and recorded daily with any breakdowns dated and recorded along with corrective actions implemented</p>	<p>In place</p>

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	<p>Inadequate system design, causing poor dispersal of odours. Extraction fans located close to sensitive receptors.</p> <p>Excessive Dust</p>	<p>The ventilation system is designed to efficiently remove moisture from the house. Gable end fans operated only during hot weather to aid cooling, typically operated when temperature reaches 30 C° inside the poultry houses with birds aged 30 days or more. Indirect heating system giving lower humidity levels. 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. Excessive dust levels if present is controlled during cleanout operations - As per routine inspection and maintenance schedule and clean out operations.</p>	<p>In place</p>
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Litter management	Odours arising from wet litter (see above).	<p>Controls on feed and ventilation (see above) help to maintain litter quality. Additional controls include:-</p> <ul style="list-style-type: none"> <li>Use of nipple drinkers with drip cups to minimise spillage.</li> <li>Daily checks of drinker height and pressures to avoid capping.</li> <li>Insulated walls and ceilings to prevent condensation.</li> <li>Concrete floors to prevent ingress of water.</li> <li>Stocking levels at optimum to prevent overcrowding.</li> <li>Use of veterinarian bespoke health plan. See health plan</li> </ul>	In place
Carcase disposal	Inadequate storage of carcasses on site.	<p>Carcasses placed into plastic sealed bags, stored in sealed, shaded and vermin proof containers away from sensitive receptors. Frequent (3 times per week) collection of carcasses. Daily levels of mortalities recorded with abnormalities investigated – See health plan</p>	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>Odour release during or pre litter removal.</p>	<p>Litter carefully placed into trailers positioned under the covered apron 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 sump levels monitored during washing and emptied as required to prevent overflow – See Key responsibilities</p> <p>Litter removal carried out as soon as possible following destocking. (1-2 days)</p> <p>Houses sealed awaiting litter removal operations. Minimum ventilation rate compliant with health and safety operated during litter removal.</p>	<p>In place</p> <p>In place</p>
Used Litter	<p>Storage of used litter on site.</p> <p>Transport of litter and land spreading.</p>	<p>No storage on site at any time.</p> <p>All trailers sheeted before leaving fill position.</p> <p>Avoidance of double handling.</p> <p>Any land spread under the control of separate farming business with written agreement. Spread in strict accordance with Manure Management Plan.</p>	<p>In place</p>

Washing operations including vehicles	Loss of dirty water to Land or Watercourse	<p>Use of specialist contractors for washing operations.</p> <p>Bespoke terminal hygiene program followed, detailing quantities of water and chemical dilution rates.</p> <p>Key staff monitoring washing operations ensuring effective drainage to dirty water tanks.</p> <p>Sumps monitored during wash down to maintain freeboard –See Key Responsibilities. All sediment traps and drains cleaned both before and after washing operations – See Inspection and maintenance schedule</p>	In place
Fugitive emissions	Leaks to doors, bin pipes, feed bins, fuel and chemical storage	<p>To prevent release of fugitive emissions procedures are in place to ensure integrity of buildings and doors as per the Routine Maintenance Schedule.</p> <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
		<p>Chemicals in secure bunded shed free from frost and unauthorised entry together with any veterinarian products/medicine Chemical spill kit available within.</p> <p>See site plan.</p>	
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 is contained within sumps, lightly contaminated yard wash is directed to the reed bed system (see site plan), before being removed off site and spread to land under control of operator.</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 increased odour until bird health recovered –See health plan</p> <p>Abnormal events documented, dated and signed, see incidents/abnormal operations, appropriate plans reviewed and updated to prevent reoccurrence see Review Schedule</p>	In place
Waste production/storage	Odour from production or storage areas	<p>No storage or production of odorous waste on site.</p> <p>Waste management plan in force detailing types and quantities produced along with disposal routes. Records kept on site.</p>	In place
Materials/storage	Potential odour source	<p>Feed delivered into sealed vermin proof silos. Sealed delivery system into poultry houses with no milling or mixing on site.</p> <p>Remaining feed at end of cycle stored in sealed silo and used on subsequent cycle.</p>	
		<p>Marked on site plan.</p> <p>3 month shelf life of feed negating the need for removal.</p> <p>Raw materials inventory recorded and kept on site – See key responsibilities</p> <p>Cleaning chemicals kept in frost free secure bunded storage area, Chemical spill kit available.</p>	

## **Complaints Procedure**

In the event of an odour complaint being received the following steps will be followed with the information being recorded on the

Complaint recording form

1. Name and address of complainant along with contact details
2. Nature of the complaint
3. Time and date of occurrence
4. Weather conditions at that time (wind direction, temperature and humidity)
5. Operational Data (eg. During production cycle, age of birds, litter conditions, de-littering, wash-down, disinfection)
6. Actions taken following investigation

## **Odour Complaint Form**

Installation Name	Date Recorded	Reference Number
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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	
Has the caller any other Comments about the odour?	
Weather conditions	

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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	