**Odour Management Plan Marl Farm Poultry Unit**

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 Marl Farm.

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

Health Plan

Contingencys

Environmental Management

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 within 400m of site boundary.

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| --- | --- | --- | --- | --- |
| Receptor Name | Description | Distance | Orientation | National Grid Reference |
| Residence | Residential | 316m | North east | 483993,437841 |
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**Overveiw**

There is only receptor within 400m of the site boundary, distance from site boundary and orientation is listed in the table above.

Prevailing wind is from the south west. Proposed poultry houses will have high velocity roof extraction fans which will give high levels of dispersion of odours at this distance from receptors. Site orientation sites the main operational activities (bird catching, littering out and washing procedures) at the western end of site. With careful management and controls in place will minimise the risk of impact on these receptors.

**Complaints Procedure**

**In the event of odour complaints being received, as well as notifying Environment Agency Area Officer immediately and recording the complaint (see attached example complaint form), operator will visit area from where complaint has been received from.**

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| --- | --- | --- | --- |
| **Odour Related Issue** | **Potential Risks and Problems** | **Actions taken to minimise odour and odour risks at Marl Poultry Farm** | **Completion date** |
| Broiler Production | Odour levels | Twice daily olfactory checks for high house-keeping odours, coinciding with stock inspections (normally 07.00-10.00 hrs and 16.00-18.00hrs) any abnormalities recorded and investigated – see contingencies and routine maintenance and inspection schedule. | 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 UKASTA 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 |

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| --- | --- | --- | --- |
| 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 daily along with stock levels so that any damage or leaks can be identified. Small spills can be cleared up with shovel and broom. Large spills or bin failure – refer to emergency action plan.  Feed deliveries are monitored to avoid dust and spills – As per routine inspection and maintenance schedule. See site plan. | 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 high velocity roof extraction fans to aid dispersion, checked prior to cycle commencement by qualified electrician who will provide 24hr breakdown cover – See electrical service reports  The ventilation and heating system is computer controlled to match the age and requirements of the flock.  The ventilation system is designed to efficiently remove moisture from the house.  Gable end fans operated only during hot weather to aid cooling.  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, computer controlled system automatically adjusting ventilation and heating to maintain range. The above are checked during the routine twice daily stock inspections.  Stock inspections carried out by trained staff to avoid panicking birds creating dust.  Dust levels if present is controlled during cleanout operations - As per routine inspection and maintenance schedule and clean out operations. | In place |

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| --- | --- | --- | --- |
| 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. Any leaks detected refer to abnormal operations.  Insulated walls and ceilings to prevent condensation, controlled humidity will also prevent condensation.  Concrete floors (with impermeable membrane underneath) to prevent ingress of water.  Stocking levels at optimum to prevent overcrowding.  Use of veterinarian bespoke health plan. See health plan |  |
| Carcase disposal | Inadequate storage of carcasses on site. | Carcasses placed into plastic sealed bags, stored in sealed, shaded and vermin proof containers awaiting collection by licensed renderer. Storage bin integrity checked daily and replaced as required.  Daily levels of mortalities recorded with abnormalities investigated – See health plan | In place |

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| --- | --- | --- | --- |
| House clean out | Creation of dust associated with litter removal from houses.  Use of odorous products during cleaning. | 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 overfill – See Key responsibilities  Clean out carried out as soon as possible following destocking. (1 day). Expected duration of littering out house 4 hours each. Houses sealed until littering out commences, minimum ventilation in operation during de littering to prevent fugitive odour release through open doors. | In place  In place |
| Used Litter | Storage of used litter on site.  Transport of litter and land spreading. | No storage on site at any time.  All trailers sheeted before leaving fill position.  Avoidance of double handling.  Any land spread under the control of separate farming business with written agreement.  Litter sold to third party. | In place |
| Washing operations including vehicles | Loss of dirty water to Land or Watercourse | Use of specialist contractors for washing operations.  Concrete yards sloped directing dirty water to sealed dirty water system.  Bespoke terminal hygiene program followed, detailing quantities of water and chemical dilution rates.  Key staff on site during washing operations (washing prohibited unless farm staff on site) ensuring effective drainage to dirty water tanks.  Dirty water tanks monitored during wash down to maintain freeboard. Washing operations will be suspended immediately if any drainage malfunctions are detected (blocked drain or tank freeboard reached) and will not be resumed until rectified –See Key responsibilities  Vehicle washing at designated wash point with drainage set to containment tanks.  Dirty water system flushed with clean water immediately following completion of washing, with tanks emptied to prevent stagnation.  All sediment traps and drains cleaned both before and after washing operations with any deposits sent with used litter – See Inspection and maintenance schedule | In place |
| Fugitive emissions | Leaks to doors, bin pipes, feed bins, fuel and chemical storage | Checks to feed storage and fill pipes along with stock levels daily.  Fuel oil in approved bunded storage tanks.  Chemicals – only small amounts of footdip disinfectant held on site in secondary containment | 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 tanks (see site plan), before being removed off site using farm vacuum tanker and spread to land under control of a separate farming business. Written agreement is in place. | In place |
| Abnormal operations | Water leak/pipe failure  Bird health/sickness | Water consumption monitored daily ensuring early detection, leak isolated and immediate repair effected, wet area - blanket covered with top up bedding material to prevent increased odour.  Major feed spill – see emergency action plan.  Veterinarian contacted (24hour cover) Litter covered with fresh top up bedding to minimise increased odour until bird health recovered –See health plan  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 (with the exception of litter)  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.  Marked on site plan.  3 month shelf life of feed negating the need for removal.  Raw materials inventory recorded and kept on site – See key responsibilities  Cleaning chemicals supplied and used by cleaning contractor not stored on site. |  |

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| **Odour Contingency** |  |  |
| **Source** | **Potential Cause** | **Mitigation** |
| Feed delivery and storage | Pipe or bin failure causing leak | 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. |
| Carcase storage and disposal | Storage container failure/damage | Carcases removed from damaged container into additional container, damaged container replaced/repaired immediately. |
| Variations in stocking density/bird growth | Rapid bird growth or poor growth due to illness. | 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. |
| Drinker systems | Leaky systems/pipe failure | 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. |
| Bird depletion | Fugitive odour release | Increase 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. |
| Litter Removal | Fugitive odour release | Increase 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. |
| Washing operations/dirty water | Odour release from drainage/storage | 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. |
| Litter/manure | Wet litter | Additional bedding applied to maintain dry friable litter.  Initiate olfactory checks, to be agreed with Environment Agency Area Officer for approval. |

**Odour Complaint Form**

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| --- | --- | --- | --- | --- | --- |
| 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 | |  | | | |
| 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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