##### Odour Management Plan

**Farm name:** Red House Farm, South Green, EYE, Suffolk **Operator:** Ford Farms (Suffolk) Ltd **Permit number:** EPR/xxxxxxx

**Date:** September 2023  **Prepared by:** K Brook

**Introduction**

The bespoke Odour Management Plan (OMP) has been prepared to support the overall Environmental Management System in place at Red House Farm.

The overriding principle of the OMP is to ensure the day-to-day activities are carried out in accordance with this document to help minimise the overall environmental impact. There are no residential sensitive receptors within the installation boundary. There are two adjacent properties and a number of other properties within 400m of the installation boundary. There is no history of complaints. The nearest receptors to the installation boundary is the farmhouse for Red House Farm lived in by the operator and Red House Farm Lodge occupied by the operator’s father. The nearest neighbours are nearby housing to the south-east occupied by third parties.

**Setting**

The installation is located at National Grid Reference TM 17363 74950. Please refer to Appendix 4.

**Figure 1: 400m buffer zone and sensitive receptors**



m

300

150

0

**Table 1: Sensitive Receptor Locations and distance from Installation Boundary to nearest point of domestic curtilage.**

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| --- | --- | --- | --- |
| **Receptor** | **Type of Receptor** | **Distance from nearest housing (m)** | **Direction to Receptor** |
| Farmhouse adjacent to installation boundary – property owned by C Ford and occupied by farm staff | House | Adjacent | E |
| Red House Farm Lodge – owned and occupied by C Ford | House | Adjacent | N |
| South Green Farm | Farm | 75 | NE |
| Ash Lodge/Gissing Farm House/Gissing Farm/Gissing Farm Cottages/Cork Oak Barn/Mertle Cottages | Farm and Residential | <250 | N |
| Minor Road – (no-through road leading to neighbouring properties) | Public road | Adjacent | W |
| Hoxne Brick Pit | SSSI | 1,600 | N |
| Remains of medieval fishponds at the Leys | Scheduled Monument | 1,250 | E |
| Denham College Moated Site | Scheduled Monument | 1,700 | E |
| Remains of Eye Priory at Abbey Farm | Scheduled Monument | 1,960 | SW |
| The Pennings, Eye | Local Nature Reserve | 2,380 | SW |
| Gypsy Camp Meadows, Thrandeston | SSSI | 6,220 | NW |
| Mellis Common | Local Nature Reserve | 7,230 | W |

The purpose of this Odour Management Plan 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.

**Potential odour sources**

In accordance with Section 3 of H4 guidance, a risk assessment of odour pollution was performed (Appendix 5).

As a result, the following sources have been identified as contributing to a potential *medium risk* odour source:

* Odour emissions from feed selection
* Odour emissions from yard areas
* Odour emissions from housing
* Odour emissions from drinking water systems
* Odour emissions from ventilation
* Odour emissions from cleanout
* Odour emissions from carcase storage and disposal
* Odour emissions from feed storage
* Odour emissions from dirty water spreading
* Odour emissions from dust build up

**Pathways and receptors**

The pathway for all of 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. No complaints have been received from neighbours relating to odour from the farm. The topography of the site and significant tree planting on three sides of the main farmstead mitigates the risk of bioaerosols reaching the receptors.

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| --- | --- | --- |
| **Odour related issues** | Actions taken to minimise odour | **Completion date** |
| Effects of diet on odour and ammonia emissions (feed selection) | * Feed composition is closely matched to pigs’ requirements, especially protein
* Diets are ad-lib dry pellets feed, via sealed systems, reducing potential for dust release to the atmosphere
* Diets are continually reviewed with a professional nutritionist to ensure good performance
* Records of crude protein levels and diet formulation are kept in the site office.
 | On-going |
| Manure storage | * Manure is removed from the site on a weekly basis. Increased odour emissions are expected when store is out-loaded.
* Manure removal will be avoided when the wind direction is blowing towards receptors if cropping/soil constraints allow
* Liquid run-off from the manure store is captured and stored with the slurry in the lagoon
* Yard areas are scraped and cleaned down on a daily basis to prevent the build-up of dirty water
 |  |
| Cleanliness of yard areas | * Yard surfaces are properly maintained
* Loading ramp area kept clean and any dirty or lightly contaminated water is exported.
* The drainage system works effectively to prevent ponding of water, which may release strong odours. This is achieved by gradient and type of yard surface, ensuring effective drainage. Inspection and maintenance in the long term will ensure that this remains the case. Dirty water is removed through a sealed system, preventing contamination of clean water drainage systems.
 | On-going as part of the inspection and maintenance programme |
| All housing and management | * Any new build will be in line with BAT requirements, as will be any future refurbishments
* All pens and stock are checked for cleanliness as part of daily welfare checks
* All pens and buildings are cleaned out in accordance with written cleaning plan
* Potentially odorous spillages (eg. feed ingredients) are cleaned up promptly
* Stocking density maintained at or below levels set out in Defra Welfare Regulations
* Ventilation corresponds to animals’ requirements to optimise the housed environment for the pigs and air quality conditions. Air quality is checked as part of minimum twice daily checks on stock.
* Build-up of waste feed in front of feeders is prevented and waste feed is removed from pens
* Feeders and drinkers have been designed to prevent wastage and leaks
* Pen and wall surfaces are constructed from non-porous smooth surfaces
* Troughs and feeders are constructed and arranged to minimise feed waste and prevent pigs from climbing in or wallowing.
* Manure storage emptied frequently – i.e. at fortnightly intervals or before reaching the 100t threshold
 | On-going |
| Cleaning out | * Cleaning out occurs as soon as possible after de-stock to allow maximum time for the building to dry before restocking.
 | On-going |
| Animal carcases | * Pig carcasses are kept in covered storage and disposed of promptly by licenced deadstock collector once per week or sooner if required
* Storage container is sealed preventing leaks
* Deadstock collector delivers a washed and disinfected carcass bin when they collect a full one.
* No incinerator.
 | On-going |
| Feed delivery and storage | * Dry feeds are stored in silos. No liquid feed storage.
* Dry pelleted feed is distributed via enclosed feed system through to troughs in pens.
* Hoppers are filled with a chain and disc system which runs every 15 minutes, so the feed never falls any great distance as it is topping up little and often
* The feed storage is checked by the site manager in accordance with the site’s maintenance schedule. Any leaks are repaired quickly and any spillage cleaned up
* All spillages are cleaned up and disposed of promptly
 | On-going |
| Spreading dirty water | * Applied to land in the locality which is owned and managed and under full control of the operator.
* Spreading is co-ordinated with local weather forecasts and follows NVZ regulations and Defra Code of Good Agricultural Practice (managed separately)
* Dirty water is applied by dribble bar, trailing shoe or injection to reduce creation of bioaerosols. (managed separately)
 | On-going |
| Dust (especially as an odour vector) | * All dry feed ingredients are stored in covered bins and fed via contained delivery system to feeders.
 | On-going |
| Dealing with odour complaints  | * Any odour complaints will be reported to P Elliott who will log and investigate causes of all odour complaints; identifying the source of the odour issue and monitoring odour levels at the site boundary as part of the investigation
* The complaint details and subsequent investigation will be recorded on the site complaint form and a copy will be kept in the site office.
* If two or more odour complaints linked to the installation have occurred during any given pig cycle and are unresolved at the end of that cycle the Operator will submit to the Environment Agency an action plan for additional measures to rectify the problems and reduce risk of odour pollution. This plan will be submitted for approval in writing to the Environment Agency. Pig placement for the next cycle will not commence until this action plan is agreed by the Environment Agency.
 | On-going |
| General comments | * Neighbours will be informed (where necessary) prior to activities which may cause odour
* Odour levels will be monitored on site by all staff. The source of abnormal odours will be identified and appropriate action will be taken to reduce odour levels back to normal levels
* The effectiveness of odour control measures will be reviewed at least once a year or sooner in the event of any complaint or relevant changes to operations.
* The operators’ own household is the nearest sensitive receptor so the permit operator is able and responsible for checking odour emissions daily; checking for any abnormal levels or potential for increased odour production. Site tours will be undertaken daily by the operators or their representative to ensure odour and risks of odour are assessed. Where there is potential for abnormal elevated odour emission, control measures will be put in place to mitigate the risk.
* The road to the farm passes the closest receptors enabling staff to also notice if there is an elevated odour emission at that point. Staff are briefed to report promptly any such occasions.
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**Contingency Plan**

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| **Abnormal Scenario** | **Remedial Action** | **Time Limit** |
| Damage to building | Damage would be repaired asap and, depending on nature of damage, area made safe and covered/contained in the meantime to prevent increased odour emissions and/or destocked in the immediate area if necessary. | Depends on severity of damage and whether environment or animals are at risk.Immediate action required to make safe.Mitigation measures will continue until the damage is repaired and it is assessed as safe to revert to normal practice. This will be recorded in the inspection and maintenance records. |
| Slurry store damage or overflow | Contingency margin in store capacity so overflow risk low. Availability of other storage options off-site.Tank should be repaired immediately and any contaminated water held or collected in the meantime. | If any risk of pollution, immediate action must be taken to remove risk. Mitigation measures will continue until the damage is repaired/situation remedied and it is assessed as safe to revert to normal practice. This will be recorded in the inspection and maintenance records and/or incident records. |
| Pipework damage | Immediately stop use of the pipe. Replace/repair pipe. Immediately install additional containment measures in the meantime if needed (e.g. using straw/sand or bucket brush) | Immediately stop potential for leak.Replace/repair pipe - Time frame depends on dependency on pipe.Mitigation measures will continue until the damage is repaired and it is assessed as safe to revert to normal practice. This will be recorded in the inspection and maintenance records and/or incident records. |
| Livestock illness | Veterinary advice and treatment plan would be referred to and additional measures taken where necessary; i.e. more frequent removal of FYM from pens where e.g. gastrointestinal illness or behaviour problems is leading to increased mucking of the pens. Where pigs need removing from their peers, hospital pens are included within each building – but these are managed exactly the same as the other pens, with dirty areas removed frequently, preventing elevated odour levels. A decision making protocol is also in place regarding acceptable treatment windows and when to make the decision to euthanise. This reduces the risk of animals which aren’t recovering in an acceptable timeframe for high welfare, or aren’t likely to be ultimately fit for transport, being kept on in hospital pens indefinitely.In the case of a notifiable disease outbreak, the site is designed for accommodating pigs to their full adult size so the feed, water and space requirements are correct for an extended housing period if required. The nature of the muck management system means that pens can be cleaned regularly throughout the batch. We would not expect an increased daily odour output for these reasons. In the instance that it is not possible to remove FYM from the site at all, advice would be sought regarding location for a temporary field heap and a tanker would be deployed to increase the dirty water holding capacity on the site. Advice from the EA and APHA would be sought. | Immediate referral to veterinary advice for prompt treatment and management plans.Assess the risk for increased odour production, and adjust bedding and mucking out schedules accordingly. Mitigation measures will continue until the situation is under control and it is assessed as safe to revert to normal practice. This will be recorded in the animal management records and/or incident records as applicable.  |
| Fire  | Control the fire as quickly as possible. If the fire is not immediately possible to extinguish and is spreading, contact fire brigade immediately and remove at-risk animals if safely possible, also remove animals from nearby buildings. Unless there is sufficient, and safe, accommodation available on site at the correct stocking densities - arrange for removal of these animals from the site within 8 hours maximum. There is contingency margin for housing available within the operators control. All firewater will be draining to the dirty water tank, so this will need frequent emptying and appropriate disposal/removal to other storage tanks/tankers. Contact Environment Agency for advice on disposal.Follow fire brigade advice regarding creation of fire breaks/protection and removal of flammable materials (e.g. straw bales),Once the fire is under control and it is safe to do so, remove all burnt material within 24 hours and thoroughly clean and decontaminate the area.  | Ring fire brigade immediatelyRefer to Emergency Action Plan – Fire sectionRing haulier/pig group (see Emergency Contacts) to arrange for movement of stock, if necessary, within 8 hours maximum.Mitigation measures will continue until the damage is repaired/situation remedied and it is assessed as safe to revert to normal practice. This will be recorded in the inspection and maintenance records and/or incident records. |
| Diet problems | In the case of a diet issue (e.g. where feed quality was below standard or feed type was incorrect), we have the capacity to remove and replace feed in the bins. Diets are continually reviewed by a professional nutritionist and feedback on feed quality and requirements given via the pig group and veterinary practice.N.B. Diets are only sourced from UFAS accredited mills. | Contact pig group/owner immediately (and vet if applicable).Mitigation measures will continue until the situation is remedied. This will be recorded in the inspection and maintenance records and/or incident records. |
| Failure of containment of food | In the case that a feed pipe leaks within the pig buildings, the system should be stopped and leaked feed cleared up promptly. No potential for contamination of clean water system. In the case that the feed bin leaks or the blow pipe fails and feed is spilled on to an outdoor area, the surface water drainage point should be immediately protected to prevent contamination of clean water systems. Any and all spillages should be cleaned up immediately. For uncontaminated feed fit for animal consumption, it can be transported by teleporter bucket to the feeders in pens or blown into another silo by the feed company vehicle (dependent on biosecurity risk). For any major spillage greater than 500kg that is unfit for animal consumption the spillage will be cleared up in to skips and removed from site for disposal via the appointed waste contractor within 24 hours of the incident. For any spillage less than 500kg, feed would be cleared up using bags and placed in the onsite general waste container for disposal.  | Stop the potential for leaks immediately.Protect clean water inlet immediately by shutting it off or containing the spillage area through use of e.g. straw/sandbags. Protect from rainfall and pests if it is not possible to remove the spilled feed, or feed from a damaged bin, within a few hours. The affected area/feedbin should be free of feed within 24 hours. Mitigation measures will continue until the damage is repaired/situation remedied and it is assessed as safe to revert to normal practice. This will be recorded in the inspection and maintenance records and/or incident records. |
| Carcass disposal route failure | In the case of increased mortality or/and culling of large numbers, the deadstock collector must be able to collect all deadstock immediately or within short timescale. Where immediate collection is not possible, all carcases must be stored in sealed, locked containers capable of retaining all effluents and of reducing risk of odours.In the case of normal contracted deadstock collector being unable to collect the carcases within the required timeframe, there are multiple other collectors used within the wider supply chain which can be called on.  | Immediate communication with deadstock collector(s) and/or pig group/owner.Mitigation measures will continue until the situation is concluded/remedied and it is assessed as safe to revert to normal practice. This will be recorded in the animal management records and/or incident records as appropriate. |
| Temporary storage and disposal of any wastes arising from incidents | Used sand, straw bales, and other waste materials arising from containing pollutants should be stored on an impermeable surface protected from drainage routes.  | Where applicable, the waste contractor (see emergency contacts) should be contacted within 24 hours of an incident and arrangements made for safe disposal.Mitigation measures will continue until the situation is remedied. This will be recorded in the incident records. |

**Summary**

Bio-aerosols/odour are assessed daily by operators. Air quality within the buildings is also assessed (sensory assessment). Weather monitoring/ forecasting also help to assess the risks and take additional actions to mitigate them if necessary.

Every effort is made to minimise impact on the closest receptors and as a result no complaints about bio-aerosol/odour emissions have been made.

Management techniques will be continually assessed to improve control of odours and emissions.

In accordance with H4 Odour Management guidance, the effectiveness of odour control measures will be reviewed at least once a year, in the light of any building and management changes and on the outcome of investigations into the causes of any future complaints, if any occur.

Any complaints will be recorded and investigated using the guidance from EPR 6.09 3.1 and 3.2 odour and emissions management on intensive livestock installations.

If two or more odour complaints linked to the installation have occurred during any given pig cycle and are unresolved at the end of that cycle the Operator will submit to the Environment Agency an action plan for additional measures to rectify the problems and reduce risk of odour pollution.

This plan will be submitted for approval in writing to the Environment Agency. Pig placement for the next cycle will not commence until this action plan is agreed by the Environment Agency.

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