

Falkingham-Odour management plan

E. Falkingham & Sons LTD

Odour Management Plan

Farm name: Denby Farm **Operator:** Ian Edwin falkingham **Permit number:** TBA

Date: 18th November 2022 **Prepared by:** A L Clayton

This risk assessment/management plan has been prepared to support the overall Environmental Management System in place at Denby Farm. The overriding principle is to ensure that the day-to-day activities are carried out in accordance with this document to help minimise the overall environmental impact. There is only one receptor close to the installation: Denby Farmhouse (1) which is owned and occupied by the operator the next neighbouring farm being 416m away with the next over 1000m away.

Setting

The installation is approximately 1.16 hectares in size, located at National Grid Reference TA 07231 68421. The proposed installation is approximately 2.42 km due west of the village of Rudston, East Yorkshire. The one receptor within 400m of this site is located south of the proposed installation. Figure 1 shows the location of the installation with the location of the receptor which have been considered in this odour management plan, these locations are summarised in Table 1.

Figure 1: Receptors in the vicinity of Denby Farm



Table 1: Receptor locations

Receptor	Distance from site	Direction	Type of receptor
Receptor 1: Denby Farmhouse	260m	South	Residential

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.
- This plan will be reviewed at least once a year and/or in the light of any odour issues or complaints.

Potential odour sources

A risk assessment of odour pollution was performed and 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 slurry storage
- 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 delivery and storage
- Odour emissions from slurry spreading
- Odour emissions from dust build up
- Odour emissions from out loading.

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 from neighbours relating to odour from the farm have been received to date. The prevailing wind direction is westerly and therefore odour emission should be predominantly blown away from nearby neighbours.

Odour related issues	Actions taken to minimise odour	Completion date
Effects of diet on odour and ammonia emissions (feed selection)	<ul style="list-style-type: none"> • Feed composition is closely matched to pigs' requirements, especially protein • Growing and finishing pigs are fed three different dry diets • 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
Slurry storage	<ul style="list-style-type: none"> • Slurry is collected in under floor tanks and removed regularly without stirring if possible. • Slurry will be pumped via underground piping to main slurry store. • Slurry introduced beneath surface of store • Unnecessary running of vacuum pumps will be avoided. 	On-going
Cleanliness of yard areas	<ul style="list-style-type: none"> • Yard surfaces are properly maintained with cracked concrete repaired. • Yards and open surfaces are designed to ensure effective separation of uncontaminated rainwater from slurry • The slurry collection system works effectively to prevent ponding of slurry, which may release strong odours. 	On-going
All housing and management	<ul style="list-style-type: none"> • 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 (feed ingredients, slurry, etc.) are cleaned up promptly • Stocking density maintained at or below levels set out in Defra Welfare Regulations • Temperature and humidity in animal housing is monitored daily and controlled automatically to optimise the housed environment for the pigs and air quality conditions • Ventilation corresponds to animals requirements; slatted housing is insulated to help keep cool in the summer • 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. 	
Cleaning out	<ul style="list-style-type: none"> • Cleaning out occurs as soon as possible after destock • Yards and open surfaces designed to ensure effective separation of uncontaminated rainwater from slurry • The slurry collection system works effectively to prevent ponding of slurry, which may release strong odours • Slurry will be pumped via underground pipes to main slurry store 	On-going

Ventilation	<ul style="list-style-type: none"> • Ventilation corresponds to animals' needs and is checked to be functioning correctly • Air outlets positioned to optimise dispersion to atmosphere • Slatted buildings insulated and insulation kept in good order. 	On-going
Animal carcasses	<ul style="list-style-type: none"> • Pig carcasses are kept in covered storage bins and disposed of promptly by registered waste collection • Storage container is covered and sealed preventing leaks 	On-going
Feed delivery and storage	<ul style="list-style-type: none"> • Dry feeds and feed ingredients are stored in covered hoppers to prevent the feed from getting wet and spoiling • Dry feed is distributed via sealed pipework, minimising the opportunity for odour release • The feed storage and distribution pipework is checked by the site manager in accordance with the site's preventative maintenance schedule. Any leaks will be repaired quickly and any spillage cleaned up • Dry feed is delivered ready mixed. All spillages are cleaned up and disposed of promptly • Waste food stuffs are not allowed to enter long-term slurry store. 	
Spreading slurry	<ul style="list-style-type: none"> • Slurry is applied by tanker with low trajectory splash plate or boom • Slurry is applied to growing crops where possible, all un-cropped land is cultivated within 12 hours of application • Spreading of slurry is co-ordinated with local weather forecasts and follows Defra Code of Good Agricultural Practice • Slurry spread in accordance with NVZ regulations. 	On-going
Dust (especially as an odour vector)	<ul style="list-style-type: none"> • Unit is relatively isolated so there is minimal risk of dust causing direct odour nuisance • All dry feed ingredients are stored in covered hoppers/bins 	On-going
Out loading of pigs to slaughter	<ul style="list-style-type: none"> • Loading ramps are kept clean and well maintained with no ponding of effluents and drains straight to under shed slurry store 	On-going
Dealing with odour complaints	<ul style="list-style-type: none"> • Any odour complaints will be reported to the site manager Ian Falkingham. The site manager will log and investigate causes of all odour complaints. The site manager will identify the source of the odour issue and will monitor 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. 	On-going
General comments	<ul style="list-style-type: none"> • 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. 	
Contingencies	<ul style="list-style-type: none"> • In the event of ventilation failure, contact engineer to assess and repair as necessary. If failure is due to power outage use emergency generator. If during warm weather open doors and vents as necessary to keep air circulation and 	

	<p>maintain health of pigs and air circulation. If during winter months check air temperature and monitor pigs for signs of cold.</p> <ul style="list-style-type: none">• Diet Problems in terms of feed delivery. Assess longevity of problem and instigate hand delivery of feed. Identify location of breakdown/blockage and move pigs to unaffected pens if possible until repairs can be affected.• Failure of containment of food. Establish if this is affecting feed delivery and if so instigate hand delivery of feed to pigs. Sweep up any spilt feed. Instigate repairs to feed tank/delivery system.• Carcasses, they will be collected by a registered disposal company. Carcasses will be collected on a weekly basis. In the event of disease outbreak any carcasses will be disposed of off-site.	
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