

Environmental Risk Assessment
Odour Management Plan for Lockes and Blackhall Farm

Farm name: Lockes & Blackhall Farm **Operator:** North Farm Livestock

Date: July 2020 **Prepared by:** E. Jackson

Introduction

This bespoke Odour Management Plan (OMP) has been prepared to support the overall Environmental Management System in place at Lockes & Blackhall Farm. The overriding principle of this 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 a number of receptors within 400m of Blackhall Farm, however there are no receptors within this distance of Lockes Farm.

Setting

Blackhall Farm is approximately 750 m to the north-north-west of Locks Farm and is approximately 1.1 km to the south-south-east of Edgefield. Blackhall Farm is at an altitude of around 62 m with the land rising towards higher ground to the north and falling towards the River Bure Valley to the south.

Figure 1 shows the location of the Lockes and Blackhall Farm with a 400m radius. The figure shows the location of the closest receptors which have been considered in this odour management plan, these locations are summarised in Table 1.

Figure 1: Receptors in the vicinity of Lockes & Blackhall Farm

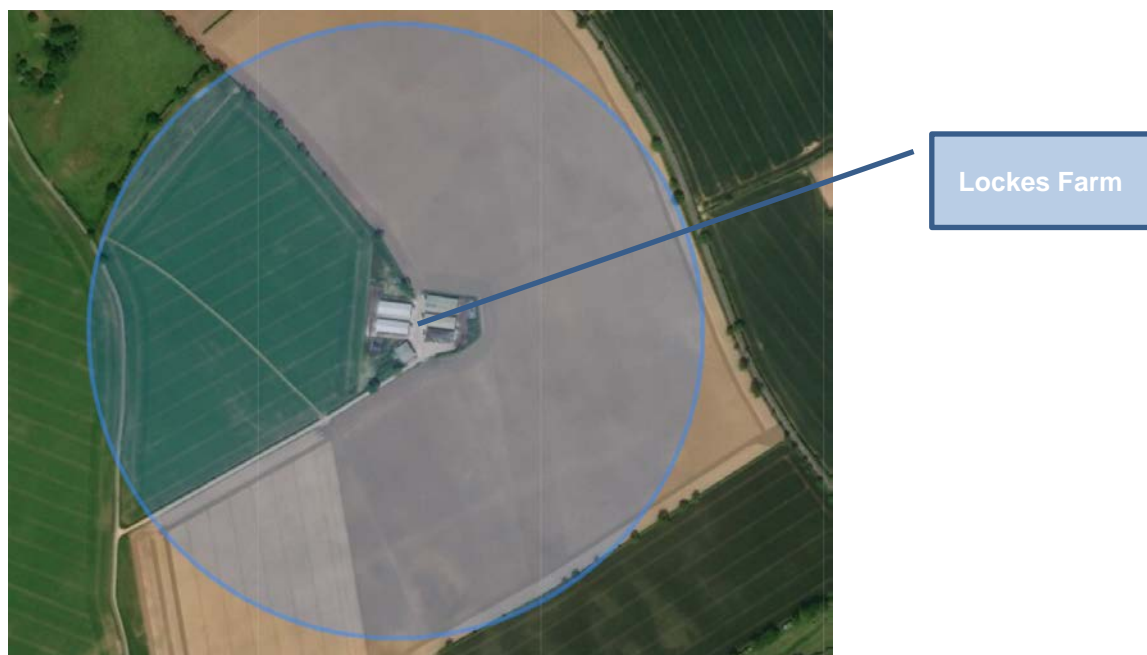


Table 1: Receptor locations

Receptor	Distance from site	Direction	Type of receptor
Receptor 1: House 1	50m	North East	Residential
Receptor 2: House 2	210m	West	
Receptor 3: Row of cottages	100m	North West	
Receptor 4: Edgefield Street	350m	West	
Receptor 5: Dotsell Cottages	255m	North East	

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

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

- Odour emissions from feed selection (maximum of 72 tonnes of feed stored at Lockes and 30 tonnes stored at Blackhall on site at one time)
- Odour emissions from manure storage odour emissions from yard areas
- Odour emissions from housing
- Odour emissions from drinking water systems
- Odour emissions from cleanout
- Odour emissions from carcase storage
- Odour emissions from feed delivery
- Odour emissions from manure and dirty water 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 (with the closest house owners of Cranley Barn Farm) the wind direction will significantly influence how receptors are affected. No complaints have been received from neighbours relating to odour from the farm. The prevailing wind direction is south westerly and therefore odour emission should be predominantly blown away from nearby neighbours.

Measuring

Daily olfactory checks will be done to identify any abnormal housekeeping odours and data will be recorded.

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 ad-lib three different diets • Diets are continually reviewed by BQP's dedicated nutritionist to ensure good performance • Records of crude protein levels and diet formulation are kept in the site office 	On-going
Manure storage	<ul style="list-style-type: none"> • Manure is stored on site on concrete pads and removed three times per year. Increased odour emissions are expected when store is out-loaded. We will avoid removing manure when the wind direction is blowing towards the residential properties • Liquid runoff from the manure store is captured and directed to the dirty water storage system • Yard areas are scraped and cleaned down on a daily basis to prevent the build-up of dirty water 	On-going
Dirty water storage	<ul style="list-style-type: none"> • Dirty water store designed and operated with effective emptying • Dirty water is removed from site on a regular basis 	On-going
Cleanliness of yard areas	<ul style="list-style-type: none"> • Yard surfaces are properly maintained • Manure from all housing scraped directly into the muck pad when houses are cleaned out • Yards and open surfaces are designed to ensure effective separation of uncontaminated rainwater from dirty water and manure 	On-going as part of the inspection and maintenance programme
All housing and management	<ul style="list-style-type: none"> • The existing housing has been reviewed as being BAT and therefore no improvements are necessary • All pens and stock are checked for cleanliness as part of daily welfare checks • All pens and buildings are scraped through daily and cleaned and disinfected after each batch • Potentially odorous spillages (feed ingredients, manure etc.) are cleaned up promptly • Stocking density maintained at or below levels set out in RSPCA Assurance • 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. 	On-going
Emissions from housing (straw based)	<ul style="list-style-type: none"> • Pens well bedded with clean, dry bedding to ensure clean animals and to bind ammonia, pens are scraped out daily and manure is transferred to muck store, and fresh straw is added daily. • All scraped areas within buildings are maintained and managed to prevent ponding • Bedding material is stored to ensure it is kept clean and dry to prevent wastage and deterioration. 	On-going

Cleaning out	<ul style="list-style-type: none"> • Cleaning out occurs as soon as possible after each batch • Yards and open surfaces designed to ensure effective separation of uncontaminated rainwater from dirty water and manure • Muck is removed from site three times per year. 	On-going
Animal carcasses	<ul style="list-style-type: none"> • Pig carcasses are kept in covered and locked storage and disposed of promptly and are collected in conjunction with the Fallen Stock Scheme as often as practicably possible. 	On-going
Feed delivery and storage	<ul style="list-style-type: none"> • Dry feed is 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, any leaks will be repaired quickly and any spillage cleaned up 	
Spreading manure	<ul style="list-style-type: none"> • FYM is exported to be utilised as soil conditioner and organic fertiliser. 	On-going
Dust (especially as an odour vector)	<ul style="list-style-type: none"> • Both Blackhall and Lockes Farm are 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
Dealing with odour complaints	<ul style="list-style-type: none"> • Any odour complaints will be reported to the site manager. 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 compliant 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. 	