Crockway Farms Limited
Danby Farm Pig Unit

SK 9889 0718

020 Dust and Bioaerosols Management Plan

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Prepared By:

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1.0 Dust Management Plan

1.1 Introduction

This Dust and Bioaerosol Management Plan (DMP) will assist Crockway Farms Lit in effectively managing potential dust releases associated with the operations at their redevelopment of Danby Farm Pig unit.

1.2 Status of the DMP

This DMP is a "live" document, the monitoring procedures, responsibilities and compliance actions and should be updated as appropriate

2.0 Site Background

Crockway Farms Limited have been operating pig units for many years and have recently taken on the pemit for the site following redevelopment of the unit. There is no record of any complaint due to dust emissions from the pig unit.

2.1 Facility Overview

Danby Farm will have a capacity for:

Production Pigs – 13000

The site is run as a fully slatted based system with frequent slurry removal. The buildings were constructed in 2018 with high velocity roof fans. Slurry is piped through the slurry acidification unit to the newly constructed slurry store.

The new acidification system will reduce ammonia emissions by 64%.

The unit operates a mostly dry feed system, the diets fed to all the pigs throughout all stages are balanced nutritionally and formulated in such a way to minimise the production and emissions of ammonia, odours, dust and the overall environmental impact of the farming activities. The unit operates a reduced crude protein diet and reports back to the Environment Agency on a regular basis to confirm compliance.

Nipple drinkers are used throughout to prevent water wastage. Meter readings will be taken on a regular basis to monitor water consumption and to detect the presence of any leakages.

All lorries are washed out and disinfected regularly, maintaining cleanliness to a high standard. Each lorry is equipped with a shovel, bag and brush for instant clean up of accidental spillages, thus reducing emissions of both dust and odour.

These measures are intended to reduce the production and emission of ammonia odours and to prevent dust and liquids escaping into the environment.

The batch system enables the housing to be cleaned out on a regular basis, ensuring all pig housing is as clean as possible.

All dead stock are disposed of via deadstock collection, bins as per the site plan to avoid contamination in lockable bins.

2.2 Potential Dust Sensitive Receptors

For the purpose of this Dust Management Plan below are described the receptors considered.

Receptor Description	Direction	Pig unit /Slurry lagoon
Danby Farm House	Part of site	Pig unit
Danby Bungalow	West	Pig unit

2.3 Potential Dust Sources and Activities

Measures to control dust have been considered in the context of the units setting and the operations that are undertaken. Identified operations with the potential to produce and release dust at the facility are described below. This DMP has been developed to ensure that potential dust, from each part of the process, is minimised through effective management to an acceptable level.

Table 1. A summary of at source control methods for particulate reduction on farm

Source of dust	Method	How the reduction is achieved
Pig Feed	Dust from silos	Feed delivery systems are sealed to minimize atmospheric dust and cyclones are fitted to the bins to eradicate dust on delivery
	Storage of feed	All feed is in covered bins
	Feed spill control	Collection of any feed spill is undertake as soon as possible
	Form of feed	Feed is supplied only from UFAS accredited feed mills, so that only approved raw materials are used. Feed specifications are prepared by the compounder's nutrition specialist.
	Feeding method	Feed is automatically controlled to ensure there is no over feeding and all pipework is checked regularly to ensure all is in good working order
Pig Bedding	Type of bedding	Fully slatted accommodation means no bedding is used apart from small volume for hospital accommodation
Pig Ventilation	Increasing ventilation	High velocity roof fans disperse the emissions and reduce the impact to the nearest sensitive receptor. Weekly inspection by the farm manager and the removal of visible dust build up where possible.
Pig House cleaning	Good Management	Buildings washed out between batches with disinfectant,.

Table 2. A Summary of control at exhaust methods of particulate abatement on farm

Dust Control	Method	How is reduction achieved
	None	Unless a complaint is received no further measures are required.

2.3.1 Liaison with Neighbours

If an action is being considered that may cause temporary dust, outside of the normal operational procedures, then before such action is taken the operations manager will be informed. Neighbours who may be affected will be contacted to advise them of the operation being undertaken, and that any increase in dust will be of a temporary nature.

3.1 Reporting

Emissions of dust will not be that which shall cause pollution. Any complaints received will be investigated (as described above) and recorded in accordance with Crockway Farms Ltd current procedures. This includes recording the following:

- Nature of the incident;
- Date of occurrence/s;
- Results of the investigation;
- Details of responses/ action plans implemented; and
- The event will be marked within the site's incident log.

The report will be made available to the Environment Agency on request.

APPENDIX 1

Site Location and sensitive receptors – Document 009 as part of Variation submitted Jan 2020

APPENDIX 2

Dust Report Form

Complaint Form

Actions and Outcome form

Dust Report Form

Staff Member:	
Time & Date:	
Location:	
Temperature:	
Wind Strength	
Wind Direction	
Intensity	
Location Sensitivity (See below)	**0 1 2 3 4 5**
Is the source evident?	
Comments and observations	
Corrective actions taken	
Was the odour eliminated	

0	Not detectable
1	Remote (No housing, commercial/industrial premises or public area within 500m)
2	Low Sensitivity (No housing etc. within 100m of affected area)
3	Moderate sensitivity (Housing etc. within 100m of affected area)
4	High sensitivity (Housing etc. within area affected by odour)
5	Extra sensitive (complaints arising from residents within area affected by dust)

Complaint - Actions and Outcome Record Sheet

Complainant
Record name, or 'withheld' if requested but not given by complainant, or 'not supplied' if it was not requested by the person receiving the complaint.

Name of person	
Organisation name	
Address	
Telephone	
Email address	

Complaint about and description

Odour	
Dust	
Noise	
Other	

Nature and record of complaint

Product / Service / Action / Document / Other (describe):

Person who used / expected it:

Date used /expected:

Nature of deficiency:

Complaint Number…….

Complaint handled by

Name of person	
Role	
Received by	Letter / email / telephone / meeting
Date received	

Action and issues being investigated
[Record details of any other organization / external person involved, if applicable. Add more action rows if necessary.]

Action 1 (Description)	
Action by (name of person)	
Date by	
Action 2 (Description)	
Action by (name of person)	
Date by	
Action 3 (Description)	
Action by (name of person)	
Date by	

Outcome

Communicated to

Date complainant notified	
Date any other parties notified	
Names of any other relevant parties (for each, state person and organization)	

Keep a copy of this record and file it with any other documents associated with the complaint, actions taken and the out come