

Sillinghurst farm

Permit number DP3931

Dust control policy

May 2023

Reviewed May 2024

11 May 2025

A dust control review was made on the farm in May 2023

We continually take measures to keep our dust to a minimum, we review products to find the lowest dust content.

Our usual wind direction helps keep dust to a minimum and from any neighbouring properties.

We use wood shavings that have been dust extracted and are blown into the chicken houses.

We buy bales of the same quality which are double wrapped.

The doors and vents are kept shut as much as possible during clean outs and set up.

Where dusty muck is being removed in dry weather it has been damped down or sheeted on the trailers.

Our farm is washed down before a new crop.

Having some hedges and natural vegetation borders help to keep dust from vents down.

The chickens have minimal disturbance to avoid dust escaping from the houses.

Ventilation is used to good effect and keeps dust to a minimum level.

Catching curtains help reduce dust escaping during catches.

Checklist 1 – Options for dust control at source

Source of dust	Method	How is reduction achieved?	Achieved Yes/No	Comments
Poultry feed	Dust from silos	Covers put over feed silo pipes.		NOT NEEDED
	Dust extraction in feed mill areas	Filters reduce dust emissions to the outside.		N/A
	Storage of feed	Use of covers for feed containers.	yes	
	Feed spill control	Collection of any feed spill is undertaken to avoid dust being generated.	yes	
	Form of feed	Mould feed into pellets so that dusty ingredients are bound together.	yes	
	Fat content	Increase fat content so that dusty ingredients are bound together.	yes	
	Spraying oil or water mist onto feed	Mainly prevents particles on surfaces from becoming airborne again by making them too heavy.		N/A
	Feed ingredients	Both wheat and barley have been found to be more dusty than maize.	yes	wheat used
	Feeding method	Hand feeding is preferable to screw auger systems and automatic feeders, which can produce increased dust levels.		NOT VIABLE
		Fit a material sock to the end of the auger pipe that delivers the feed directly into the bin.	NO	
		Cover the internal feed bin, e.g. with a ply-wood constructed top, and fit the auger pipe through the cover.		NOT VIABLE
		Feed pans may be preferable to tracks.		FEED PANS
Bedding material	Over administration of feed to birds	Avoid spilled feed crushed on the floor into particles which become airborne.	yes	
	Type of bedding	Sawdust and flax straw have been found to produce less dust than wheat, barley or rye straw.		DUST EXTRACTED SAWDUST / WOOD STRAWING
	Treatment of bedding	Dust from straw can be reduced effectively if the straw is humidified prior to application.		N/A

Source of dust	Method	How is reduction achieved?	Achieved Yes/No	Comments
	Amount of bedding	Deep bedding systems have been shown to contribute less dust to the environment than shallow bedding systems.	Yes	
	Application of bedding	Bedding applied internally.	Yes	
	Age of bedding	Fit catching curtains when unloading and augering bulk bedding into housing. As bedding materials break down to a dry friable litter dust production increases.	Yes	
Litter systems	Use of cage systems for layers	Dust emissions were much higher from houses using litter rather than cages with wire floors.		N/A
Relative humidity	Increasing humidity	Using misting systems to increase the humidity at low ventilation rates has been shown to reduce inhalable dust.		N/A
Ventilation	Increasing ventilation	An effective method is by significantly increased and controlled airflow velocities.	Yes	
House cleaning	Good management	Good house cleaning between flocks is essential to reduce the volume and potential for air contamination within the house and via exhaust systems.	Yes	
	Dust removal by vacuum cleaner	In-house dust removal by vacuum cleaner when the birds are in situ, reduces dust that could be disturbed by ventilation and emitted.		N/A
Genotype	Animal activity	Birds that exhibit higher activity levels create elevated levels of dust in the air.		Low activity numbers
	Feather crunchiness	Greater feather crunchiness causes increased dust levels at moulting periods.	?	?
Number of birds	Reduced flock numbers	Less birds, less feed, less litter means less activity to produce dust airborne.	Yes	Numbers reduced.
Crop cycle length	Lower final body weight	Birds grown to a shorter cycle length and lower weight produce less dust as most dust is emitted from day 20.	Yes	Birds gone by 52 day

Checklist 2 – Options for dust control at exhaust

Dust control	Method	How is reduction achieved?	Achieved Yes/No	Comment
Screens and wind breaks	Natural and artificial	Rely on exhaust air directed towards them, typically from end-wall mounted systems, so that dust particles intercepted and air lifted into the atmosphere for better dilution and dispersion. Vegetative screens seen to reduce dust levels by approximately 50%.	Yes	As in First page of Review
Dry filters	Collecting dust onto filters on exhaust vents	Dry filters can be fitted to internal air recirculation units.	Yes	In some of the units.
Electrostatic precipitation devices (ESP)	Attraction and collection of dust particles	ESPs impart electric charges to dust particles. Dust particles collected in a tray, or attracted to earthed surfaces.	No	N/A
Passive dry air cleaning units	Filter panels that collect dust across the width of the house	Fans are located in the end-wall of the house, in front is a plenum chamber fitted with linked filter panels making a filter wall. As air is drawn through to the fans the filter separates the dust into collection pockets that can be emptied. Commercial results suggest a 70% reduction in visible exhaust dust.	No	
Active wet cleaning units	End-wall ventilated systems	Water air-cleaning units intercept dust as air passes through a water or chemical spray, often over a pad matrix.		
	Roof ventilated systems	Water is sprayed over the exhaust air from exhaust chimneys, binding the dust. All units are connected together and used water falling on the roof goes to central acidified treatment basin where odour and ammonia molecules are trapped. Requires the air pressure to be more than 30 Pa.	Yes	
Scrubbers	Bio-filters and acid-filters	Air passes through a water scrubber to remove the larger dust particles. Next, in the bio-filter system the air is passed over moistened beds of plant material, removing dust, odour, microbes and pathogens. In the sulphuric acid filter scrubber, 99% of ammonia molecules and other odorous compounds can be removed.	No	Will look into this further