



DUST AND BIOAEROSOL MANAGEMENT PLAN

DEVELOPMENT: **EPR/VP3237WY/V0005**

LOCATION: **Bryn y Groes
Llanyblodwel
Oswestry
SY10 8NB**

CLIENT: **DV, GE & JD Wigley Partnership**

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INTRODUCTION

This Dust Management Plan (DMP) details the methods by which the site operator, DV & GE Wigley will systematically assess, reduce and prevent dust from the proposed poultry facility in accordance with the Environmental Permitting Regulations.

There are 3 properties within 100 metres of the development site for the Bryn y Groes Poultry Unit.

Name	Easting	Northing	Distance from unit to residential curtilage (m)	Orientation of receptor from installation	Description
AL11	324394	323000	99	South	1 Tanat View, Residential
AL12	324402	323002	99	South	2 Tanat View, Residential
AL13	324423	323009	97	South	Riverslea, Residential

The main sources of dust from poultry buildings are the birds themselves, the food and litter. Dust levels have found to vary depending on the number of birds, their age and the activity levels within buildings. The particle size of the dust will also vary although in general, particles smaller than 2 microns (2 μm) will account for around 70% of the number but only 5% of the mass. Larger particles of greater than 5 μm will account for less than 10% in number but between 40% and 90% of the dust mass. Dust particles can be emitted into the atmosphere through the ventilation systems so potential for impact is greater during the summer months when fans will be operating at a higher rate. Dust baffles can however be used over the ventilation fans to avoid any dust becoming airborne. The larger dust particles will tend either to not get into the ventilation fans, or if they are expelled from the building will be immediately deposited on the ground. Smaller particles can be carried in the wind. As the distance from the site becomes greater, the concentration of dust will fall to a level below air quality guidelines and become indistinguishable from normal background dust levels.

In addition, there is the potential for dust from vehicles moving over dusty surfaces and the wind blowing over dusty surfaces as well as through the ventilation system. The pathway for the transportation of dust particles is the wind with greater emissions of dust in stronger winds but being countered by greater dilution. Potential impacts of dust will be respiratory tract/eye irritation or the perception of health effects for sensitive receptors within 400m of the site. Mitigation available includes dust baffles over the ventilation fans, internal handling of manure and good practice during construction such as dampening down surfaces.

In conclusion, there are few receptors close enough to be significantly affected by dust as course dust will tend not to travel in significant volumes further than 100m from the source due to reductions in concentration and deposition with distance. The potential receptors are outside of this zone.

In addition, the prevailing wind is from the south-west away from residential properties. Impact from vehicles will not have a significant impact as the poultry vehicles will not considerably alter the baseline level of dust. The greatest dust emissions are likely to arise during the construction and decommissioning phases for a short period of time and it is considered that no significant impact in terms of dust nuisance will occur.

DUST MANAGEMENT PLAN

The DMP will be reviewed annually or in the event of any major changes to the site.

Hazard	Receptor	Pathway	Risk Management	Exposure	Consequence	Overall Risk
To Air						
Dust: Sources: Feed.	Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation	Air	Feed delivered in sealed systems. Dust socks fitted to silo exhaust pipes. Closed system delivery of feed from silo to poultry house. Feed spills dealt with promptly. Feed milling in open environment	Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.	Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation.	Not significant if carefully managed.
Bedding	Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation	Air	Use of suitable bedding materials, not blown into poultry house. Sawdust and flax straw less dusty than wheat, barley or rye straw	Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.	Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation.	Not significant if carefully managed.

Litter System	Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation	Air	Manure removal at the end of each crop cycle.	Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.	Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation.	Not significant if carefully managed.
Ventilation	Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation	Air	Use of roof extraction fans on all houses within the installation.	Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.	Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation.	Not significant if carefully managed.
House Cleaning	Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation	Air	Litter removed carefully during cleanout minimising dust. Full trailers sheeted before leaving installation.	Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.	Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation.	Not significant if carefully managed.
Bird Numbers/Type	Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation	Air	180,000 BROILER UNIT Reduced time within poultry house reducing dust levels.	Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.	Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation.	Not significant

DUST MONITORING

COMPLAINTS PROCEDURE

If a complaint is received from a local resident, an investigation shall be instigated within one working day to identify the cause of the non-compliance/complaint and the Dust Complaint Form, detailed below will be filled in and appropriate action will be taken to remedy the problem should the complaint be validated.

A complaint investigation may involve the identification and cessation of the activity or activities considered to be the cause of the non-compliance/complaint and/or the investigation of mitigation measures to reduce the dust levels from the activity or activities.

Any deviation from agreed working practices shall be identified immediately and conformance to the working practice reinstated.

DUST COMPLAINT FORM

Bryn-y-Groes, Llanyblodwel, Oswestry		Date Recorded:	Reference No:
Name and address of caller			
Telephone			
Location of caller in relation to the installation			
Time and date of complaint			
Date, time and duration of offending dust			
Callers description of dust			
Has the caller any other comments on dust?			
Weather conditions			
Wind strength and direction			
Any previous complaints relating to dust?			
Any other relevant information?			
Potential dust sources that could give rise to the complaint			
Operating conditions at the time of the offending dust			
Follow up – date and time caller contacted			
Action taken			
Amendment requirement to Dust Management Plan			
Form completed by (print)		Signed and date	