



NOISE & VIBRATION

DEVELOPMENT: **IPPC PERMIT VARIATION - EPR/KP3130HL/V005**

LOCATION: **Great Ness Poultry Farm
Rodefern Lane
Nesscliffe
Shrewsbury
Shropshire
SY4 1AT**

CLIENT: **Great Ness Poultry Limited**

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INTRODUCTION

This Noise Management Plan (NMP) details the methods by which the site operator, Great Ness Poultry Ltd will systematically assess, reduce and prevent noise emissions from the proposed poultry facility in accordance with the Environmental Permitting Regulations.

This NMP will:

- identify and employ 'all appropriate measures' to minimise the generation and noise and subsequent exposure / impact;
- limit exposure of people outside the site to levels of noise which would result in complaints; and
- minimise the risk of unplanned 'noisy' events which have the potential to result in offsite noise complaints

There are sensitive receptors within 400m of the proposed site and a Noise Assessment has been carried out as part of the Environment Impact Assessment process. In order to determine the existing noise climate in the sensitive external areas of the nearby residential properties, a noise monitoring survey was undertaken. The receptors selected were provisionally agreed with Shropshire Council prior to the survey being undertaken.

There are three properties within 400 metres of Great Ness Poultry (not including receptors owned by operator/operator staff):

NAME	EASTING	NORTHING	Distance from the additional units (m)	Orientation of receptor from installation
Rodefern Farm, Rodefern Lane, Montford Bridge, SHREWSBURY, SY4 1AT	340240	318357	115m	South-West
Ness Hall, Great Ness, NESSCLIFFE, Shropshire, SY4 2LB	339975	318894	331m	North
Oakfield, Great Ness, SHREWSBURY, Shropshire, SY4 2LB	340048	318890	292m	North

Noise & Vibration Risk Assessment

Hazard	Receptor	Pathway	Risk Management	Exposure	Consequence	Overall Risk
Noise Issues from large vehicles travelling to and from farm Mobile source	Neighbouring dwelling houses within 400m of installation	Air	Measures as described in SGN EPR6.09 (Farming) Noise Management at Intensive Livestock Installations. All vehicles are required to be driven onto and offsite with due consideration for neighbours. Timed delivery restrictions can be implemented (07.00 and 20.00hrs) to minimise disturbance. Bird catching frequently occurring during night time (reduced bird stress) All vehicles regularly maintained to minimise engine noise. Roadways are free from potholes and maintained in good order. Route selection made with due consideration to nearby neighbours.	Unlikely	Noise annoyance	Not significant if managed carefully.
Large vehicles delivering/collecting from site, litter removal, removal of dirty water	Neighbouring dwelling houses within 400m of installation	Air	Measures as described in SGN EPR6.09 Vehicles well maintained and driven slowly on site. Engines not left idling. Audible reversing warnings mostly during daylight hours, excepting during night catching. Dirty water and litter removal during daylight hours.	Unlikely	Noise annoyance	Not significant
Small vehicle movements Mobile Source	Neighbouring dwelling houses within 400m of installation	Air	Measures as described in SGN EPR6.09 Vehicles driven slowly on site for night catching. Low risk for other small vehicle movements during daylight hours.	Unlikely	Noise annoyance	Not significant
Feed transfer from lorry to bins Fixed Source	Neighbouring dwelling houses within 400m of installation	Air	Vehicles well maintained and designed to minimise noise during transfer.	Unlikely	Noise annoyance	Not significant
Ventilation Fans Fixed Source	Neighbouring dwelling houses	Air	Efficient extraction fans matched to size and population within house. Regularly maintained.	Unlikely	Noise annoyance	Not significant

	within 400m of installation					
Alarm System/Standby Generator Fixed Source	Neighbouring dwelling houses within 400m of installation	Air	System tested weekly (Mondays mid-morning to reduce disturbance) Specialist maintenance contract in operation. Frequent electrical servicing.	Unlikely	Noise annoyance	Not significant
Chickens Mobile Source	Neighbouring dwelling houses within 400m of installation	Air	Low risk. Noise during catching minimised by careful bird handling by trained catchers. Prompt departure of loaded lorries.	Unlikely	Noise annoyance	Not significant
Personnel Mobile Source	Neighbouring dwelling houses within 400m of installation	Air	Staff and contractors required to carry out their respective duties without creating excessive noise.	Unlikely	Noise annoyance	Not significant
Repairs and Servicing	Neighbouring dwelling houses within 400m of installation	Air	Repairs required are carried out with due regard for possible noise nuisance and unless exceptional are carried out during normal working hours along with routine servicing.	Unlikely	Noise annoyance	Not significant
Biomass Boilers						
Fans & motors	Neighbouring dwelling houses within 400m of installation	Air	Equipment has been selected with low decibel ratings and smooth operational profiles.	Unlikely	Noise annoyance	Not significant
Fuelling	Neighbouring dwelling houses within 400m of installation	Air	Use of precision-controlled feed systems to avoid sudden fuel drops or mechanical jolts.	Unlikely	Noise annoyance	Not significant

Noise & Vibration Management

The greatest noise impacts occur at Duckets Croft, the residential property to the north-west of the poultry farm. This property is owned by the Warner Family and is occupied by the poultry unit manager.

This NMP will be reviewed annually.

NMP Status

This NMP is a controlled document, and forms part of the site Management System.

The specification for the periodic review and update of the NMP will be set out within the site Management System and will be on an annual basis, as a minimum.

However, the NMP is intended to be a live document which serves as a reference during daily operations, and as such would be updated on a more frequent basis should the following occur:

- significant changes are made to the plant or operational practices;
- the EA requests that the NMP is updated, in their role as regulator; or
- complaints are received, which on subsequent investigation result in the identification of further control measures or remedial action, in addition to those set out within this NMP.

Noise Contributors

The three highest source contributors to the specific noise level are:

- the roof ridge fans and the gable end fans;
- broiler noise emanating from each shed; and
- the intermittent HGV movements.

Management of noise from these sources is key to this NMP, and techniques to minimise noise from these three components are discussed further.

Ventilation

The ventilation system fans will be inspected every crop turnaround, damaged fans will be with-drawn from use and noted for repair by an engineer. Broken or damaged machinery can generate excess noise resulting in greater stress for the birds as well as increased noises emissions. A full maintenance inspection will be undertaken by qualified engineers annually on the ventilation system.

The fans however are very quiet running, with the majority of the noise produced from the air movement being akin to a light breeze.

If a complaint of noise from the ventilation fans is received in the first instance the fans must be inspected to identify if maintenance is required.

After this inspection careful consideration of the on-time of the fan/s closest, or in line of sight, to the sensitive receptor must be made. It may be possible to reduce the fan on-time, and offset this decrease by an increase in the on-time of the fan/s furthest, or out of site, from the sensitive receptor. Noise levels may subsequently be mitigated.

Broilers

The broilers will be housed in the sheds.

It is assumed that broiler noise would be constant during both the daytime period and the night-time period, a scenario that may be considered unlikely. At times it is likely that the broilers will be much quieter.

If broiler noise does lead to complaints management techniques may be introduced to quieten the birds; such measures may include:

- increasing the temperature as broilers are noisy when cold;
- reducing draughts as draughts may cause broilers to cluster and elevate noise in a localised area; and
- reduce lighting as broilers are quieter when lighting is dimmed.

HGV Movements

Whilst HGV movements are infrequent, when they do occur, management of noise is required as they are a high contributor to the specific noise level.

If HGV noise does lead to complaints management techniques may be introduced to reduce the impact; such measures may include:

- instructing drivers to use low revs and drive at low speed;
- instructing drivers to turn engines off when stationary;
- maintaining the access road in good repair to avoid rattles and/or body slap; and
- restricting HGV arrival and departures to times when background noise levels are typically higher.

NOISE SURVEILLANCE

The purpose of noise surveillance is to demonstrate to the EA that the permitted development is being operated in such a manner as to minimise the noise impact at nearby noise-sensitive receptors. In the event that complaints are received noise monitoring would prompt remedial actions to ensure ongoing future compliance.

In the first instance a responsible person shall undertake fortnightly noise patrols at the nearby noise-sensitive receptors. Audibility or otherwise of the site should be logged in a register.

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 Noise Complaint Form, detailed in schedule 6, 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 noise emission levels from the activity or activities, for example the replacement of noisy plant with quieter alternatives and/or the use of temporary screening mounds.

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

If it is not possible to identify the source of the complaint it may be necessary to undertake a noise survey. If this is needed a suitably qualified person should be employed to undertake the required survey work. The date and results of the noise survey should be logged and reported in accordance with the relevant British Standard.



NOISE & VIBRATION COMPLAINT FORM

Great Ness Poultry Unit		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 noise			
Callers description of the noise			
Has the caller any other comments on noise?			
Weather conditions			
Wind strength and direction			
Any previous complaints relating to noise?			
Any other relevant information?			
Potential noise sources that could give rise to the complaint			
Operating conditions at the time of the offending noise			
Follow up – date and time caller contacted			
Action taken			
Amendment requirement to Noise Management Plan			
Form completed by (print)		Signed and date	