## AG4 Barn Lodge Farm Permit number EP3435FF Environmental Risk Assessment

The purpose of this Environmental Risk Assessment is to

- 1. Identify risks to the environment from activities at Barn Lodge Farm
- 2. Carry out a risk assessment of each activity
- 3. Identify appropriate measure to control them

Table 1 Odour risk assessment and management plan

What do you do that can harm and what could be harmed		Managing the risk		Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall risk
Selection of feed	Sensitive receptors within 400m	Air	Feed specifications prepared by nutrition specialist	Unlikely	Odour annoyance	Not significant
Feed delivery & storage	Sensitive receptors within 400m	Air	Sealed delivery system. Silos fitted with dust socks Spillages cleaned up immediately Integrity of silos checked every 3 months	Unlikely	Odour annoyance	Not significant if managed
Ventilation techniques	Sensitive receptors within 400m	Air	Designed to efficiently control humidity Ventilation managed for optimum conditions for birds Maintenance schedule in place	Unlikely	Odour annoyance	Not significant if managed
Litter conditions and management	Sensitive receptors within 400m	Air	Controls on feed and ventilation help maintain litter quality Drinkers designed to minimise spillage Vet helps maintain bird health Sheds built and maintained to avoid wet litter Inspection & maintenance program in place Wet litter removed and the cause investigated Sheds walked 3 times per day	Unlikely	Odour annoyance	Not significant if managed
Carcass disposal	Sensitive receptors within 400m	Air	Stored in locked bins treated with odour neutraliser in hot weather Regular carcass collection Bins washed and disinfected at turnaround	Unlikely	Odour annoyance	Not significant if managed carefully

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall risk
Management of drinkers	Sensitive receptors within 400m	Air	Systems checked daily and repairs reported	Unlikely	Odour annoyance	Not significant if managed carefully
Catching	Sensitive receptors within 400m	Air	Ventilation managed to reduce odours during catching Machinery movements kept to a minimum Catching planned for minimal disruption	Unlikely	Odour annoyance	Not significant if managed carefully
Litter removal	Sensitive receptors within 400m	Air	Trapped dust blown down internally Litter scraped up inside shed Lorries parked near shed doors Trailers sheeted before leaving the farm	Unlikely	Odour annoyance	Not significant if managed carefully
Cleaning & disinfection	Sensitive receptors within 400m	Air	Chemicals used by trained personnel only. Used as recommended by supplier	Unlikely	Odour annoyance	Not significant
Dirty water management	Sensitive receptors within 400m	Air	Yard kept clean Dirty water stored in underground tanks and emptied regularly Levels checked weekly	Unlikely	Odour annoyance	Not significant

Table 2 Noise risk assessment and management plan

What do you do that can harm and what could be harmed			Managing the risk		Assessing the risk	
Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall risk
Vehicle movements	Sensitive receptors within 400m	Air	Vehicles maintained in a good state of repair Drivers follow a protocol to reduce unnecessary noise	Unlikely	Noise annoyance	Not significant
Feed delivery	Sensitive receptors within 400m	Air	Vehicles and auxiliary equipment maintained in a good state of repair	Unlikely	Noise annoyance	Not significant
Alarm system	Sensitive receptors within 400m	Air	Weekly system checks are carried out at times to minimise nuisance to neighbours.  Electrics and equipment maintained to reduce the risk of back-up systems being used	Unlikely	Noise annoyance	Not significant
Repairs	Sensitive receptors within 400m	Air	If repairs are required, work is undertaken during the working day and with regard to possible noise nuisance.  Neighbours will be notified in advance if major work that may cause significant disruption is planned	Unlikely	Noise annoyance	Not significant
Birds	Sensitive receptors within 400m	Air	Noise from birds is not considered to be a likely cause for complaint. During loading, bird noise is minimised by careful handling and prompt removal of the lorry from site when full	Unlikely	Noise annoyance	Not significant
Personnel	Sensitive receptors within 400m	Air	Shouting or radio noise from personnel on site	Unlikely	Noise annoyance	Not significant
Ventilation	Sensitive receptors within 400m	Air	Noise from the fans is not considered a likely cause for complaint. Minimum ventilation used unless weather conditions require more	Unlikely	Noise annoyance	Not significant

Table 3 Fugitive emissions risk assessment and management plan

What do you do that can harm and what could be harmed			Managing the risk		Assessing the risk	
Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall risk
Fugitive emiss	ions to air					
Dust from litter or feed	Sensitive receptors within 400m Potential dust inhalation and nuisance Potential nutrient enrichment of surrounding land	Air	Use of suitable litter materials Pelleted feed delivered in sealed systems Litter tipped in to trailers from minimal height	Dust could potentially reach the road and neighbouring properties when a strong wind blows in their direction	Nuisance – dust on surrounding vegetation, cars, clothing	Not significant if managed
Ammonia from birds and litter	Sensitive receptors within 400m Potential inhalation and odour nuisance Potential nutrient enrichment of surrounding land	Air	Measures as described in How to Comply. Litter kept dry and friable Feed formulated to match flock requirements	The impact of ammonia air emissions have been assessed using the H1 methodology	Aerial deposition and direct toxic effect on trees. Nutrient enrichment of soils and changes to sensitive ecosystems	Not significant
Zoonoses and notifiable disease	Human health and livestock health	Air/direct contact	Detailed biosecurity precautions in place to prevent spread of disease	Unlikely	Human and livestock health implications	Not significant if managed
Pests						
Flies from manure heap could move off site and affect nearby residents	Neighbouring dwellings and businesses	Air	No manure stored on site Litter kept dry and friable	Unlikely	Flies are a vector of pollution that can harm health. Concerns about this pollution can cause off	Not significant

Table 4 Accident risk assessment and management plan

What do you do that can harm and what could be harmed			Managing the risk		Assessing the risk	
Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall risk
Spillage from chemical handling	Risk to groundwater	Cracks in concrete yard	Concrete areas are kept in a good state of repair and designed for containment. Inspection and maintenance program in place	Very unlikely	Contamination of groundwater and risk to local abstractors	Not significant
Spillage or fuel oil containment failure	Risk to groundwater	Surface water drainage system or cracks in the concrete yard	Regular inspection and any issues reported. Barriers in place to prevent vehicles damaging equipment. Levels monitored to avoid overfilling. Spill kit stored nearby in case spill occurs	Very unlikely	Contamination of groundwater and risk to local abstractors	Not significant
Feed spillage	Risk to groundwater	Surface water drainage system or cracks in the concrete yard	Any spillages of feed identified are swept immediately. The condition of the bin is checked frequently so that any damage or leaks can be identified and reported for repair. Silos located to avoid collision damage.  Dust socks on all silos	Unlikely	Contamination of groundwater and risk to local abstractors	Not significant
Dirty water containment failure	Risk to groundwater	Surface water drainage system or cracks in the concrete yard	There are no watercourses in the vicinity of the tank. The condition of the tank is checked frequently so that any damage or leaks can be identified and reported. Managing the diverter and the transportation of dirty water from the site is carried out by competent and trained personnel	Unlikely	Contamination of groundwater and risk to local abstractors	Not significant