Project Name	Broxfield Farm
EPR	0
Type (New Permit/Variation)	New

Farm Name		Operator		Permit Number	

Date	
Reviewed	

The following tables present the risk assessment for the following hazards
Odour
Noise
Fugitive emissions
Accidents

Odour

Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
Odour from feed mixing, delivery and storage	Neighbouring dwelling houses	Air	• Any spillage of feed around the bins is immediately cleaned up. • The condition of feed bins is checked frequently so that any damage or leaks can be identified • All feed is stored in covered silos • Feed delivery sealed to minimise atmospheric dust. • The condition of feed bins is checked frequently so that any damage or leaks can be identified In general, measures taken as described in *'How to comply with your environmental permit for intensive farming V2 Jan 2010*' (EPR 6.09 Sector Guidance Note)	Unlikely	Odour annoyance	Insignificant
Odour arising from problems with housing ventilation system Inadequate air movement in the house leading to high humidity levels. Inadequate system design causing poor dispersal of odours	Neighbouring dwelling houses	Air	• Natural ventilation only • Stocking density maintained at or below levels set out in Welfare Regulations. In general, measures taken as described in 'How to comply with your environmental permit for intensive farming V2 Jan 2010' (EPR 6.09 Sector Guidance Note)	Unlikely	Odour annoyance	Insignificant
			• Water wastage minimised by cleaning drinkers. • Regular maintenance and correct positioning to avoid overflow from feed and drinking systems. • Surfaces prevent water ingress and arranged to avoid build-up of stagnant water			

Slurry Management	Neighbouring dwelling houses	Air	• Stocking density at optimal levels to prevent overcrowding. • Pens kept clean. • Slurry and FYM removed in accordance with management plan In general, measures taken as described in 'How to comply with your environmental permit for intensive farming V2 Jan 2010' (EPR 6.09 Sector Guidance Note)	Unlikely	Odour annoyance	Insignificant
Carcass disposal Inadequate storage on site Disposal on site by incineration	Neighbouring dwelling houses	Air	• Carcasses are disposed via the Fallen stock scheme. In general, measures taken as described in 'How to comply with your environmental permit for intensive farming V2 Jan 2010' (EPR 6.09 Sector Guidance Note)	Unlikely	Odour annoyance	Insignificant
Buildings Cleaning and Disinfecting	Neighbouring dwelling houses	Air	• Pens and yards kept clean. Solid floor straw deep straw system with scrape passages cleaned weekly and full mucking out between each batch • Dirty water soaked up with straw or sucked up with slurry tanker as appropriate	Likely	Odour annoyance	Not significant if carefully managed
Odour arising from slurry/FYM spreading	Neighbouring dwelling houses	Air	FYM exported directly through a muck for straw arrangement with third party. Buildings are washed down only once per annum with dirty water soaked up by straw or sucked into slurry tanker	Unlikely	Odour annoyance	Not significant if carefully managed

Noise

Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
Noise from large vehicle movements travelling to and from farm	Neighbouring dwelling houses	Air	• Vehicles are to be driven on and off site with due consideration . • Deliveries of feed and other materials are made only during daytime wherever possible to minimise disturbance. • Animal movements are made only during daytime wherever possible to minimise disturbance with minimise stress to livestock. • Vehicles are to be well maintained to minimise engine noise and are driven slowly to and from the site entrance. . • Roads and tracks are to be maintained to minimise noise produced. In general, measures taken as described in 'How to comply with your environmental permit for intensive farming V2 Jan 2010' (EPR 6.09 Sector Guidance Note)	Unlikely	Noise annoyance	Not significant if carefully managed

Deliveries on site Waste removals from site Animal movements	Neighbouring dwelling houses	Air	• Vehicles are to be well maintained to minimise engine noise and are driven slowly to and from the site entrance. . • Engines are to be switched of when not in use. • Vehicles fitted with audible vehicle reversing warning systems are generally to be used on during daytime • Idling of machines avoided and engine revs kept low with an effective silencer	Unlikely	Noise annoyance	Insignificant
Small vehicle movements	Neighbouring dwelling houses	Air	• Small vehicles arrive during normal working hours therefore are seen as low risk	Unlikely	Noise annoyance	Insignificant
Feed transfer from lorry to stores	Neighbouring dwelling houses	Air	• Vehicles are well maintained and designed so that noise during feed transfer is minimised. • Conveyors and augers not operated when empty. • Blower and vacuum type delivery vehicles fitted with low noise units.	Unlikely	Noise annoyance	Insignificant
Operation of ventilation fans	Neighbouring dwelling houses	Air	• Not application natural ventilation only			
Alarm system/Standby generator	Neighbouring dwelling houses	Air	• Weekly system test (required by law) is carried out, timed in order to minimise nuisance to receptors. • All electrics and equipment are routinely maintained so that the back-up systems rarely need to be used in practice. • Back-up generator only used in case of mains power failure	Unlikely	Noise annoyance	Insignificant
Livestock	Neighbouring dwelling houses	Air	• Noise from pigs may be considered to be a cause for complaint during the growing period. • During loading, noise from animals is minimised by careful handling and by prompt removal of the lorry from the site when full	Unlikely	Noise annoyance	Insignificant
Personnel	Neighbouring dwelling houses	Air	• Staff and other contractors are required to carry out their work without creating excessive noise from shouting and use of radios, etc.	Unlikely	Noise annoyance	Insignificant
Maintenance of site	Neighbouring dwelling houses	Air	• If repairs to the site are required, the work is undertaken with due regard for possible noise nuisance and during the normal working day • In the event of major repair work being undertaken which is likely to cause significant noise and disruption, neighbouring residents will be notified in advance	Unlikely	Noise annoyance	Insignificant

Slurry Spreading	Neighbouring dwelling houses	Air	• Machinery operated at reasonable times where possible and idling avoided • Equipment maintained to optimum standards	Likely	Noise annoyance	Not significant if carefully managed

Fugitive emissions

Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	What is the overall risk?
Dust (including bio aerosols) from Feed	Neighbouring dwelling houses Surrounding vegetation: Covers leaves and inhibits photosynthesis Surrounding land: Nutrient enrichment of soils Contributes to respiratory problems for pigs and staff	Air	•Solid floor straw system, straw applied in closed building to minimise dust release • Dry feed delivered in sealed systems and stored in covered containers • Regular clearing of dust to prevent build up within buildings, as part of the disease control strategy	Unlikely	Nuisance: dust on surrounding vegetation, cars, clothing Smothering and direct damage to nearby vegetation Pigs/staff may get stressed and become unwell	Not significant if carefully managed
Ammonia from pig housing, animal wastes, dirty water	Neighbouring dwelling houses Contributes to respiratory problems for pigs and staff Also perceived as a nuisance as it contributes to odours Surrounding vegetation: direct toxic effect and changes to sensitive ecosystems Surrounding land: Nutrient enrichment of soils and changes to sensitive ecosystems	Air	• Mitigation measures as for odour • Feed formulated to match pig requirements and to minimise amount of ammonia produced • Rations under periodic review • Ventilation systems designed to provide optimal environment and regularly monitored and maintained • Regular monitoring of store contents and maintenance of facilities and equipment • Slurry and FYM removed in accordance with management plan • Dirty water soaked up with straw or sucked up into slurry tanker • Fully trained operators In general, measures taken as described in 'How to comply with your environmental permit for intensive farming V2 Jan 2010' (EPR 6.09 Sector Guidance Note)	Unlikely	Aerial deposition and direct toxic effect on trees Nutrient enrichment of soils and changes to sensitive ecosystems Respiratory problems in humans and mammals	Insignificant
Zoonoses and notifiable diseases	People and livestock	Air/ Direct contact	•Detailed biosecurity precautions in place, e.g. frequent stock inspection, use of disinfectants and appropriate clean overalls, boots, etc for staff, visitors and contractors, to prevent spread of disease • Secure site visitor policy • Livestock monitored for signs of disease and incidents reported quickly	Unlikely	Human and livestock health implications	Not significant if carefully managed

			• Use of a health plan, with specialist veterinary input in place.			
Nutrients such as N and P plus organic matter Wash water run off to nearby water course, muck and slurry spreading	Nutrient leaching from soil to surface waters and groundwater, causing eutrophication and increased biochemical oxygen demand (BOD) of watercourses	Land run-off	• Yard areas maintained as clean • In event of feed spilt on yard/roadways, it is cleaned up promptly • Manure management plan followed including NVZ rules	Unlikely	Pollution of water course leading to eutrophication and poisoning of flora and fauna	Not significant if carefully managed
Ammonia from storage of dirty water, slurry and housing	Sensitive nature and conservation sites identified in pre-application screening Is there a SSSI within 500m?	Air	As for odour and 'To water' above • Feed selected to minimise excretion of nutrients • Contaminated and wash water diverted into a dirty water store underground. • No SSSI with 500m of the installation	Unlikely	Direct toxic effect on trees, nutrient enrichment and acidification of soils Changes to sensitive ecosystems .	Insignificant
Waste materials, packaging, etc. – non- organic waste storage and disposal.	Neighbouring dwellings and surrounding habitats and countryside	Air	Policy to avoid production where possible • Dedicated storage areas and facilities • Collected by licensed contractors for re-cycling or disposal • Regular checks made for rubbish dumped by third parties	Unlikely	Amenity value of countryside spoilt by rubbish Possibility of causing harm to wildlife	Not significant if carefully managed
Vermin, Flies	Neighbouring dwelling houses	Air	• Site kept clean and tidy. No attractive cover or access to feed. • Food sources covered and secure from pests • Pest control programme in operation	Unlikely	Flies and rats are a vector of pollution that can harm human health Concerns about this pollution can cause offence and affect amenity	Not significant if carefully managed

Accidents

Spillages from storage and use of pesticides and fuel/chemicals/veterinary medicines	Vulnerable groundwater beneath site Watercourses, surface water bodies	Land run-off	Management techniques employed aimed at avoiding or minimising use where possible • Use of approved chemicals only • Operators fully trained and all equipment regularly maintained to avoid any in-field spillage or discharge • Fuel and oil storage appropriately bunded • No agrochemicals stored on installation • Veterinary medicines in locked store. • Accident Management plan in place • Maintenance and regular inspection, any defects repaired promptly • Foot dips on hard surfaces, • Dedicated storage for chemicals • Damaged containers or suspect packaging rejected at time of delivery	Unlikely	Contamination of surface and groundwaters Mortality in local flora and fauna	Not significant if carefully managed
Fuel oil in storage tank/vehicles escaping the containment	Land, local water course	The surface water drainage system	Fuel storage appropriately bunded and in accordance with SAFFO			
			• Standard operating procedures applied for loading and unloading			

Spillage of slurry, manure, feed and fuel due to operator error when loading and unloading	Land, local water course	Land, the surface water drainage system	• Any spillage of feed around the bins is immediately cleaned up The condition of feed bins is checked frequently so that any damage or leaks can be identified in accordance with the site maintenance and inspection procedure • Levels measured to prevent overfilling and sight gauge enclosed by guard • Barriers are in place to prevent collision • All suppliers are supervised while on site • Fully trained operators	Unlikely	Contamination of local water systems	Insignificant
Failure to contain firewater or off-site pollutants	Ditches, local water course	Land	• Accident Management Plan in place • Drain inlets to be covered by sandbags if necessary. • Contaminants to be contained and removed or directed to tanks as appropriate. • Slurry tankers to be utilised for additional storage capacity if required.	Unlikely	Contamination of local water systems	Insignificant
Incorrect disposal of wash water	Clean drain, ditches, local water course and soakaways	Drains, ditches, land	• Staff trained in correct operation procedures • All drains marked • All drains shown on drainage plan • All wash water collected to slurry tanker/soaked up in straw, appropriate bunding to be used at annual wash-down to prevent any dirty water entering clean water drainage systems	Unlikely	Contamination of ground and surface waters	Insignificant
Spillage when loading and emptying incinerator of non SRM material, e.g. ash containing trace elements, heavy metals, calcium, phosphate and dust	Neighbouring dwelling houses Surrounding land and water courses	Air, land and water	No incinerator			
Acts of vandalism which cause damage to structures and fittings	Surrounding land, surface and ground waters	Land, water	Site security. The site can be accessed only via the single access track	Unlikely	Contamination of soil and or water	Insignificant
Flooding and other storm damage	Surrounding land, surface and ground waters	Land, drains, water courses	• Good site layout and design • Maintenance of site infrastructure and local flood defences • Observe weather forecasts and weather warnings • There is no known flooding risk for this site. • Minimised surrounding concrete areas to reduce impact of sudden and high rainfall. .	Unlikely	Water and soil pollution	Insignificant
Power outage causing failure of slurry pumping systems resulting in tank overflow.	Surrounding land, surface and ground waters	Land, drains, water courses	No pumping systems installed and slurry removed by slurry tanker	Unlikely	Water and soil pollution	Insignificant