ODOUR

BPEX MODEL TEMPLATE B3.5 6A

Environmental Risk Assessment

Farm name: Peach Tree Farm Ottringham Hull East Yorkshire **Operator: White Rose Farms Ltd** **Permit number:** EPR/

Table 1 Assessment of Odour Risk

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
Odour from feed delivery and storage	Nearest neighbours (eg workplace 460m) to the installation	Air	Measures as described in 'How to comply with your environmental permit for intensive farming V2 Jan 2010' (EPR 6.09 Sector Guidance Note) Feed delivery will be sealed to minimise	Unlikely	Odour annoyance	Not significant

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			atmospheric dust. Any spillage of feed around the bin and sheds is immediately cleaned up. The condition of feed bins is checked frequently so that any damage or leaks can be identified and immediately repaired. The unit is relatively isolated so there is minimal risk of dust causing direct odour nuisance.			
• Odour arising from problems with housing	Nearest neighbours (eg workplace 460m) to the installation	Air	Measures as described in 'How to comply-Intensive Farming'.	Unlikely	Odour annoyance	Not significant

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
ventilation system • Inadequate air movement in the house leading to high humidity and wet bedding • Inadequate system design causing poor dispersal of odours.			The ventilation system (where applicable) will be regularly adjusted according to the age and requirements of the livestock and weather conditions. The ventilation system will be designed to efficiently remove moisture from the house. Stocking density maintained at or below levels set out in Welfare Regulations			
Slurry management:	Nearest neighbours (eg	Air	Measures as described in 'How to comply-Intensive Farming'	Unlikely	Odour annoyance	Not significant

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
• Odours arising from poorly managed dirty water/slurry collection, removal and distribution • Spillage of water from drinking systems • Disease and vice outbreaks	workplace 460m) to the installation		Controls on feed and ventilation (see above) help to maintain air quality Additional controls include: Insulated building materials to prevent condensation, where applicable Regular maintenance and correct positioning to avoid overflow from feed and drinking systems Concrete floors to prevent water ingress and surfaces			

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			arranged to avoid build-up of stagnant water Stocking density at optimal levels to prevent overcrowding Pens and yards kept clean Dirty water/slurry collection systems enclosed and regularly emptied to avoid anaerobic conditions Frequent removal of slurry/dirty water; wind direction observed			

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			Minimal agitation of the slurry tank on removal and potentially odorous spillages cleaned up promptly			
Carcase disposal: • Inadequate storage of carcasses on site	Nearest neighbours (eg workplace 460m) to the installation	Air	Measures as described in 'How to comply-Intensive Farming' Carcasses are placed in sealed containers immediately after they are removed and are promptly disposed of via a licenced deadstock collector There is no incinerator.	Unlikely	Odour annoyance	Not significant

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			All odour complaints are logged and investigated promptly.			
Buildings: • Cleaning and disinfection • Emptying dirty water/slurry tank	Nearest neighbours (eg workplace 460m) to the installation	Air	Pens and yards kept clean Dirty water collection systems enclosed and regularly emptied to avoid anaerobic conditions Frequent removal of slurry and dirty water, wind direction observed Minimal agitation of slurry tank (where applicable) on removal and potentially odorous spillages cleaned up promptly	Likely	Odour annoyance	Not significant if carefully managed

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
Odour arising from slurry spreading	Nearest neighbours (eg workplace 460m) to the installation	Air	As above Slurry which is landspread is highlighted in the manure management plan and also follows NVZ rules (where applicable) Intermittent activity only	Likely	Odour annoyance	Not significant if carefully managed
Odour arising from slurry. Storage – dirty water/slurry tank (where applicable)	Nearest neighbours (eg workplace 460m) to the installation	Air	Feed selection and ration managed to minimise excretion of nutrients Storage areas (including field heaps) sited away from neighbours	Likely	Odour annoyance	Not significant if carefully managed

ODOUR

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs, who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			Areas of open, dirty concrete minimised and cleaned regularly Stores regularly emptied			

NOISE

Table 2 Assessment of Noise Risk

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
Noise problems from large vehicles travelling to and from the farm. Mobile source	Nearest neighbours (eg workplace 460m) to the installation	Air	Measures as described in 'How to comply- Intensive Farming' Vehicles are required to be driven on to and off site with due care and consideration for neighbours Deliveries of feed and fuel (where applicable) are made only during the daytime, if possible, so that disturbance is minimised	Unlikely	Noise annoyance	Not significant if managed carefully

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			General animal movements made at social hours and of short duration with minimum stress All vehicles maintained so as to minimise engine noise and are driven slowly to and from the site Roads and tracks maintained to minimise noise produced			

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
Large vehicles on site for delivering feed, loading live livestock at end of the growing period, removal of slurry (where applicable) from houses Mobile source	Nearest neighbours (eg workplace 460m) to the installation	Air	Measures as described in 'How to comply- Intensive Farming' Vehicles have to be well maintained and must be driven slowly around the site at all times Engines to be switched off when not in use Vehicles which are fitted with an audible 'vehicle reversing' warning system are generally used only in the daytime Idling of machines avoided and engine revs	Unlikely	Noise annoyance	Not significant

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			kept low with an effective silencer where possible Minimal manual feeding restricted to day working hours. Slurry tanker filling and emptying done as an intermittent activity (where applicable) (exported – third party control) Machinery and equipment sited as far as possible from neighbours			

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
Small vehicles travelling to and from the farm eg staff and visitors' cars, courier van deliveries, etc Mobile source	Nearest neighbours (eg workplace 460m) to the installation	Air	Measures as described in 'How to comply- Intensive Farming' Small vehicles arrive during the normal working day and therefore are seen as low risk	Unlikely	Noise annoyance	Not significant
Feed transfer from lorry to bins and tanks Fixed source	Nearest neighbours (eg workplace 460m) to the installation	Air	Vehicles are well maintained and designed so that noise during feed transfer is minimised Conveyors and augers not operated when empty	Unlikely	Noise annoyance	Not significant

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			Tipping type delivery vehicles and augers used whenever possible for bulk dry ingredient delivery Blower and vacuum type delivery vehicles fitted with low noise units			
Operation of fans Fixed source	Nearest neighbours (eg workplace 460m) to the installation	Air	When required, the fans suck cool air in, blow it into the livestock sheds. The fans are only in use in hot weather. Fans are maintained in good condition to avoid excessive noise.	Unlikely	Noise annoyance	Not significant

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			Fans sited away from neighbours.			
Alarm system and standby generator (where applicable) Fixed source	Nearest neighbours (eg workplace 460m) to the installation, staff and livestock (N/A as alarm system and generator are not present)	Air	Weekly system test (required by law) is carried out, timed in order to minimise nuisance to neighbours All electrics and equipment are routinely maintained so that the back-up systems rarely need to be used in practice	Unlikely	Noise annoyance	Not significant
Livestock Mobile source	Nearest neighbours (eg workplace 460m) to the installation	Air	Noise from livestock may be considered to be a likely cause for	Unlikely	Noise annoyance	Not significant

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			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.			
Personnel Mobile source	Nearest neighbours (eg workplace 460m) to the installation	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	Not significant

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
Repairs	Nearest neighbours (eg workplace 460m) to the installation	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	Not significant
Slurry spreading	Nearest neighbours (eg workplace 460m) to the	Air	Machinery operated at reasonable times where possible and idling avoided	Likely	Noise annoyance	Not significant if managed carefully

NOISE

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
	installation, wildlife		Equipment maintained to optimum standards			

FUGITIVE EMISSIONS

Table 3 Assessment of Fugitive Emissions Risk

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
To air						
Dust (including bio aerosols) Sources: • Straw • Feed	Nearest neighbours (eg workplace 460m) to the installation: • Nuisance • Contributes to odours • Negative impact on Human health (inhalation) Surrounding vegetation:	Air	Use of suitable bedding materials, where applicable, and good storage of such materials Use of dry feed delivered in sealed systems and stored in covered feed bins Regular clearing of dust to prevent build up within buildings, on vehicles, on roofs and around vents, as part of the disease control strategy Uncontaminated road and yard rainwater is directed into gutters. Dirty water that has arisen from effluent in the buildings is	Dust could potentially reach the road and neighbouring houses and surrounding land when a strong wind blows in that direction Management actions should	Nuisance: dust on surrounding vegetation, cars, clothing Smothering and direct damage to nearby vegetation Livestock/staff may get stressed and	Not significant if managed carefully

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
	Covers leaves and inhibits photosynthesis Surrounding land: Nutrient enrichment of soils Contributes to respiratory problems for livestock and staff		directed to the midden areas and dirty water storage facilities.	prevent this happening	become unwell	

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Ammonia Source: Livestock housing and slurry/dirty water storage, removal and spreading	Nearest neighbours (eg workplace 460m) to the installation Livestock and staff: high levels can cause respiratory problems Also perceived as a nuisance as it contributes to odours	Air	Measures as described in 'How to Comply – Intensive Farming' Mitigation measures as for odour Feed formulated to match livestock requirements and to minimise amount of ammonia produced Rations under periodic review Provision of sufficient straw in bedding to bind nitrogen, where appropriate Ventilation control systems designed to provide optimal environment and regularly monitored and maintained	The impact of ammonia on air emissions from the installation has been assessed using the H1 methodology and detailed air dispersion modelling The results demonstrate that there will be little	Aerial deposition and direct toxic effect on trees Nutrient enrichment of soils and changes to sensitive ecosystems Respiratory problems in humans and mammals	Not significant

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
	Surrounding vegetation: direct toxic effect and changes to sensitive ecosystems Surrounding land: Nutrient enrichment and acidification of soils		Regular monitoring of tank and store contents and maintenance of facilities and equipment Frequency of slurry removal to optimise pen cleanliness Dedicated purpose-built facilities for slurry and dirty water Slurry spread at low level and in accordance with the Manure Management Plan and NVZ rules Fully trained operators Soils regularly analysed and applications made in response to crop requirements to	likelihood of impact to nearby wildlife sites		

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
			avoid spreading more slurry than is needed [exported]			
Zoonoses and notifiable diseases	Human health and livestock health	Air/direct contact	Detailed biosecurity precautions in place, eg 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 daily for signs of disease and incidents reported quickly Use of a health plan, with specialist veterinary input in place.	Unlikely	Human and livestock health implications	Not significant if managed carefully

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
To water						
Nutrients such as N and P plus organic matter Source: Wash water run off to nearby watercourse, muck and slurry (where applicable) spreading	Any adjacent watercourses Nutrient leaching from soil to surface waters and groundwater, causing eutrophication and increased biochemical oxygen demand (BOD) of watercourses	Land	Used feed spilt on yard/roadways during clean out is cleaned up promptly Manure management plan followed including NVZ rules for spreading Slurry (where applicable)	Unlikely	Pollution of water course leading to eutrophication and poisoning of flora and fauna	Not significant if managed carefully

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Spillages from storage and use of pesticides and fuel (where applicable) /chemicals	Vulnerable groundwater beneath site	Land	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 All tanks bunded and compliant with legislation	Unlikely	Contamination of surface and groundwaters Killing of flora and fauna	Not significant
To land						
Ammonia from storage of dirty water, slurry and housing	Sensitive nature and conservation sites identified in pre-	Air	As for odour and 'To water' above Feed selected to minimise excretion of nutrients Slurry storage tanks are covered.	Likely	Direct toxic effect on trees, nutrient enrichment and	Not significant if

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
	application screening There is no SSSI within 500m.		Storage sites sited away from sensitive receptors There are no SSSI areas within a 500m vicinity	Unlikely	acidification of soils Changes to sensitive ecosystems	managed carefully Not Significant

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Waste materials, packaging, etc. Source: Non-organic waste storage and disposal	Neighbouring dwellings and surrounding habitats and countryside	Air	Policy to avoid waste 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
Pests						
Flies could move off-site and affect nearby residents	Neighbours	Air	Pest management programme in place	Unlikely	Flies and rats are a vector of pollution that	Not significant if managed carefully

FUGITIVE EMISSIONS

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Also, birds, rats, etc.			Heap will be treated with pesticide and covered with sheeting if flies become an issue Food sources covered and secure from pests Pest control programme in operation		can harm human health Concerns about this pollution can cause offence and affect amenity	

ACCIDENT RISK

Table 4 Assessment of Accident Risk

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Spillages from pesticide and biocide handling and storage areas escaping	Potentially polluting liquids flow over yard to clean drains/ditches and surrounding land Also vulnerable groundwater beneath site	Flowing over yard or through cracks in poor impermeable surface and through the ground	Accident Management Plan in place Repair any infrastructure and design appropriate containment measures Maintenance and regular inspection procedure designed and implemented Foot dips on good concrete with drains to dirty	Very unlikely	Contamination of local groundwater and potential nearby abstractions	Not significant with measures indicated

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
			water system and located where overflowing gutters will not dilute Regular inspection of facilities and records kept Dedicated container for storage with impermeable hard standing within bund Removed from site by licensed contractor			

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
			Damaged or suspect packaging rejected at time of delivery			
Fuel oil in storage tank (when applicable) /vehicles escaping the containment	Land, local water course	The surface water drainage system	Regular inspection in accordance with the site maintenance and inspection procedure and complies with SSAFO regulations Concrete base and bund containing tank and fill point	Very unlikely	Contamination of local water course	Not significant

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
			Double valves locked when not in use If spills occur the oil spill equipment is located nearby and clean-up is prompt			
Spillage of slurry, feed and fuel (where applicable) due to operator error when loading and unloading	Land, local water course	Land, the surface water drainage system	Standard operating procedures applied for loading and unloading Any spillage of feed around the bins and tanks is immediately cleaned up using	Unlikely	Contamination of local water course	Not significant

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
			materials and equipment which are stored nearby Area drains to dirty water tank (where applicable) so containment provided The condition of feed bins and tanks is checked frequently so that any damage or leaks can be identified in accordance with the site maintenance and			

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
			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			
Failure to contain firewater or off-site pollutants	Ditches, local watercourse		Accident Management Plan in place	Unlikely	Contamination of local watercourse	Not significant

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
			Sandbags Drain inlets to be covered by sandbags, drain bung inserted, diverter valve closed Stem flow of runoff from edge of yard using sandbags, use loader to push soil into a dam and excavate a sump		and surrounding land	
Incorrect disposal of wash water	Clean drain, ditches, local	Drains, ditches, land	Staff trained in correct operation procedures	Unlikely	Contamination of ground and surface waters	Not significant

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
	water course and soakaways		All drains shown on site plan			
Acts of vandalism which cause damage to structures and fittings	Surrounding land, surface and ground waters	Land, water	Site security. Remote from centres of population.	Low	Contamination of soil and or water	Low
Flooding and other storm damage	Surrounding land, surface and ground waters	Land, drains, water courses	Good site layout and design for purpose Maintenance of site infrastructure and local flood defences Observe weather forecasts and weather warnings	Low	Water and soil pollution	Low

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Power outage causing failure of slurry (where applicable) pumping systems resulting in tank overflow Failure of automatic liquid level control sensors and devices	Surrounding land, surface and ground waters	Land, drains, watercourses	Frequent monitoring. Dirty water tank (where applicable) emptied with a tanker system.	Low	Overflow of storage facilities	Low
Fire	Livestock, staff, buildings, fuel (where applicable) and oils, chemicals, bedding, feed, local habitats and	Air	Regular inspection and maintenance of equipment	Unlikely	Toxic smoke and other pollutants, surface run-off from firefighting water, surface run-off from failed storage	Low

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
	neighbouring dwellings				tanks, pipes and stores Exploding gas and fuel (where applicable) cannisters and containers Increased numbers of dead animals for disposal Dust and fibres from sheet building material which may contain asbestos	

ACCIDENT RISK

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**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence.**
Below ground slurry tank and pipe ruptures/overflows (including used disinfectant)	Dirty water flows over yard to clean drain inlet at the back of the office and into local water course	The surface water drainage system	Curbing to prevent water entering gutter/pond/nearby land Use of Defra/NOAH approved disinfectants Block off drain inlet with sand bags Contact office or duty manager. If necessary contact Environment Agency	Unlikely	Contamination of local water course	Not significant

This document has been prepared by the applicant using the BPEX template.

ACCIDENT RISK

While the Agriculture and Horticulture Development Board, operating through its BPEX division, seeks to ensure that the information contained within this document is accurate at the time of printing, no warranty is given in respect thereof and, to the maximum extent permitted by law, the Agriculture and Horticulture Development Board accepts no liability for loss, damage or injury howsoever caused (including that caused by negligence) or suffered directly or indirectly in relation to information and opinions contained in or omitted from this document.