Environmental Risk Assessment – Welton

Risk & Sources	Potential Receptors	Possible Pathways	Are the risks acceptable and can they be screened out	Control Measures (If risks are too high)
Noise and Vibration (Agricultural activities e.g. mucking out, washing, feed deliveries etc)	1 property within 100m (holiday let).	Prevailing winds may carry sound longer distances, especially during winter months when green shields (vegetation) are less prevalent.	Risk are acceptable due to proximity of local residences. Site operational hours kept within daylight hours to avoid noise nuisance.	Additional noise abatement measures could be added such as evergreen hedges. Noise monitoring shall be initiated to substantiate or refute any claims of noise nuisance.
Effluent Discharge to Surface or Groundwater e.g. wash out slurries	Site porous surfaces, attenuation pond.	Stoned areas between houses, attenuation pond drainage channels becoming backed up or overwhelmed during high wash-water yield.	Risks are acceptable due to strict control measures of directed effluent channels from poultry houses to underground systems and subsequently to holding tanks, managed by site divertor valve being managed to prevent erroneous discharge via clean water systems.	If risks too high, additional capacity for holding effluent could be considered adding a second tank. Further kerbing around site concreted areas could be installed. Strict management of the divertor system and wash down process mitigates a high portion of any environmental risks.
Odour discharge (Poultry Houses)	1 property within 100m (holiday let).	Prevailing winds may carry odours from the poultry houses further than normal, particularly during times of thinning, depopulation and cleaning out.	Risks are acceptable with strict management of litter conditions ensuring livestock bedding is always kept as dry and friable as possible. Sites using extremely low dust generating initial bedding and low dust wood shavings for top up bales. Type of site yields extremely low odours even at C&D stage of crop cycles.	Cease mucking activities if odour excessive. Odour level monitoring shall be conducted by boundary 'sniff-testing' and recorded weekly to ascertain trends.

Risk & Sources	Potential Receptors	Possible Pathways	Are the risks acceptable and can they be screened out	Control Measures (If risks are too high)
Emissions from site Generator	1 property within 100m (holiday let).	Site generator not being regularly serviced and/or operated outside of the permitted levels.	Acceptable risk due to generator being emergency use only apart from testing of 1hr per week to meet assurance scheme standards. Generators are serviced every six months and reports given.	Replace old inefficient unit with newer to ensure maximum fuel efficiency and minimal emission levels. Newer unit due to replace old existing unit (220KvA – 0.191MW).
Bio-aerosols (Dusts)	1 property within 100m (holiday let).	Roof and gable end fans depositing to atmosphere. Generated dusts during bedding replacement.	Dusts in newer houses are emitted above 5.5m to atmosphere, minimal dusts are generated. Side fan expulsion points cleaned monthly as per company SOP. Monitoring of building roofs, service buildings and vehicles for dust levels is ongoing by the site management teams.	Use as dust free substrate for bedding as possible and dampen down house dusts during extremely dry periods and during muck out periods using the installed misting systems.
Waste's e.g. plastics, cardboard, food wastes.	Local community and wider areas during collection and disposal.	Wastes falling out of skips and waste receptacles. Wastes blowing around site.	Risks are acceptable due to business contract with Biffa Waste to use lidded waste receptacles in line with legal frameworks of general, recyclable and food wastes.	Further waste solutions available to manage high waste yields e.g. cardboards etc from boxes, these can be disposed of by local skip companies accompanying waste transfer notes viewable during site inspections.
Feedstuff Spillages	Ground pollution.	Feed spillages onto nearby hardcore and drainage channels.	Feed is held in purpose-built silos of incredibly good solid steel construction and fibre glass silos and feed is delivered inside enclosed blow pipes and auger systems. Repairs conducted immediately on damaged systems.	No further controls required at this time.

Risk & Sources	Potential Receptors	Possible Pathways	Are the risks acceptable and can they be screened out	Control Measures (If risks are too high)
Chemical Spillage	Groundwater, ground pollution.	Chemical spillages entering drainage system.	Site has dedicated spill kits and clean up facilities and are trained how to deal with accidents/incidents relating to chemicals. All chemicals held on site in volumes above 10L are kept in bunded containers.	Installation of specific COSHH cabinet with integrated bund and ventilation system.
Rodent Control	Local and wider community.	Rodents (particularly rats) exploring local area becoming nuisance to residents.	Singular nearby resident and a business operation nearby (storage facility), however rodent control is outsourced to external contractor visiting at least once every 28 days and providing both site visitation report and site environmental risk assessment at each visit.	Frequency of visits to monitor activity can be increased during high activity periods e.g. winter.
Vehicle Strike	Site equipment.	Damage to gas tanks, feed silos, fuel storage tanks.	Feed silos are positioned in a way, so vehicles cannot strike them or have impact protection via steel bollards. LPG tanks protected by steel barrier system. Fuel storage is integrated into generator housing.	Armco design placed around banks of LPG tanks to protect from strike. Feed silos set back behind houses or recessed from house frontages.
LPG Heating	Local and atmosphere.	Emissions to atmosphere via exhaust pipes.	LPG heaters serviced twice per year for efficiency of use. New units installed when old ones become inefficient.	Installation of heat exchange units would reduce the amount of LPG used and overall burden of use on the LPG system. Zonal heating system installation to reduce LPG usage burden.

Risk & Sources	Potential Receptors	Possible Pathways	Are the risks acceptable and can they be screened out	Control Measures (If risks are too high)
Ammonia Emissions	Local and atmosphere.	Emissions to atmosphere.	Emission levels are monitored during each crop by manual measurements of NH3 levels. Annual reporting via PIR portal indicates levels of emissions by numbers of birds placed. Low levels expected due to type of farming.	Abatement measures if required if emissions become too high. Site currently well within screening limits.
Nitrogen & Phosphorus Emissions	Exported areas of muck and wastewater disposal via third parties.	Emissions to local area during third party removals and land spread activities.	Emission levels are monitored by annual P and N reporting via EA portal. All parameters well within guidelines. Existing feed rations show decreasing levels of protein and phosphorous during the growth of the livestock.	Changes to diet considered and under constant review.
Diesel Spillage	Watercourse	Spillage from tank into local watercourse causing hydrocarbon pollution.	Diesel contained in bespoke bunded, double skinned container beneath the site generator. Waste oils are removed by third party and disposed of in accordance with legal requirements.	Soil and ground water monitoring could be undertaken around generator location to ensure no hydrocarbon emissions have occurred.
Chemical Spillage	Groundwater, ground pollution.	Chemical spillages entering drainage system.	Sites have dedicated spill kits and clean up facilities and are trained how to deal with accidents/incidents relating to chemicals. All chemicals held on site on volumes above 10L are kept in bunded containers.	Installation of specific COSHH cabinet with integrated bund and ventilation system.

Risk & Sources	Potential Receptors	Possible Pathways	Are the risks acceptable and can they be screened out	Control Measures (If risks are too high)
Fire	Local and atmosphere	Site fires causing catastrophic loss to structure and livestock.	Flammable materials kept away from buildings by a minimum of 4m. Electrics serviced and maintained under insurance scheme requirements of 4 yearly program. Fire extinguishers provided as per the requirements of British Standards and serviced annually. Containment of firewater would also be via the underground wastewater tanks and removed by licenced waste carrier (details provided in WCN's).	Fire suppression systems generally unviable in poultry houses, alarm systems generally affected by dusts, technology on CCTV systems could be set up to identify heat spots and linked into alarm systems.
Flooding	Local and surrounding areas.	Flood water ingression into poultry houses, contaminating waterway.	No flood zones in proximity to and likely to affect the site. Mitigation measures in place to respond quickly if incident likely. Accident/Incident Management Plan in place to guide site staff in procedures to follow.	Flood response plan in place for the business. Long term flooding of sites result in suspension of stocking, and site remaining empty until floodwater subsidence.

Risk & Sources	Potential Receptors	Possible Pathways	Are the risks acceptable and can they be screened out	Control Measures (If risks are too high)
Vandalism	On-site	Interference to LPG supplies, damage to plant and machinery and activist incursions.	Site has robust CCTV system, clear signage in place and entrance doors to livestock buildings and sensitive areas covered by footage. Activity levels around NGO groups monitored through shared information amongst local growers and industry alerts. LPG tanks protected by lockable isolation taps and valves.	24hr monitoring station could be engaged if required, though risk of premises deemed to be low due to security systems already in place and 24hr site attendance via on-site farm manager at dwelling house.
Zoonoses and Notifiable Diseases	Site and local areas (3km and 10km zones as per DEFRA guidelines)	Personnel, pests, feed, water ingression, thinning period.	Robust biosecurity system in place, all staff adhere and sign to abide by business biosecurity protocols and hygiene measures. During periods of notifiable disease incursion site is easily isolated from other premises. Localised incidences of notifiable disease (within 3km) bring enhanced measures to site inclusive of thin and clear process for catching & depopulation. Site has shower in and shower out facility in place.	During periods of intense viral loads of HPAI the business may choose to de-stock a site for a period until risk diminishes.

Risk & Sources	Potential Receptors	Possible Pathways	Are the risks acceptable and can they be screened out	Control Measures (If risks are too high)
Flies	Local	Localised nuisance, likely to 'operator controlled' premises only as nearest receptors.	Broiler Breeder 'Rearing' farms very low to negligent incidence of fly yields, robust measures in place if required via company pest management plan e.g. larvicidal, residual and knock down approach.	Low likelihood of nuisance on this type of premises.