Environmental Risk Assessment for Hubbard's Farm Poultry Unit

Source of emission	Emission (e.g., ammonia, dust, run-off, spillage, noise, odour)	Receptor (e.g., air, water, land, humans, plants)	Description of impact and duration of impact i.e., short term (ST), medium term (MT) or long term (LT)	Significance of negative impacts Major +++ Moderate ++ Minor + Nil 0	Mitigation / management measures for this emission
1. Poultry production (for the complete production & cleaning cycle)	Ammonia	Humans	Adverse effect on air quality and health (LT)	+	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010 and Best Available Techniques (BAT) Reference Document; 2017: -
		Plants	Direct toxic effects (ST)	+	• Forced ventilation & a non-leaking drinking system (in case of solid floor with deep litter). • Reduce crude protein content using a nitrogen balanced diet based on the energy needs and digestible amino acids. • Multiphase feeding with a diet formulation adapted to the specific requirements of the production period. Provide chickens a minimum of three separate diets which contain increasingly lower crude protein. • Addition of controlled amounts of essential amino acids. Highly digestible amino acid analogues lysine, methionine, threonine, and valine added in milling compound feedstuffs to supplement otherwise low naturally occurring levels in wheat grains. • Designated sites for nature conservation within 5km – Bovingdon Hall Woods Site of Special Scientific Interest (SSSI), Sheeringhall Spring Ancient Woodland (AW) Hart Wood AW and Levelly Wood AW. No International or European sites within 5km. • Environment Agency advised in the Pre-application Report dated 10th June 2025 applicant does not need to submit detailed ammonia modelling for the conservation sites for permit application.
		Land	Nutrient enrichment of soils (e.g., hyper-eutrophication and acidification) (LT)	+	
		Land	Changes to sensitive ecosystems (LT)	+	

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	Dust	Humans Humans Plants	Adverse effect on air quality and health (LT) Nuisance (ST) Covers leaves, inhibits photosynthesis (ST)	++ ++ ++	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010 and Best Available Techniques (BAT) Reference Document; 2017: - • Residential dwelling houses, industrial and agricultural premises within 100m of the installation boundary will be sensitive receptors. • Created a dust & bio-aerosol management plan with routine actions to minimise dust and bio-aerosols from sources onsite, contingency actions and a complaints investigation and reporting procedure if required.
	Noise	Humans	Nuisance (ST)	++	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010 and Best Available Techniques (BAT) Reference Document; 2017: - • Residential dwelling houses, a primary school, industrial and agricultural premises and public footpaths within 400m of the installation boundary will be sensitive receptors. • Created a noise management plan with routine actions to minimise noise from sources onsite, contingency actions and a complaints investigation and reporting procedure if required.
	Odour	Humans	Nuisance (ST)	++	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010 and Best Available Techniques (BAT) Reference Document; 2017: - • Residential dwelling houses, a primary school, industrial and agricultural premises and public footpaths within 400m of the installation boundary will be sensitive receptors.

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					• Created an odour management plan with routine actions to minimise odour from sources onsite, contingency actions and a complaints investigation and reporting procedure if required.
	Pests	Humans	Nuisance caused by vermin and flies (ST)	+	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010: - • Macerated eggs, & carcasses stored in secure, non-leaking, containers & kept covered. • Containers removed weekly by an approved transporter under the National Fallen Stock scheme. Weekly collections considered to be adequate to avoid attracting flies. • Collection can be increased anytime e.g. in warm weather or in event of higher mortality. • Exchange filled containers for clean & disinfected containers. • Planned pest control with professional contractors licensed to use pest control products.
	Dirty water	Land Water Water	Nutrient enrichment of soils (LT) Nutrient enrichment in watercourses (ST) Changes to sensitive ecosystems (LT)	+ ++ ++	Measures are described in EPR 6.09 SGN; How to comply; Version2, 2010: - • Concrete apron & kerbs channel dirty water into package, below ground storage tanks. • Dirty water storage tanks encased in concrete with capacity for all the dirty water. Come with diverter valves to keep dirty and clean water separate. • Farmworkers and cleaners keep roadways, areas around buildings, dirty water grates and drains clear of litter, etc to avoid backing-up, pooling, or overspilling into surface water drains or on unmade land. • Professional contractors empty dirty water tanks after cleaning, avoids anaerobic conditions developing in settled sludge.

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					• Frequency of emptying can be increased anytime e.g. where a diverter valve was not reset and tank filled with rainwater. • Planned preventive maintenance for buildings & equipment by operator's engineers or professional contractors in accordance with any manufacturer's instructions and keeping records of the work.
	Feed spillage	Land Water	Nutrient enrichment of soils (LT) Nutrient enrichment of water courses (MT)	+ ++	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010 and Best Available Techniques (BAT) Reference Document; 2017, and DEFRA Code of practice for the welfare of meat chickens and meat breeding chickens, updated January 2024: - • Feed stored in package silos and delivered into houses with package augers and pipes. • Silos & feed delivery equipment protected from collision damage from reversing vehicles by careful siting relative to traffic flows in between the houses and with kerbs or barriers, as required. • Feed delivered from suppliers and blown directly into the silos. • Deliveries monitored by drivers & farmworkers and any spillage cleared up immediately. • Automatic equipment on which chickens depend inspected by farm workers not less than once per day to check there are no defects, any defects to be repaired immediately. • Planned preventive maintenance for buildings & equipment by operator's engineers or professional contractors in accordance with any manufacturer's instructions and keeping records of the work.
	Zoonoses & notifiable diseases	Humans & livestock	Human and livestock health implications (ST)	++	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010 and Best Available Techniques (BAT) Reference Document; 2017, and DEFRA (2018) Code of

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					practice for the welfare of meat chickens and meat breeding chickens, updated January 2024: - • Farmworkers who are responsible for care of chickens at any point in time, including holiday cover, part-time & temporary workers will be appropriately trained and qualified. • Use a Health Plan with professional veterinary input as required. • Maintain the bio-security precautions. • Signage warning people against unauthorised entry. • Clean protective clothing for farmworkers and visitors. • DEFRA approved disinfectants for boot dips and cleaning houses. • Daily livestock inspections by farmworkers. • Dead chickens must be removed from poultry houses daily. • Dirty water from washing & disinfecting the macerator must be stored with the macerated eggs, & carcasses in secure, non-leaking, containers & kept covered. Not to be allowed into any drains or dirty water tanks and never to be spread on land. Collected under the National Fallen Stock Scheme.
2. Storage facilities	Fuel, disinfectant, and other chemicals (e.g., due to spills or leakage)	Water Land	Contamination of surface & groundwater with consequential effects on animals (ST) Contamination of land (MT)	+++ +++	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010 and DEFRA (2018) Code of practice for the welfare of meat chickens and meat breeding chickens, updated 25 January 2024: - • Emergency back-up generator with separate bunded fuel tank & regularly check level. • Automatic equipment on which chickens depend inspected by farm workers not less than once per day to check there are no defects, any defects to be repaired immediately.

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					• Disinfectants, pesticides & veterinary medicines stored in dry, frost-free, fire-resistant stores, kept secure against unauthorised use and capable of retaining any spillage. • Package footbaths to be used to avoid overflowing. • Spent disinfectant from footbaths emptied into dirty water tank. • Implement the accident management plan including using spill kit equipment if disinfectant poses risk of entering any surface or groundwater. • Planned preventive maintenance for buildings & equipment by operator's engineers or professional contractors in accordance with any manufacturer's instructions and keeping records of the work.
	Health risks due to contact with stored materials, inhalation, etc.	Humans	Human health issues (ST)	+	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010: - • Manufacturer's safety data sheets for materials kept onsite. • Measures set out in the accident management plan. • Planned preventive maintenance for buildings & equipment by operator's engineers or professional contractors in accordance with any manufacturer's instructions and keeping records of the work.

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3. Surface water drainage system	Fuel, disinfectant & other chemicals (e.g., spills result of unauthorised persons, tampering, vandalism, stealing).	River Pant and River Brain tributaries of the river Blackwater	Contamination of surface water (MT) Contamination of land & groundwater (MT)	Minor Minor	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010: - • Perimeter fence & gates & no public access through any part of the site. • Poultry houses & stores will be securely locked at night. • Fuel oil tanks & LPG tanks will be secure & locked. • Keep a list of the substances that would harm the environment if they were to escape including in the raw materials inventory. • Relatively small inventory and quantities of potentially polluting substances stored onsite at any time including fuel oil for back-up generator & disinfectants, etc. • Environment Agency must be notified immediately of any spillage into unmade land and risk of entering into groundwater in accordance with the procedure in the permit.
	Fire & firefighting water	River Pant and River Brain tributaries of the river Blackwater	Contamination of surface water (MT) Contamination of land & groundwater (MT)	Minor Minor	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010: - • Maintain general fire precautions at all times, in accordance with company fire safety procedures & training and farmworkers checking the precautions every day. • Store incompatible materials apart. • Limit size of stockpiles of combustible materials & surround them with fire breaks. • Not storing materials alongside the site boundary. • Store contaminated firewater onsite, where practicable e.g. in the underground dirty water storage tanks for offsite disposal. • Mandatory risk assessments & recommendations provided for buildings & precautions by professional contractors & insurers.

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4. Surface water (flash flooding)	Carcasses, litter, dirty water, fuel, disinfectant boot dips etc	River Pant and River Brain tributaries of the river Blackwater	Contamination of surface floodwater (ST) Contamination of land & groundwater (MT)	Minor Minor	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010: - • Yearly chance of surface water flooding is very low staying at very low between 2040 and 2060 with climate change according to the government website. • Present day potential for surface water flooding on land in the north of the installation and on adjacent land.
5. Ground water flooding	Litter, dirty water, fuel, disinfectant boot dips etc	River Pant and River Brain tributaries of the river Blackwater	Contamination of surface floodwater (ST) Contamination of land & groundwater (MT)	Minor Minor	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010: - • Installation will be outside of a groundwater flood alert area according to the government website.
6. Rivers and sea flooding	Carcasses, litter, dirty water, fuel, disinfectant boot dips etc	River Pant and River Brain tributaries of the river Blackwater	Contamination of river and seawater (ST) Contamination of land & groundwater (MT)	Minor Minor	Measures are described in EPR 6.09 SGN; How to comply; Version2; 2010: - • Installation will be located in Flood Zone 1. Present day chance of flooding from rivers and the sea is very low staying at very low between 2036 and 2069 with climate change according to the government website.