**Bio Aerosol Emissions at Barns Poultry Farm**

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| **Hazard** | **Receptor** | **Pathway** | **Risk Management** | **Exposure** | **Consequence** | **Overall Risk** |
| **To Air** |  |  |  |  |  |  |
| Dust: Sources: Feed. | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation  |  Air | Feed delivered in sealed systems.Use of pelleted feed with oil coating to prevent pellet degradation.Pan feeding system within poultry houses on timed feed pattern to appetite preventing wastage.Dust socks fitted to silo exhaust pipes.Closed system delivery of feed from silo to poultry house.Silos and delivery pipes checked daily for integrity.Feed spills dealt with promptly. | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant if carefully managed. |
| Bedding | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation |  Air | Bedding layer will be either green sawdust which has high moisture content minimising dust or dust extracted shavings, not blown into poultry house. Shavings spread inside house with only minimum ventilation in operation to minimise dust release. Top up bales spread during cycle with light intensity reduced to prevent birds panicking minimising dust. | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant if carefully managed. |
| Litter System | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation |  Air | Computer controlled environment keeping humidity between 55 and 60% minimising dust | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant if carefully managed. |
| Ventilation | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation |  Air | Use of roof extraction fans on all houses | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant if carefully managed. |
| Bird Catching | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation | Air | Bird catching under very low light levels to prevent bird stress and minimising dust. | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant if carefully managed. |
| House Cleaning | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation |  Air | Litter removed carefully during cleanout minimising dust. Full trailers sheeted before leaving installation.Houses and exhaust vents pre-soaked with low pressure hose to minimise dust release. Exhaust vents then high pressure hosed minimising any lightly contaminated water release onto roofs.  | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant if carefully managed. |
| **Bird Numbers/Type** | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation |  Air | Four poultry houses with 180000 birds.Stock inspections carried out by trained staff with reduced light intensity to prevent birds panicking and minimising disturbance and dust levels.  | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant |
| Broiler Production | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation |  Air | Location of installation to nearest receptors. Prevailing wind away from nearest receptor. | Dust could have the potential to reach nearby neighbours and surrounding land during certain weather conditions.  | Nuisance – dust on surrounding vegetation, cars and clothing. Smothering and direct damage to nearby vegetation. | Not significant |
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