**Bio Aerosol Emissions at Kirkburn Grange Farm poultry unit**

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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.  Dust socks fitted to silo exhaust pipes.  Closed system delivery of feed from silo to poultry house.  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. |
| Biomass Boilers | Neighbouring dwelling houses within 100m of installation Surrounding Land and Vegetation | Air | Boilers serviced by installer. Ash stored in sealed containers awaiting disposal with litter under exemption. | 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 | Use of suitable bedding materials, not blown into poultry house. | 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 high velocity roof extraction fans | 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. | 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 | 300,000 Broilers. | 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 | High velocity roof extraction fans aiding dispersal, houses 5 - 10 | 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 |