2 NON-TECHNICAL SUMMARY

Arranview currently has a PPC permit for 132,000 birds and current operations comprise of 64,000 barn egg-laying birds housed at Arranview (in sheds AV1 & AV3) and 67,940 pullets housed a Jameston Moss (in sheds JM8 to JM10) – a total of 131,940 birds. Glenrath Farms Ltd plan to expand the site to include a further house Arranview 2 (AV2) which will house a further 65,000 barn egg-laying birds, bringing the total number of birds on site to 196,940.

Whilst the construction of a new house will increase permitted bird numbers from 132,000 to 196,940, calculated ammonia emissions **decrease** by 17kg per year based on those calculated for the site's 2018 PPC variation. In 2018 the emission factors used did not take into consideration reductions for the small average bird size, reduced occupancy and crude protein reduction in diets for birds at Jameson Moss. The emission factors used for Arranview also did not include a reduction factor for crude protein reduction in birds diets. These have all been applied. The new barn shed at Arranview will be constructed with manure belt drying (using recirculated internal forced air) to reduce the ammonia emission factor for the new house by 60%, as agreed with SEPA during pre-application discussions.

The new AV2 shed will be larger than the existing AV1 & AV3 sheds however it will operate in the same way as AV1 & AV3. These are aviary systems which are filled with birds at around 18 weeks old where they will stay and lay eggs until the shed is emptied, around 85 weeks old. Manure is to be collected and dried on manure belts (using piped forced air) and this is removed from the houses twice per week and collected in a trailer. It is then taken directly off-site by a contractor. Once emptied, the sheds are deep-cleaned – and all wash water is contained in a tank on-site and removed off-site by a contractor.

The new shed will have an automatically controlled ventilation system and will operate in the same way as the existing AV1 & AV3 sheds. Fresh air will be brought in from roof inlets, drawn through the building and exhausted via high velocity roof vents situated at the southern end of the building. During warmer months, additional 'tunnel' ventilation will be provided – additional fresh air will be pulled in at the north end of the building and exhausted via gable end ventilation fans. These are fitted with louvre systems to deposit any particulate matter on the ground. The gable end areas are concreted to collect any dust which may run-off during rain events and this is treated by means of a swale which will be designed to meet the requirements of the CREW guidance, considered to be Best Available Technique (BAT). This system will treat all lightly contaminated rainwater run-off from site.

The main emission from the housing will be ammonia and the impact on nearby sensitive receptors, in particular nearby Dykeneuk Moss, Cockinhead Moss and Backhead Moss which have bog habitat susceptible to ammonia pollution. However as already mentioned, calculated ammonia emissions will be lower than the currently permitted. The impacts of the new shed have also been assessed using the Simple Calculation of Atmospheric Impact Limits (SCAIL) tool and has been discussed in detail with SEPA prior to submission of this variation. Best available techniques will be implemented to reduce ammonia emissions and these have already been mentioned - belt drying of manure and the reduction of crude protein. There is also a small existing tree belt at the end of the building with gable exhaust vents and this should also help reduce ammonia emissions further.

There are some sensitive receptors (i.e. residential housing) within 400m of the proposed new housing so dust and odour have also been considered. Dust emissions have recently been monitored on site and SEPA concluded that all preventative measure have been taken against pollution (through implementation of BAT) and no significant pollution was being caused. The new house will also meet BAT through minimisation of dust from the use of crumbed food and dust-extracted coarse litter. In addition, the existing tree belt should help minimise dust emissions further. An Odour Management Plan is in place which ensures odour potential has been assessed and mitigated where possible, this also meets BAT.

Estimates of the amount of additional raw materials, water and energy consumed have been made and will be monitored as part of permit requirements. Similarly, the operator has estimated the additional wastes to be produced in the new housing. The operator is also planning to install a wind turbine on site which will provide renewable-generated electricity and significantly reduce demand on the grid.

The construction of this new housing will not require an extension to the permit boundary and all proposed changes to the site plan and drainage arrangements have been included within this application.