

Attachment I

Existing Environment and Impact of the Activity

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I.1. Assessment of atmospheric emissions

The key requirements for the odour from poultry operation are:-

- Avoiding the build-up of litter on concrete around buildings
- Removal and disposal of dead animals
- Drain maintenance
- Bedding cleanliness
- Management of drinking systems, with particular emphasis on frequently adjusting nipple and drip cups to bird eye level to avoid spillage and wet litter
- Stocking density
- Litter moisture content
- Insulation of the building and the long term maintenance of that insulation
- Ventilation and heating system
- Type of heating
- Composition of the feed particularly its oil and fat content and its protein content

Although odour generated in the operation may be more detectable at certain times, as partly influenced by prevailing weather conditions, the townland and surrounding townlands are well accustomed to occasional odour from agricultural operations. However, odour levels generated are not expected to cause a significant nuisance in the surrounding area, as the operation will be management to the best possible level. There are no odour sensitive locations within 150m of the unit other than the Applicant's dwelling.

The existing unit using the best available practices is already operating without significant effect on the environment and will continue to strive to minimise all environmental impacts. The standard of management for good animal husbandry helps to mitigate the potential of odour generating along with modern house designs, and ventilation systems. The houses will be continuously washed and disinfected between batches, stocked at optimum levels and adequately ventilated ensuring minimal odour emissions. Should technical advances be made in odour reduction, the farm operations will adopt any economically viable practices. Odours and emissions from modern, well managed poultry units are insignificant outside the confines of buildings and adjoining yards.

Mitigation Measures

The following is the current cleaning/washing regime:

- (i) All doors are closed in houses until final extraction of birds has taken place.
- (ii) The litter from the operation is removed from the houses and loaded onto the articulated trailers for instant removal to Custom Compost/Walsh Mushrooms, Ballyminaun Hill, Gorey, Co. Wexford for composting. This is a same day activity.
- (iii) Contractors arrive on site on same day as litter is removed and they begin a strict washing programme and disinfectant programme.

- (iv) All tankers, feed lines, fans are power hosed first, followed by ceilings, walls and floors.
- (v) Houses are disinfected with a high solution (approved by the Department of Agriculture), doors are then closed to let dry.
- (vi) Washings from cleaning of poultry houses is kept in a 5,000 gallon underground storage tank.
- (vii) Water minimisation is kept to a minimum due to the cost of pumping water to wash houses. Approximately 100 gallons are used to clean houses.

In the event that a nuisance is reported due to odours arising from the poultry litter, a masking agent will be used which is a chemical component in an open-air spray specifically designed to mix with the fugitive odour. These masking agents typically have pleasant odours designed to “mask” the unpleasant odour.

I.2. Assessment of impact of impact of ground emissions/I.3. Ground and/or groundwater contamination

The only concern to groundwater with regards to emissions and contamination is the storage of the wash water in the 2 no soiled water underground storage containers. These storage tanks were built by White Plant Hire and comply with Department Specification S123 *Minimum Specification for Bovine Livestock Units and Reinforced Tanks* as per the attached letter from White Plant Hire confirming same.

In addition the following mitigation measures will be carried out:

- Weekly visual inspection of monitoring point SW1
- Sample taken quarterly from SW1 and sampled at an independent laboratory
- Visually assessing the over ground sections of concrete tanks
- Visually inspecting empty tanks where the opportunity arises

Soiled water arising from the washing down of the accommodation houses is utilised on the applicant's land adjacent to the unit and amounts to approximately 5 vacuum tanks a year. The application of the soiled water is regulated under the EU (Good Agricultural Practice for the Protection of Waters) 2014 S.I. 31 of 2014.

I.4. Noise Impact

A simple definition of noise is “unwanted sound”. The major noises associated with a poultry unit are typical of any agricultural unit i.e. feed delivery and unloading, stock delivery and removal, ventilation systems.

Noise levels are measured in decibels and a weighting factor (A) is applied to approximate the frequency response to the human ear. This weighted decibel scale, dB (A) correlates well with human sensations of loudness, disturbance and annoyance.

Noise emissions from this unit are not audible at the site boundary. Noise levels are generally low and typical of a quiet rural area during daytime.

On-site mitigation measures

- The existing site has been established with acoustic barriers such as planting and fencing
- On site activities will only be carried out during normal working hours i.e. 08:00 – 18:00
- Access roads will be maintained to control noise emitted from moving vehicles i.e. banging caused by empty trucks
- Appropriate speed limits will be applied to access roads i.e. 20km
- All vehicles servicing the site will be properly maintained especially exhaust systems; a compulsory component of a Certificate of Road Worthiness, for the vehicle to operate on Public Roads
- Access routes will be maintained

I.5 Environmental Considerations, Main Alternatives and BAT

I.5a

Alternative sites considered

Michael O' Connor engaged NERGE Ltd. to carry out a feasibility study for this development. The existing site is in a rural area and ensures low visual impact. Over the years, Michael O' Connor has developed this farm to its current size, an alternative site would not be financially viable.

Alternative Site Layout & Designs

Alternative site layouts and designs were considered. The optimum depth of soiled tanks was decided upon on the basis of air draughts, capacity, emission reduction and costs etc. Generally, the most economical and efficient layout for poultry production and poultry movement was designed for, with a view to reducing environmental impacts and providing a safe and healthy environment for staff and livestock.

I.5b

The following Reference documents apply to the Poultry Unit:

Title of Document
Reference Document on Best Available Techniques for Intensive Rearing of Poultry and Pigs (July 2003)
Reference Document on Best Available Techniques on Emissions from Storage (July 2006)
Reference Document on Best Available Techniques for Energy Efficiency (February 2009)

I.5 c

The attached tables indicate how each BAT applies to the poultry unit at Templeglantine, Newcastle West, Co. Limerick.

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