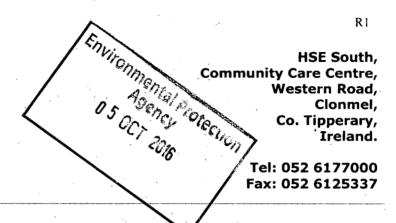
Feidhmeannacht na Seirbhíse Sláinte Health Service Executive



## **HSE SUBMISSION REPORT.**

Environmental Health Service Consultation Report.

(As a Statutory Consultee (Planning and Development Acts 2000, & Regs made thereunder)

Report to: Mr. Patrick Doyle
Programme Officer
Environmental Licensing Programme
Office of Environmental Sastainability
Environmental Protection Agency,
Headquarters, PO Box 3000
Johnstown Castle Estate
Co. Wexford.

**Type of Consultation:** Integrated Pollution Prevention and Control Licence Application Reference No. P1032-02.

Planning Authority. Tipperary County Council.

Reference number: P1032-02.

Our Reference number: 1D0509.

**Applicant:** Mile Tree Farm's Ltd. Clashiniska Lower, Clonmel, Co. Tipperary.

**Proposed Development**: Application to The Environmental Protection Agency for an Integrated Pollution Prevention and Control Licence for the rearing of pigs in an installation where the capacity exceeds, (a) 750 places for sows, or (b) 2000 places for the production of pigs where each is over 30kg. The application relates to the existing farm complex at Clashiniska Lower, Clonmel, Co. Tipperary.

1) General Introduction.

This report only comments on Environmental Health (EH) Impacts of the proposed development as outlined in this Environmental Report (ER) and the adequacy of the ER from an EH perspective. We have made observations on the following specific EH areas.

A) Noise/Vibration. B) Air Quality. C) Water Quality. D) Pest Control. E) Legionella Control.

# 2 Assessment of Principle & Description of the Project.

The farm complex is situated in a rural location approximately 2.8 km north of Clonmel on the R688. The existing piggery facility has been established for in excess of 20 years and is located approximately 350 metres off the main Clonmel /Cashel road. The site of the existing piggery is approximately 1.2 hectares and is surrounded by agricultural land much of which is owned by Mr. William Carroll the owner/operator of the piggery. The landscape around the piggery is low lying and comprises of mainly improved grassland and some and used for arable purposes. There are a scattering of residential developments along the main road. The existing farm complex consists of Dry Sow Houses, Farrowing Houses, Weaner Houses, Fattening Houses and an assortment of service buildings, feed storage silos and underground slurry storage tanks. The applicant Mr. Carroll has spent a number of years modernising the existing facility into a financially viable pig rearing and fattening unit and currently operates an integrated pig unit comprising of 600 sows and 3000 fattening pigs at the facility. There are currently three fulltime stock men employed at the site. The facility also provides employment in the form of maintenance contracts for repairs, slurry application to land, and professional services such as veterinarians accountant and agricultural consultant on an ongoing basis.

Planning permission to extend the site was granted to the applicant by Tipperary Co. Council back in 1991 and 1994. The structures, for which these permissions were sought, incorporate modern design concepts in areas of animal welfare, insulation, ventilation and environmental protection in the day to day operation of the facility. The proposed application consists of modifications to existing housing and facilities to accommodate a 700 sow herd. It can therefore be considered that the proposed application will comply with strict animal welfare legislation and incorporate best available techniques in order to minimise emissions to the environment.

The process at the facility involves sows being impregnated, and once sows have farrowed the piglet's progress through a two stage weaner phase which takes approximately 50 days. At this stage the weaners should achieve a target weight of 32 kg. Finally, the weaners are transferred to fattening units in order to achieve a slaughter weight of approximately 90-100kg. The fattened pigs are then sold to a meat processing plant located in Roscrea.

The pig farm has been inspected and accredited for the Bord Bia Code of Practice and the daily operation of the facility follows the Bord Bia Code of Practice for pig rearing welfare.

## 3) Assessment of the Environmental Impact Statement.

I have since had an opportunity to look at the Environmental Impact Statement in detail which was submitted as part of the licence application. I visited the facility on Thursday the 29<sup>th</sup> of September 2016 and spoke to the applicant Mr. William Carroll and was escorted around the site. He outlined the pig production process and his proposals to increase the herd at the facility and comply with current legislative requirements for animal welfare. Mr Carroll informed me that the piggery was first established on the site back in the early 1950's and over time has gradually expanded.

The current facility is very compact and appeared to be well managed and maintained in a tidy manner at the time of visit. Documentation is in place and includes the following: A) List of farmers supplied with slurry from the facility, including dates and volumes of slurry removed. B) Waste removal, including municipal waste and dead carcass. C) Pest Control. D) Water sampling programme of private water supply. E) Health and Safety Statement. F) Record of calibration on ventilation monitoring sensors located in individual pig housing units etc. The Environmental Impact Statement in my view was not very detailed, and did not provide sufficient information to demonstrate that concerns from an Environmental Health perspective will be adequately addressed. I should therefore like to make the following comments and recommendations in order to minimise the risk of potential nuisance to nearby residents.

### (A) Noise (Operational Phase).

Once the pig herd has increased this will no doubt lead to an increase in pig numbers in all categories of pigs at the facility including sows, weaners and fatteners. Consequently this may lead to an increase in noise levels from pigs at feeding times and increased demand from plant and equipment. It is therefore strongly recommended that a noise survey be undertaken. The survey should be undertaken by a competent qualified acoustics consultant to establish the predicted noise levels from fixed plant and equipment such as ventilation fans, motors, pumps etc. The noise survey should be undertaken in accordance with B.S 4142 Noise from Industrial sources affecting residential premises. Where noise levels are likely to exceed background levels all fixed noise generating plant and equipment associated with the operation of the piggery should be incorporated into suitable acoustic enclosures where practicable, or alternatively be adequately insulated and fitted with suitable noise attenuation /antivibration devices in order to minimise the risk of noise nuisance to nearby residential premises.

#### **Feeding**

The peak noise on pig farms is generally at feeding times when pigs compete for space and food at the feeding trough. A dry feeding regime pertains throughout the pig farm, augers transfer feed to the various pig buildings from the bulk silos located at the facility. The suckling sows, first /second stage weaners and the fatteners are fed pellet feed in "dry" feed hoppers ad lib. Pellets are eaten off the shelf and water is supplied via a nipple point in each pen. The peak noise levels are therefore avoided as the pigs are more content and do not have to compete for food and can feed throughout the day. Dry sows, gilts and boars, are fed twice daily via augers.

### **Deliveries**

It is strongly recommended that deliveries such as pigs and feedstuffs, and exports such as pigs and pig manure should not take place any earlier than 07.00 a.m and no later than 20.00 hours Monday to Saturday. This will help minimise the risk on noise nuisance from traffic movements.

# (B) Air Quality (Operational Phase).

## **Odour**

During the operational phase of the piggery there are two aspects which relate to air quality i.e. odour from on site activities and odour off site from land spreading of pig manure. The odour from the piggery arises from the day to day operations such as slurry agitation, washing down passageways and units within the piggery etc. The existing farm already uses current best available techniques.

All units housing pigs are on slatted floors and are washed, disinfected and rested on a regular basis between batches of pigs. Temperature control systems maintain the ventilation of the houses within the piggery at optimum air movements which assist in mitigating against any odour potential. Removal of pig manure from the facility is by vacuum leak proof tanker and agitation of slurry is kept to an absolute minimum in order to minimise odour release. Underground slurry storage tanks have equivalent to 4 months manure storage capacity. All dead carcasses are stored in a container at the piggery and removed for rendering on a monthly basis and more frequently if necessary by a licensed waste contractor.

The pig farm is located in a rural agricultural area where farm odours are part and parcel of the character of the locality. There are a number of odour sensitive locations within 150-300 metres of the farm facility. On the day of my visit to the piggery on the 29<sup>th</sup> of September 2016 there was a slight detectable pig slurry odour at the main entrance to the facility.

# Pig Slurry application to land

The pig slurry produced on the farm is used as a fertilizer by customer farms within the Clonmel/ Clerihan area of South Tipperary. A register of all pig slurry exported is maintained on site with date, volume exported, farmers name and address recorded. The pig slurry is applied to agricultural land in accordance with the Nitrate Directive Regulations (S.I No. 610 of 2010) and Teagasc Code of Good Practice for application of slurry to land.

In order to mitigate against any potential odour nuisance during application of pig slurry to land it is strongly recommended that the following measures be adopted.

- All pig slurry should be injected directly into the soil, or alternatively tankers should be fitted with low trajectory splash plates or band spreader to minimise aerosol formation.
- Pig slurry should not be applied any closer than 100 metres to residential dwellings to eliminate risk of odour complaints and contamination of private water supply.
- No applications of pig slurry to land during windy conditions to prevent carry over of odour/ aerosol to any nearby residential dwellings or main roads.
- Pig slurry should only be applied to fand between the periods of 15<sup>th</sup> of January to the 15<sup>th</sup> of October in accordance with the directive.

# (C) Water Quality Operational Phase).

The main potential threat to the contamination of ground water is the large volume of pig manure stored on site. In order to mitigate against any potential groundwater contamination it is recommended that the following measures be incorporated into the proposals.

- The slurry storage capacity should be calculated based upon the BATNEEC Guidance Note for Pig Production Sector (Revision 1-February 1998).
- It is strongly recommended that a leak detection system is installed to help eliminate the risk of ground water contamination. The leak detection systems should be inspected on a regular basis and any samples obtained at leak detection sites should be analysed by an independent accredited laboratory to determine the nature of any contamination.
- All pig manure applied to agricultural land should be in accordance with the Nitrate Directive Regulations previously mentioned.
- It is strongly recommended that water samples are obtained on a regular basis (at least on a quarterly basis) from any drainage ditches used for surface water runoff. The samples should be analysed by an independent accredited laboratory to ensure no contamination from the piggery enters the drainage ditch.
- The farm has its own private water supply by means of a private bored well. This water supply is currently used for the piggery alone, and samples are

- obtained from the well twice annually and submitted to an independent laboratory for analysis to ensure that the drinking water supply complies with the E.C. (Drinking Water) Regulations 2007.
- As mains drainage is not accessible on site, a septic tank is provided to accommodate staff W/C facilities and staff canteen. The Septic Tank should be inspected on a regular basis, serviced and de-sludged in accordance with the manufactures re-commendations. The outfall should be sampled at least annually and sent to an independent laboratory for analysis to ensure it complies with the loading rates for commercial premises as outlined in the Waste Water Treatment Manual produced by the Environmental Protection Agency.

### (D) Pest Control

The very nature of the farm environment tends to attract rodents such as rats and mice and insects such as flies i.e. blue bottles and cluster flies etc. They have a food and water supply, warmth and shelter readily available. It is virtually impossible to completely pest proof farm buildings as livestock require adequate ventilation therefore giving pests a pathway to enter buildings. During my visit to the piggery I did not see any evidence of rodent infestations, however there was evidence of fly activity in several of the housing units. Currently all pest control is undertaken by staff employed at the facility. There is the potential for pest problems at the facility due to the availability of food and shelter. I therefore strongly recommended that the services of a reputable, competent Pest Control Contractor be appointed to control rats, mice and flying insects. Inspections should be carried out at least quarterly and more frequently if necessary. A map of all bait points throughout the farm should be provided and a record of all inspections/comments should be available for inspection at all times.

# (E) Legionella Control

Day to day activities at pig farms involve the use of large volumes of hot and cold water for washing down and disinfection of pig houses. It is therefore imperative that all plant used for the distribution of heating/cooling of water supplies (e.g. water tanks, pipe work, cooling towers, pumps, valves etc) should be properly maintained and serviced to eliminate the risk and spread of Legionella. All new equipment should be designed as far as possible to eliminate the production of aerosols. The temperature and quality of the water used should be such that it will not support the growth of Legionella. The plant and equipment should be cleaned, flushed and disinfected on a regular basis and preferably have residual disinfection at all times. Regular temperature surveillance monitoring of the water system should be undertaken and microbiological samples obtained for analysis to detect the presence of Legionella. It is recommended that all staff are trained and educated in the prevention and spread of Legionella.

### Conclusion

The applicant Mr. William Carroll currently operates Mile Tree Farms Ltd. Clashiniska Lower, Clonmel, Co. Tipperary. The applicant has considerable experience in pig production and has operated on the current site for in excess of 20 years. The applicant informed me that he has never received any complaints from residents which live in close proximity to the piggery. The current facility is compact and well managed and no additional construction works are required to accommodate the increase in pig numbers, where necessary, existing buildings will be modified to accommodate the increase in pig numbers. The current facility complies with strict animal welfare conditions and incorporates best available techniques to minimise emissions from the facility, the current slurry storage capacity exceeds 4 months. The farm is accredited for the Bord BIA Code of Practice and is inspected on a regular basis to ensure it follows the Code of Practice for pig rearing welfare. The proposed development comprises of an activity to which an Integrated Pollution Prevention and Control Licence (IPPCL) under Part IV of the Environmental Protection Agency 1992 as amended is required.

I have since had an opportunity to look at the Environmental Impact Statement with regards to the proposed increase in the pig herd at the facility. As outlined previously, the mitigation measures (for controlling emissions to air and emissions to ground and surface water) as set out in the Environmental impact Statement were not very detailed. I therefore strongly recommend that those intigation measures outlined under items A to E above are also implemented as part of the licence application conditions. I therefore have no additional or adverse comments to make in respect of the proposed application.

Signed:

Date: 30<sup>th</sup> September 2016.

All correspondence or any queries with regard to this report including acknowledgement of this report should be forwarded to Mr. Ray Parle (Principal Environmental Health Officer) Environmental Health Department, Community Care Buildings, Western Rd. Clonmel, Co, Tipperary.

· 4 OCT 2016
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ENVIRONMENTAL HEALTH DEPARTMENT

SOUTH TIPPERARY OFFICE