Submission	
Submitter:	Miss Kay O Connor
Organisation Name:	HSE
Submission Title:	HSE Submission Repor, Rosedale Ltd, EHIS1105, EPA P1126-01
Submission Reference No.:	S005988
Submission Received:	11 March 2020
Application	
Applicant:	Rosedale Limited
Reg. No.:	P1126-01
See below for Submission details. Attachments are displayed on the following page(s).	

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Environmental Health Service,
Whitemill Industrial Estate,
Wexford
Phone: 053 9114381

Date: 11 March 2020

Name: EPA
Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford

Re: Industrial Emissions Licence Application Reference: P1126-01

Proposed development: Rosedale Ltd., Corbally, Enniscorthy, Co. Wexford

Name and Address of applicant: Mr. Joseph Healy, Rosedale Ltd., Corbally, Enniscorthy, Co. Wexford

Dear Sir/Madam

Please find enclosed the HSE consultation report(s) in relation to the above licence application. If you have any queries regarding any of these reports the initial contact is Ms. Siobhán Byrne, Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours faithfully,

Siobhán Byrne
Principal Environmental Health Officer

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Environmental Health Service,
Whitemill Industrial Estate,
Wexford
Phone: 053 9114381

Date: 11 March 2020

Our reference: EHIS 1105

Report to: Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford

EPA Reference: P1126-01

Type of Consultation: Industrial Emissions

Applicant: Rosedale Ltd., Corbally, Enniscorthy, Co. Wexford.

Nature of Activity: The rearing of pigs in an installation where the capacity exceeds (a) 750 places for sows or (b) 2000 places for production pigs which are each over 30kg

Introduction

The following HSE departments were notified of the consultation request for the licence application on 7 February 2020

- Emergency Planning – David O'Sullivan
- Assistant National Director for Health Protection – Kevin Kelleher / Laura Murphy
- CHO – Kate Killeen White
- Estates – Helen Maher

This report only comments on Environmental Health impacts of the licence application.

General

Rosedale Ltd. has applied for an Industrial Emissions Licence for their facility in Corbally, Enniscorthy, Co Wexford, which has been in operation since the 1980s. The licence application is being made as it is proposed to increase the number of stock at the facility. This will result in the facility falling under Class 6.2 of the First Schedule of the EPA Act 1992 'the rearing of pigs in an installation where the capacity exceeds –

(a) 750 places for sows or
(b) 2000 places for production which are each over 30kg'

The Non-Technical Summary accompanying the licence states that the facility operations include farrowing, creep feeding and weaning. Table 1 'Proposed Maximum Stock Numbers on Rosedale Site' indicates that the current number of pigs on site totals 6,596 and that it is proposed to increase this to 10,210.

All commitments to future actions including mitigation and further testing have been taken as read, and all data has been accepted as accurate. No additional investigations/measurements were undertaken in the review of this application.

The Environmental Health Service has not received any complaints regarding the existing Rosedale Ltd pig production facility

In respect of this application, the areas reviewed were those of concern to Environmental Health and which are:

- Any potential contamination of surface or ground water
- Emissions to air including odour and noise
- Pest Control
- Waste

Ms Anne Deacon, Senior EHO and Ms Kay O Connor EHO visited the pig production facility on 26 February 2020 to assist in the preparation of this report

Observations and recommendations from the site visit

a) This is an existing pig breeding unit which has been operating since the 1980s. The application for an Integrated Pollution Licence is being applied for as a result of an extension of stock numbers from 750 to a maximum of 1050 sows. It is noted that this application was not required to be accompanied by an Environmental Impact Assessment.

b) The site is located in a rural agricultural area. It is accessed by a narrow tarmac road which is in good condition. The closest house to the site is a farmhouse with farmyard which is estimated at a distance of 100-150 metres from the facility. There are a number of other houses further from the site. There has been minimal development in the area in recent years; the majority of applications on Wexford County Council Planning Portal were for changes to existing dwellings. Two planning applications were made in the area in 2019, none in 2018, one in 2017 and two in 2016. No recent planning applications have been refused.

c) The main emission from the site is and will continue to be from slurry waste and the inherent threat of surface water pollution. Some wastes may contain metals such as copper which must be considered in developing nutrient management plans.

d) This is a non -bedded unit, slurry dry matter is expected to be between 6-9%. The expected output for nitrogen is calculated by formula. During the visit it was reported that minimal analysis of the slurry has been carried out to identify environmental contaminants which may be of issue for the nutrient management plan.

e) In relation to slurry storage the current maximum storage capacity at the site was reported as 7555m^3, it is expected that with increased stock the production of slurry would increase to 7500m^3 which complies with the requirement for a minimum of 6 months storage capacity.

f) It was reported during the site visit that land spreading of the slurry is carried out by local farmers and that the piggery has their own slurry spreader which is equipped with a dribble bar. Some farmers also collect slurry themselves from 2 collection points on site. Currently a land bank of 2000 acres is available. During the site visit the owner confirmed that a list of farmers spreading from the unit is routinely submitted to Department of Agriculture.

g) The location of the River Ballyedmond, a tributary of the River Slaney, was observed during the site visit. The River Slaney is used for drinking water extraction. Nitrogen levels in the river Slaney and to a lesser extent phosphorous have increased in recent years (EPA Water Quality Report). The River Slaney flows into Wexford Harbour which is a bivalve mussel extraction area for human consumption.

h) Landspreading from the site will have a cumulative effect. Each farm will have to take account of the nature of their own soils and the water table levels on their farms. From consulting with the National Survey of Ireland soil map for Wexford soil types in the area of the piggery are a mix of Randalsmill, Kilpierce, Clonroche and Rathangan series; a mixture of freely and poorly drained soils. There are a mix of high water tables and deep water tables and therefore variable susceptibility to pollution.

i) Storm water from the site also flows to the River Ballyedmond through drainage ditches SW1 and SW2. Clean surface water from the concrete yard as well as water from the roof is directed to these ditches.

j) During the site visit it was identified by the applicant that one of the feed silos requires bunding to protect groundwater from accidental spillages. There are large storage tanks to the west of the site containing water and feed. The tank bunds require integrity testing and replacement if necessary. These should be included as conditions for granting the licence.

k) The groundwater vulnerability at the site has been designated as high and the aquifer is classed as locally important however the site is not located in a groundwater protection zone. It is described on GSI maps as having a high permeability subsoil, sand & gravels overlain by well -drained soil, the subsoil being glaciofluvial sands and gravels.

l) The site is served by a well. Routine microbiological testing of the well is currently carried out periodically according to the owner of the site. Recent tests which were included with the licence application were satisfactory in accordance with the above groundwater legislation.

m) The bulk of the slurry is collected in an underground slurry tank. There is also an open slurry tank on site. It is at the furthest point on site from the nearest sensitive receptor. The tank is secured with a high fence. Minimal agitation of the slurry is carried out according to the owner.

n) Odour on the piggery site itself was faint to moderate on the day of our site visit. It had recently rained (overnight prior to the site visit) and there was a light breeze on the day.

Environmental Health Service Recommendations

Potential contamination of surface or ground water

The Environmental Health Service has considered any potential risk of contamination of surface and ground water and makes the following comments:

The River Slaney is a source of drinking water for a number of counties in the east/south east of Ireland and flows into the Irish Sea at Wexford Harbour, which is an extraction area for bivalve mussels for human consumption.

Surface water runoff from the office building, sheds and concrete yard is directed to two identified storm water discharge points, both of which drain to the River Ballyedmond, a tributary of the River Slaney.

The Environmental Health Service notes that baseline monitoring of surface water quality has been undertaken and recommends that a programme of water quality monitoring is undertaken at the discharge points to the River Ballyedmond. This programme should be implemented during the operation of the expanded facility to ensure that the quality of surface water discharged into the Ballyedmond stream is not impacted by the operation of the facility.

Chapter 8.0 'Fuel and Feed Storage' of the Site Condition Report states that the fuel storage tank, which stores a maximum of 500 litres of diesel at a time, is not bunded. This Section also acknowledges that '*feed storage silos located to the south of the site requires bunding'* to alleviate the risk of accidental spillage.

The Environmental Health Service recommends that bunding of both the fuel storage tank and the feed storage silo to provide 110% capacity is undertaken. This should be included as a requirement of the licence.

In addition, the bunding to the large storage tanks to the west of the site containing water and feed require integrity testing and replacement if necessary. It is recommended that this should be included as a condition of granting the licence.

The area in which the facility is located is not served by a Public Water Scheme, and it is therefore likely that most of the homes in the area are served by private wells.

The Environmental Health Service recommends that routine groundwater testing should be required as a licence condition to assess compliance with EC Environmental Objectives (Groundwater) Regulations 2010 as amended.
This is to assess that there is no change microbiological or chemical water quality parameters arising from the operation of the expanded facility.

The water supply to the facility is from a groundwater well which is located on site.
Routine microbiological testing of the well is currently carried out periodically according to information contained in the licence application documents. Recent tests results, included with the licence application, were satisfactory and in accordance with the above groundwater legislation.

Water intended for human consumption or for food preparation should comply with the Drinking Water Directive (Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption) and European Union (Drinking Water) Regulations 2014 (S.I. No. 122 of 2014. Compliance with the requirements of the above legislation must be verified through sampling.

Emissions to air including odour and noise

On the day of the site visit by the Environmental Health Officer a faint to moderate odour was detected at the site of the pig production facility. Attachment 7.4.1 'Emissions to Atmosphere – Main and Fugitive Emissions' indicates that there are no emission points to atmosphere and indicates the measures proposed to mitigate fugitive emissions. These include

- All slurry tanks for sheds are located below ground and are covered to reduce odour as much as possible.
- Slurry is transferred to closed tankers when transferred from site for land spreading.
- Sheds are ventilated to avoid build-up of odour in sheds.

- Balanced feeds are fed to animals to reduce ammonia and odour production as much as practicable.
- Housekeeping on site includes clean down of sheds and yard areas to remove potentially odour material.
- Farmers must follow Good Agricultural Practices when land spreading slurry to avoid nuisance

It is recommended that the slurry storage tank is covered in order to reduce odours and prevent rainwater ingress and the potential for flooding.

It is noted that the pigs are fed a reduced protein diet and that the volume of feed used on site in 2017 was 2100 tonnes. Feeding pigs a low protein diet to reduce odour from slurry is in accordance with recommendations included in the EPA's 'Odour Impacts and Odour Emission Control Measures for Intensive Agriculture' report (EPA 2001)

The Environmental Health Service (EHS) notes that there is limited information contained in the Licence Application on the potentially significant impacts of fugitive odours from the facility. The EHS was unable to locate any baseline odour monitoring at the nearest sensitive locations, or that any atmospheric dispersion modelling had been undertaken or considered.

It is anticipated that there will be an increase in slurry production and an increase in the potential for odour emissions as a result of any intensification of activities on site. Rainwater ingress into the open slurry pit as a result of increased rain fall could also lead to additional slurry mass and tank flooding.

It is recommended that odour from the facility is monitored to ensure that the mitigation measures listed above are effective and that a nuisance is not created.

EPA Application Form 7.5 'Noise Emissions' which accompanies the Licence Application indicates that the proposed maximum noise levels are 60dB $L_{Ar,T}$ (30 mins) (daytime); 55Db L_{ArT} evening and 50 dB $L_{eq,T}$. There are two monitoring points, one on the north boundary and one on the south boundary.

Noise mitigation measures specified in the application include

- The use of low noise fans to ventilate sheds
- Sheds are insulated to reduce potential noise impacts from animals
- Truck movements limited to daytime hours to avoid traffic noise at night.
- Shed doors to be kept closed to minimise fugitive odours

The Environmental Health Service recommends that noise limits, and the monitoring of noise levels to ensure that limits are not exceeded, are included as a condition of the licence.

Pest Control

The Environmental Health Service was informed that a Pest Control Contract is in place for the external site areas, but that internal shed baiting is self- managed for biosecurity reasons. The control of pests on site is essential as rodents can consume and contaminate feed and can play a role in the transmission of disease.

Pest Control measures should include good hygiene practices within the facility and routine checks to ensure that the shed structures are rodent proof.

It is recommended that a Pest Control Plan is drawn up for the facility in its entirety, which specifies

- **Frequency of pest control monitoring**
- **Rodenticides used**
- **Rodent activity noted**
- **Remedial action undertaken**

The Visit Sheets completed by the Pest Control company following site visits should also be included in this Plan.

- **Waste**

Waste generated on site will include

- Spent fluorescent lighting tubes
- Veterinary waste
- Dead animals
- General domestic waste from office bins and yard waste
- Construction and demolition waste from occasional works onsite
- Wastewater general from site welfare and sanitary facilities
- Slurry from the operation of the facility

Chapter D.1.5 'Waste' of the Non-Technical Summary states that 'waste production is minimised where possible' and that 'wastes produced from areas such as the administration office, stores and equipment maintenance are recovered or recycled where possible by a licenced or permitted waste contractor'

The Environmental Health Service recommends that construction and demolition waste should be removed off site immediately as it may provide harbourage for pests

Chapter 5.1 of the Site Condition Report outlines the procedure for the removal and disposal of casualty pigs, which are stored in a closed skip prior to collection by an approved haulier to a rendering plant.

The site is not connected to a mains sewer and wastewater from the site welfare facilities discharges to an on-site septic tank.

The Environmental Health Service recommends that the integrity of this tank is checked annually and that it is emptied a maximum of every five years

The Licence Application acknowledges that the main waste produced on site is slurry from the pig rearing process. The bulk of the slurry is collected in an underground slurry tank. There is also an open slurry tank on site which is at the furthest point on site from the nearest sensitive receptor. The tank is secured with a high fence. The owner has stated that minimal agitation of the slurry is carried out in order to minimise odour generation.

Organic wastes, by their nature contain high concentrations of the nutrients nitrogen (N), phosphorus (P) and potassium (K). Wastes such as manures and slurries from piggeries are likely to contain faecal bacteria, viruses, protozoa (e.g. Cryptospiridium) and helminthic parasites. Some wastes may also contain metals such as copper which must be considered in developing nutrient management plans. This is a non- bedded unit and slurry dry matter is expected to be between 6-9%. The expected output for nitrogen is calculated by formula. Minimal analysis of the slurry has been carried out by the facility to date however to identify the other environmental contaminants which may be of issue.

The Environmental Health Service recommends that routine microbiological and chemical analysis of the slurry should be undertaken a minimum of once every six months and also if general feeding or creep feeding practices/products change.

The Site Condition Report states that the current maximum storage capacity at the site is 7555m^3. It is expected that with increased stock the production of slurry would increase to 7500m^3 which complies with the requirement for a minimum of 6 months storage capacity.

Chapter D.1.5 'Waste' contains details of best practice to be implemented in the spreading of slurry to mitigate the impact of odour on sensitive receptors.

Land spreading of the slurry is carried out by local farmers, the piggery have their own slurry spreader which is equipped with a dribble bar. Some farmers also collect slurry themselves from two collection points on site. Currently a land bank of 2000 acres is available. The owner confirmed that a list of farmers spreading from the unit is routinely submitted to Department of Agriculture.

The Environmental Health Service recommends that farmers exporting slurry from the Rosedale Ltd facility to use for land spreading are made aware of and comply with the best practice measures contained in Chapter D.1.5 of the Non-Technical Summary.

It is further recommended that a condition of the licence should be compliance with land spreading requirements as specified in the Nitrates Directive (91/676/EEC) and the National Nitrates Action Programmes (NAP)

Kay O Connor

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