	Vironmental Protection Agency Ghnomhaireacht um Chaomhnú Comhshaoil	OFFICE OF LICENSING & GUIDANCE
I	NSPECTORS REPORT (	<b>NALICENCE APPLICATION</b>
То:	Directors	
From:	Aoife Loughnane	- Licensing Unit
Date:	27 <sup>th</sup> March 2006	
RE:	Application for an IPPC Limited, Carrick Road, F 761	Licence Review from Glanbia Fresh Pork Edenderry, County Offaly. Licence Register

Application Details		
Class of activity:	7.4.1: The operation of slaughterhouses with a carcass production capacity greater than 50 tonnes per day.	
Section 87(1)b notice sent:	25/08/05	
Information under Section 87(1)b received:	13/12/05, 16/12/05	
Section 99(E) notice sent to Sanitary Authority:	9/01/06	
Information under Section 99(E) received:	13/02/06, 27/03/06	
Notices under Article 17 issued:	12/01/06	
Information under Article 17 received:	16/02/06	
Submissions received:	None	
Site visits:	12/08/2005	

## SUMMARY

This application by Glanbia Fresh Pork Limited is for the review of existing licence Reg. 180, granted on 23/10/1997 to Roscrea Bacon Factory Ltd, T/A Irish County Meats for the operation of a pig slaughtering and processing plant located at Carrick Road, Edenderry, Co. Offaly. Glanbia requested a review on 8/7/2005 under Article 15 of the EPA (Licensing) Regulations, 1994 to 2004. The licence review is necessary for the following reasons:

- (i) To update the licence in light of changes at the installation; and
- (ii) To incorporate the amendments to the licensing provisions of the Environmental Protection Agency Acts 1992 and 2003, as appropriate.

Processing operations on-site comprise of pig slaughtering, cleaning (scalding, de-hairing, singeing, polishing), evisceration, cutting/boning, packing & dispatch. Approx. 285 staff are employed at the installation.

#### LICENCE REVIEW ISSUES

The main licence review issues are:

- (i) Revised Site Boundary
- (ii) Modifications to on-site Wastewater Treatment Plant
- (iii) Modifications to Air Emissions

#### (i) <u>Revised Site Boundary</u>

The licensee has applied for a revised licensed site boundary in light of the proposal by Offaly County Council to construct a new relief road around Edenderry. It is anticipated that a portion of this new road will traverse the Glanbia site, resulting in a land take of approximately 0.68 ha which will cut the existing site in two (see Figure 1 below). The detail presented in the review application is based on currently available information. The final site boundary will be subject to further consultation with Offaly County Council and dependent on any subsequent compulsory purchase order. The total area of the site is 7.94 ha. After the proposed road construction, it is anticipated that approx. 1.17 ha of the licensee's site will be located to the north of the relief road, with the remainder of the site located to the south. All of the licensee's buildings and plant will be located on the southern side of the relief road, and the northern section will remain within the licensee's ownership. The area of land being taken for road construction currently consists of an area under the staff car park, internal roadway, grassland and part of the boundary earthen embankment.

The site was a green field prior to being occupied by the slaughtering plant. The licensee is not aware of any contamination, either as a result of past or present activities in the area of land to be removed from the existing licensed boundary. Condition 1.3 of the RD requires the licensee to submit details of the final site boundary to the Agency within one month of agreement with the Local Authority. Any reference to 'installation' in the RD shall be the area thus outlined.



Figure 1 Site Layout – Revised Boundary

## (ii) Modifications to Wastewater Treatment Plant

The limiting factor with regard to slaughtering capacity at the installation is the design limit of the on-site wastewater treatment plant (WWTP). Prior to 2005, all process wastewater was treated in an existing single stage activated sludge WWTP, with preliminary screening, flow balancing and oils/fats/grease removal. The sludge produced was thickened in a sludge consolidation tank and dewatered using a belt press. The wastewater load being produced and treated in the WWTP was approximately 865 kg BOD/day. This plant was overloaded and was consequently upgraded and extended to provide for additional loading and an increase in effluent quality.

The upgraded WWTP provides sufficient treatment capacity for approximately 1,096 kg BOD/day. Upgrading works began in November 2004 and were complete by April 2005. The upgrade involved the introduction of a two stage activated sludge process to decrease BOD/COD (this required the construction of an additional aeration and settlement tank to provide the first stage of treatment, while the existing tanks provide the second stage of treatment), the construction of an anoxic tank to reduce nitrogen concentrations, dosing with ferric sulphate to decrease phosphorus concentrations and the replacement of the sludge dewatering belt press by a decanting centrifuge to increase the dry solids content of the sludge (from approx. 10% to 18% dry solids). The upgraded WWTP layout is shown in Figure 2 below. The following additional tanks/units were constructed on-site:

- First Stage Aeration Tank
- First Stage Clarifier (inter-stage settlement tank)
- Anoxic Tank upstream of Second Stage Aeration Tank (existing tank)
- Additional Sludge Consolidation Tank
- New dewatering centrifuge (replacement for sludge dewatering belt press)
- Ferric sulphate bulk storage tank & associated bund, dosing pumps, pipelines & controls
- Odour Abatement Unit



Figure 2 Site Layout: Wastewater Treatment Plant

Table 1 sets out the design loading criteria for the upgraded WWTP based on balancing the influent loading over 6.5 days with a processing capacity of 14,000 pig equivalents.

Table 1 Design Loading Capacity of Wastewater Treatment Flant					
Number of Animals	Flow (m <sup>3</sup> /dav)	BOD (kg/dav)	Total Nitrogen (kg/dav)	Total Phosphorus (kg/day)	
14,000 pig equivalent	493	1,096	175	94.27	

# (iii) <u>Modifications to Air Emissions</u>

While there are no licensed emission points to atmosphere in the current licence (Reg. 180), Condition 5 requires the licensee to carry out annual boiler combustion efficiency testing. Arising from changes on-site since licensing, the licensee has applied for two new emission points to atmosphere; a 4.8MW duty boiler (A1-2) and the odour abatement unit at the WWTP (A2-1). These changes are discussed under the *Air* section of this report.

Modifications to the building structures on-site since the current licence (Reg. 180) was issued include an extension to enclose a relocated waste product dispatch area, extensions to existing chills, dispatch and slaughter areas and the installation of new boiler, flue and oil storage tank.

## USE OF RESOURCES

The primary raw material used on-site is animals for slaughter. Other raw materials include wastewater treatment chemicals (polyelectrolyte and ferric sulphate), carbon dioxide (pig stunner), salt (water softener), chlorine (water disinfectant), ammonia (refrigerant), packaging and cleaning agents.

There is a 10 kV electricity supply to the site to feed two transformers, having a capacity of 1,000kVA and 1,500kVA respectively. Annual power consumption is estimated at 845,342 kW of electricity. Annual fuel consumption is approximately 1,992,000 litres of LFO to fire the duty boiler and 101,078 litres of LPG to fire the standby boiler and singer. The primary heat source on-site is steam generation from the boilers, with direct steam injection to the dehairing machines, scald tank and tray wash. Annual water consumption is approximately 115,200 m<sup>3</sup>, sourced from an on-site well which yields approximately 31.8 m<sup>3</sup> per hour. A second on-site well is retained as stand-by supply. All water is softened on-site prior to being delivered to the 680m<sup>3</sup> storage tank. Process water is chlorinated to a concentration of 0.5 - 2 ppm. Hot water is produced by means of two heat exchangers, with 60°C water used for cleaning/washdown purposes, and 82°C water used for sterilisation. The refrigeration system on-site has low and high temperature stages, with two compressors for each with evaporating temperatures of  $-36^{\circ}$ C and  $15.5^{\circ}$ C respectively. Carcasses are passed through a quick-chill followed by an equalising chill to reduce carcass temperature from ambient to 3 to 4°C.

# COUNCIL DIRECTIVE 96/61/EC – IPPC DIRECTIVE

This installation falls within the scope of category 6.4(a) (*Slaughterhouses with a carcass production capacity greater than 50 tonnes per day*) of Annex I of Council Directive 96/61/EC concerning integrated pollution prevention and control.

This Directive has been transposed into Irish Law by the enactment of the Protection of the Environment Act 2003. The Recommended Determination (RD), as drafted, takes account of the requirements of the Directive. In particular, Condition 7 provides conditions dealing with energy, water and raw material use, reduction and efficiency on site. Conditions 9 and 10 deal with accidents, emergency response, decommissioning and residuals management at the installation. BAT is taken to be represented by the guidance given in the *IPPC Reference Document on Best Available Techniques in the Slaughterhouses and Animal By-Products Industries, November 2003.* 

# EUROPEAN COMMUNITIES (CONTROL OF MAJOR ACCIDENT HAZARDS INVOLVING DANGEROUS SUBSTANCES) REGULATIONS, 2006 (S.I. 74 OF 2006)

The activity is not an establishment to which the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2006 applies.

#### **RECOMMENDED DETERMINATION**

#### AIR:

Significant emissions to atmosphere arise from the boilers and odour abatement system. A general air extraction system removes air from the slaughtering, evisceration and deboning areas, from which emissions are considered to be insignificant.

#### **Boiler Emissions:**

A new 4.8 MW light fuel oil duty boiler was commissioned in 2004 for the generation of steam requirements on-site (steam output 6,800kg/hr). The original LPG fired boiler was commissioned in 1991 and is now used on standby only (steam output 3,500kg/hr). Air dispersion modelling was conducted using the US EPA dispersion model AERMOD for maximum emissions from the new boiler (emission point A1-2). The meteorological data used was that collected at Casement Aerodrome from 1999 to 2003. Background concentrations for the four parameters were incorporated into the model, using estimates for the Edenderry area (Rural Air Quality Zone D) based on the Agency's Air Quality Monitoring Annual Reports. The modelled results are presented in Table 2 below.

Parameter	Modelled Impact <sup>Note 1</sup>	Predicted Ground Level Concentration (ug/m <sup>3</sup> )	Air Quality Standard <sup>Note 2</sup> (µg/Nm <sup>3</sup> )	Predicted Ground Level Concentration as % of AOS
NO <sub>2</sub> <sup>Note 3</sup>	Annual Mean	22.1	40	55%
	99.8% ile of hourly values	86	200	43%
SO <sub>2</sub> <sup>-1000</sup>	99.7% le of hourly values	255	350	73%
	99.2% ile of daily values	96.3	125	77%
PM <sub>10</sub>	Annual Mean	19.8	40	50%
	90.4%ile of daily values	24.3	50	49%
СО	8-hour Maximum	0.33	10	3%

Table 2:	Dispersion	Model Results -	Boiler A1-2 a	at Maximum C	<b>)</b> peration
----------	------------	-----------------	---------------	--------------	-------------------

**Note 1:** Emissions were modelled at maximum emission limits of 1020 mg/m<sup>3</sup> for sulphur dioxide, 650 mg/m<sup>3</sup> for nitrogen oxides, 125 mg/m<sup>3</sup> for particulates and 150 mg/m<sup>3</sup> for carbon monoxide.

Note 2: Air Quality Standards Regulations 2002, S.I. No. 271 of 2002.

Note 3: A ratio of 0.75 conversion of NOx to  $NO_2$  was used in the model for predicting annual average  $NO_2$  concentrations, while a ratio of 0.35 was used for predicting maximum one-hour  $NO_2$  concentrations, based on guidance from USEPA for assessing the impact of NOx from point sources.

Note 4: Air dispersion modelling impact assessment is based on the boiler using fuel oil with a sulphur content of 0.6%.

The model found that emissions of NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub> and CO from the boiler operating under maximum conditions will lead to predicted ambient ground level concentrations at or beyond the site boundary, which are significantly below the relevant ambient air quality limit values. Ambient concentrations at the nearest residential receptors will generally be significantly less than those reported at the worst-case location off-site. In summary, no adverse environmental impact is expected to occur at or beyond the site boundary whilst operating the duty boiler at full capacity. *Schedule C* of the RD requires annual combustion efficiency testing of both duty and standby boilers.

## Odour Emissions:

Following licensing of this installation by the Agency, there were ongoing complaints of odour nuisance. In July 2003, the licensee commissioned Bord na Mona Environmental Ltd. to carry out an odour impact assessment at the site. The results were presented in the form of concentration contours/isopleths produced using the Industrial Source Complex Short Term 3 (ISCST3) model. The five closest residential dwellings in all directions were deemed sensitive receptors for modelling purposes. An odour annoyance criterion of 3  $OU_E/m^3$  as a 98% ile in one year was adopted, with the sensitive receptors to be located outside the 3  $OU_E/m^3$  isopleth, as determined by the modelling software. The modelling assessment concluded that:

- Based on the 3  $OU_E/m^3$  odour annoyance criterion, an odour impact may have been perceived at selected sensitive locations;
- The dewatered sludge holding tank was the most significant on-site odour source;
- The installation of an abatement unit to cover, extract and treat the headspace air from the dewatered sludge holding tank and balance tank would result in no exceedence of the adopted odour annoyance criterion at any sensitive receptor.
- After installation of the odour abatement unit, the expansion of the plant (including the upgrade of the WWTP) was not predicted to result in a significant perceived odour impact at any sensitive receptor.

A shell biofilter was installed at the on-site WWTP in 2004 with the agreement of the Agency, to minimise odours and reduce total sulphur compounds by treating air extracted from the headspaces of the covered balance tank and dewatered sludge holding tank. At the request of the Agency, the catchment was extended to include the sludge dewatering building. This air stream is extracted through a calcareous shell media to minimise contaminants prior to release through a stack labelled as emission point A2-1. The treatment process involves adsorption and absorption of the contaminants onto the shell filter media and into the surrounding aqueous phase, while the micro-organisms present on the biofilter medium biologically degrade and neutralise sulphide compounds. Process details and design values for the odour abatement unit are given in Tables 3 and 4.

Air Source	Volume / Size	Extraction Rate m <sup>3</sup> /hr	Odour Concentration OU <sub>E</sub> /m <sup>3</sup>	Equivalent H <sub>2</sub> S ppm
Balance Tank	20m x 4.5m	1360	100,000	47
			(Assumed Worst Case)	
Sludge Tank	6m x 1.4m	400	231, 824	109
			(Measured)	

 Table 3 Process Details

Table 4 Process Design	
Dimensions of Filter	6.25m x 2.59m x 2.51m
Total Max. Air Volume	1,760 m <sup>3</sup> /hr/filter
Media Volume	$30 \text{ m}^3$
Net Effective Loading	59m <sup>3</sup> /hr/m <sup>3</sup> media
Max. Ammonia + Amine Conc. ppm	15 ppm Ammonia
Max. Hydrogen Sulphide Conc. ppm	61 ppm
Water Recirculation Rate	$3 \text{ m}^3/\text{hr}$
Minimum recommended potable water top-up rate	375 litres/day

# The odour abatement system was designed and commissioned to achieve an odour contribution of $3 \text{ OU}_{\text{E}}/\text{m}^3$ as a 98% ile at the nearest sensitive receptor. This design criterion exceeds the standard referred to in the *draft BAT Guidance Note for the Slaughtering Sector* (*December 2004*) (5 $\text{OU}_{\text{E}}/\text{m}^3$ as a 98% ile of hourly average concentrations, above that of recorded background concentrations, measured at the nearest odour sensitive receptor). The Schedules of the RD specify emission limit values and control and monitoring requirements for the odour abatement unit.

#### **EMISSIONS TO SEWER:**

The upgrade and extension to the WWTP has been discussed under *Licence Review Issues* above. Wastewater is derived from wash down at slaughter and process areas, truck washings and lairage. Treated effluent is discharged to the Local Authority sewer and conveyed for further treatment at the municipal WWTP in Edenderry. Under the current licence (Reg. 180), the discharge point for treated effluent to the Local Authority sewer is a manhole at the North-Western corner of the site, on the access road. Monitoring of treated effluent is carried out at the outlet from the final clarifier tank at the WWTP, as the licensee states that this is the most accessible monitoring location and there is no process effluent discharged to sewer beyond this point. Domestic wastewater from the site administration block is discharged to sewer downstream of the outlet from the WWTP. The RD specifies the outlet from the final clarifier as the emission point and monitoring point for trade effluent discharge to sewer.

The licensee has requested increases in emission limit values for the treated effluent discharge to sewer, as shown in Table 5. An increased Nitrate limit has been requested on the basis of results obtained to date since the commissioning of the anoxic tank on-site. Increased Sulphate and Chloride limits have been requested as current limits cannot be achieved on a consistent basis and the licensee considers that the requested limits should not pose a risk to the Sanitary Authority collection system, municipal treatment plant or ultimate receiving waters, as the emission limit values proposed for the discharge are those specified in the *European Communities (Drinking Waters) Regulations, 2000 (S.I. No. 439 of 2000).* 

A Section 99E notice was issued to Offaly County Council (OCC) in respect of process effluent sewer discharges. OCC have specified that consent conditions shall remain as per current licence (Reg. 180). OCC have no objection to the requested changes in emission limit values for Sulphate and Chloride, however they are concerned at the impact the proposed increase in Nitrates would have on the municipal treatment plant and consequently on effluent quality. The existing municipal treatment plant was designed based on 40mg/l Total-N in influent, and to provide a 50% reduction in Total Nitrogen. The Total-N concentration of Glanbia's discharge, based on the proposed increase in Nitrates, would be in the region of 80 mg/l Total-N. OCC request that no change in the Nitrate level be permitted, and that the 5mg/l limit specified in the current licence (Reg. 180) continue to apply. The existing municipal treatment plant in Edenderry is at capacity, and proposals are at an advanced stage for the upgrade of the plant, which is to be carried out under a Design, Build and Operate contract. It is expected that the upgrade will be completed circa mid 2007. OCC state that if requested by the licensee, they would consider the possibility of providing additional capacity to cater for increased Nitrates or other discharge parameters.

	Emission Limit Values (mg/l)			
Parameter	Specified in current Licence (Reg. 180)	Requested by licensee	Specified in RD	
Nitrates (as N)	5	30	5	
Sulphate (as SO <sub>4</sub> )	100	250	250	
Chloride (as Cl)	200	250	250	

 Table 5 Current & Requested Emission Limits for Sewer Discharge

Condition 6.15 of the RD requires the licensee to carry out an efficiency evaluation of the onsite WWTP to identify alternative operating conditions, additional infrastructure and means to reduce the loading to the plant to ensure compliance with the ELVs specified under *Schedule B.3*. The licensee is required to submit a report on this evaluation within three months of date of grant of licence and to implement any measures within six months, subject to agreement of the Agency.

## **EMISSIONS TO WATERS:**

There are no direct emissions of effluent to water.

## SURFACE WATER:

Surface water runoff from roofs, car parks and hardstanding areas of the site discharge from SW1 on the western site boundary to a Local Authority surface water sewer. The receiving surface water is a stream which flows into the River Boyne. The licensee anticipates that the surface water drainage network on-site will be modified as a result of the predicted alignment of the new road through the site. The location of discharge point SW1 is not expected to change, however the on-site drainage network will be altered to facilitate drainage of the proposed new staff car park. The revised drainage map submitted by the licensee shows a proposed bypass oil separator on the surface water drainage line, prior to discharge at SW1. The RD specifies the standard requirement for the installation and maintenance of silt traps and oil separators on the storm water drainage network at the installation. The licensee is required to submit as-constructed drawings of the revised drainage network to the Agency. *Schedule C* of the RD retains the same monitoring regime for this discharge as required under the current licence (Reg. 180).

## Storage / Bunding:

Although blood is classified as Category 3 animal by-product material (see *Waste* section of this report), it is stored separately and removed under contract for recovery for use in the production of pet food. The 22,300 litre blood storage tank is emptied on a daily basis and has been fitted with an overfill alarm to ensure there is no risk of spillage. Boiler fuel is stored in a 51,948 litre double-skinned oil storage tank fitted with an overfill alarm and bund alarm and is barrier protected to prevent accidental collision. All oils stored on-site including the waste oil tank are bunded.

## Firewater Retention:

The current licence (Reg. 180) does not contain provisions in relation to firewater retention at the installation. Condition 3 of the RD requires the licensee to carry out a risk assessment to determine if the activity should have a firewater retention facility and to implement a suitable risk management programme in the event that a significant risk exists for the release of contaminated firewater.

## **EMISSIONS TO GROUND:**

There are no existing or proposed emissions to ground from the site. Off-site emissions to ground relate to landspreading of WWTP sludge, which is undertaken in accordance with an Agency agreed nutrient management plan (NMP). The total amount of sludge produced at the WWTP in 2004 was 4,217.51m<sup>3</sup>. In the 2005 NMP, land owned by 41 no. farmers constituted the total landbank of 2,287 ha, of which 1,881 ha was determined as usable land. This available land bank had the capacity to accept 8,536.36m<sup>3</sup> of sludge, when taking the nutrient requirements of each field into consideration. The licensee states that their landspreading contractors, Landfeeds Environmental Services, are currently reviewing available contingency lands for spreading to increase the reserve landbank available to the licensee.

The RD maintains conditions which require the licensee to demonstrate adequate recovery capacity for the sludge generated on-site by means of an annual nutrient management plan. Demonstration of adequate sludge recovery capacity may become more difficult as a result of the Nitrates Regulations (S.I. 788 of 2005), however the licensee currently has a generous reserve recovery capacity and is planning to increase this reserve.

## WASTE:

Waste materials generated at the installation include animal by-products (Category 2 & 3 material<sup>1</sup>), canteen & office waste, metal & packaging waste, sludge etc. Hazardous wastes arising include waste oils, lab chemicals and fluorescent light tubes. Waste recovery/disposal is controlled by licence conditions, which require the waste to transferred to authorised recovery/disposal facilities. The most significant waste stream produced is sludge from the WWTP, which is landspread in accordance with an Agency approved NMP. Animal by-products are disposed of to two licensed rendering facilities, with the exception of lungs and blood, which are dispatched off-site for re-use in the production of pet food. Canteen and office waste is disposed of to the Local Authority Landfill at Derryclure (Waste Licence 29-2).

Condition 8 of the RD specifies the standard requirements for handling of waste materials at the installation, including wastes destined for landspreading. Condition 8.9 of the RD requires the licensee to provide a minimum of 16 weeks storage capacity for wastes destined for landspreading. This is the storage period specified in Schedule 3 of the Nitrates Regulations (S.I. No. 788 of 2005), which although it specifically refers to livestock manures, is considered an appropriate timeframe in this case to ensure sufficient capacity for overwinter storage of organic wastes prior to landspreading. The licensee is also required to carry out an integrity assessment of sludge storage facilities on-site at least once every three years and ensure that sludge storage facilities off-site are appropriate for their purpose and will not cause pollution of ground or surface waters.

<u>Request:</u> The licensee has proposed the introduction of a macerator at the installation, to extract excrement from and clean the large intestines of pigs. Supporting information submitted by the licensee quotes a typical pig large intestine weight of 4.2 kgs, and states that maceration would reduce the weight by 60% by removing 2.4kgs of excrement. At present the large intestine and its contents are sent off-site for disposal by rendering. Maceration would reduce the amount of waste sent for rendering, as 60% of the waste would be sent for treatment in the on-site WWTP. It is projected that if the intestines of 2,000 pigs per were macerated, 4,800 kgs of waste would be produced, which would be sent to the on-site WWTP. Based on trials in the use of a macerator at the licensee's sister plant in Roscrea (Reg. 181) it is predicted that the hydraulic load on the WWTP would increase by 4,800 kgs of waste per day, BOD loading would increase by 114 kgs/day, Total Nitrogen loading would increase by 22 kgs/day, and an extra 880 kg/day of sludge would be produced.

The licensee projects that on the basis of these results, the introduction of the proposed macerator would not adversely affect the operation of the WWTP. The licensee does not anticipate that the odour generated from the maceration activity would result in a significant impact on odour levels beyond the site boundary, as the macerator would be located within the Category 2 animal by-products storage area located beside the lairage, and the door to this building can be closed. The licensee does not anticipate that the extra load on the WWTP will result in reduced performance in the abatement of odours by the biofilter unit due to the original conservative design capacity of the load from the balance tank headspace (100,000  $OU_E/m^3$ ). In addition, the licensee states that the macerator could further reduce waste quantities sent for rendering by cleaning the large intestine with warm water following removal of the excrement, thereby enabling its use in the production of pet food. The licensee states that no decision has been made yet on this option.

<sup>&</sup>lt;sup>1</sup> Category 2 Material (not fit for animal consumption) generated at the installation consists of manure and digestive tract contents, dead on arrival pigs/sows, dead in lairage pigs/sows, pigs which exceed permitted residue levels, trimmings at Veterinary detention rail, floor sweepings from boning hall/kill line, pig carcasses/parts that are condemned after the slaugherline by plant staff or DAFF, meat condemned in boning hall by plant staff or DAFF, screenings from large screen in WWTP.

**Category 3 Material (not fit for human consumption)** generated at the installation consists of lung lobes, flair fat, blood, testicles & sow udders passed by Veterinary inspection, waste bones from boning hall, hair, neck trimmings from slaughtering, heads from pigs/sows that are classified Category 3 under the salmonella categorisation programme.

<u>Response</u>: Based on the information submitted by the licensee, the projected capacity of the WWTP to treat this additional effluent stream is dependent on the slaughtering plant not operating at full capacity. Monitoring results have shown that the licensee is experiencing difficulties in achieving the current 5mg/l Nitrate (as N) emission limit value for the treated effluent discharge to sewer. The Sanitary Authority, in their Section 99 response, have not permitted any increase the emission limit value for nitrates on the basis that the existing municipal treatment plant in Edenderry was designed based on 40 mg/l Total-N in influent, and the Total-N concentration of Glanbia's proposed discharge (based on the proposed Nitrate emission limit value of 30 mg/l) would be in the region of 80 mg/l Total-N. For this reason, the proposal to introduce gut maceration at the installation is not currently considered appropriate, however the macerator proposal may be approved under Condition 1.4 of the revised licence, pending Sanitary Authority consent for an increased Nitrate emission limit values specified in the RD, particularly nitrates (as N).

## NOISE:

The most recent noise survey conducted in September/October 2003 concluded that the site was operating within the limits specified in the current licence. In the review application the licensee has expressed their concerns regarding potential ambient limits/conditions at the site boundary or nearest sensitive receptors, in light of the intensification of development around the site. The RD requires the licensee to carry out a noise survey within twelve months of date of grant of licence and thereafter as required by the Agency. The RD sets limits of 55/45 dB(A) at any noise sensitive location and tonal or impulsive emissions are prohibited in line with the current licence.

# HABITATS:

The site is located in an IDA Industrial Estate on the outskirts of Edenderry town and as such, it is not anticipated that there will be any significant emissions from the installation which could impact on a designated site.

# FIT & PROPER PERSON ASSESSMENT

Glanbia Fresh Pork Ltd. is a branch of the global company, Glanbia plc. The applicants experience, technical abilities, financial and legal standing would qualify them as Fit & Proper Persons.

## **COMPLIANCE RECORD:**

The Office of Environmental Enforcement (OEE) of the Agency identify that the two principal concerns in relation to this site are odour and the WWTP. Since the installation of the odour abatement equipment in 2004, two odour complaints have been received by the Agency (one in 2004 and one in 2005). In relation to the upgraded WWTP, the licensee has not yet achieved full compliance with the emission limit values specified in the current licence (Reg. 180), especially for Nitrates.

## SUBMISSIONS:

No submissions were received in relation to this application.

# **CHARGES:**

The financial charge for 2005 was 0,868. An annual charge of 10,509 is proposed in the RD, which reflects the enforcement effort required for the installation.

#### **RECOMMENDATION:**

I recommend that the Recommended Determination be issued subject to the conditions and for the reasons as drafted.

Signed

#### Aoife Loughnane

Inspector, Office of Licensing & Guidance

#### **Procedural Note**

In the event that no objections are received to the Proposed Determination of the review application, a revised licence will be granted in accordance with Section 87(4) of the Environmental Protection Agency Acts 1992 and 2003 as soon as may be after the expiration of the appropriate period.