

This Memo has been cleared for submission to the Director by the Senior Inspector, Ms. Marie O'Gonnor

Signed: Stulard Date: 6/12/11



**OFI  
LICENSING &  
RESOURCE USE**

**INSPECTORS REPORT ON A LICENCE APPLICATION**

To:	Directors
From:	Gavin Clabby - Licensing Unit
Date:	2 <sup>nd</sup> December 2011
RE:	APPLICATION FOR REVIEW OF AN IPPC LICENCE FROM QUEALLY PIG SLAUGHTERING LIMITED, LICENCE REGISTER P0175-02

**Application Details**

Licensee:	Queally Pig Slaughtering Limited
Location of Installation:	Grannagh, County Kilkenny
Classes of activity:	7.4.1: The operation of slaughterhouses with a carcass production capacity greater than 50 tonnes per day.
Categories of Activity under IPPC Directive (2008/1/EC):	6.4 (a)
87(1)b notice sent:	28/07/2011
Review form received:	04/10/2011
Notices under Article 90 issued:	24/11/2011
Information under Article 90 received:	29/11/2011
Supplementary material submitted by applicant	none
Submissions received:	none

**1.0 Reason for Licence Review**

The EPA (The Agency) granted Queally Pig Slaughtering Limited, IPC licence register number P0175-01 on the 26<sup>th</sup> February 1998, for the installation located at Grannagh,

County Kilkenny. This licence was amended on the 9<sup>th</sup> November 2005 to provide for conformity with the provisions of the IPPC Directive (96/61/EC).

On the 28<sup>th</sup> July 2011, the Agency initiated a review of IPPC licence register number P0175-01. The review was initiated by writing to the licensee and placing a newspaper notice in the Irish Independent. The reasons for initiating the review are in light of requirements under the following Regulations:

- (1) The European Communities Environmental Objectives (Surface Waters) Regulations 2009.
- (2) The European Communities Environmental Objectives (Ground Water) Regulations 2010.

## 2.0 Emissions to Surface Waters

Effluent from the Wastewater Treatment Plant (WWTP) discharges to the Middle Suir Estuary (WFD code: IE\_SE\_100\_0550). The existing WWTP comprises of the following unit processes: Dissolved Air Flotation, Balancing and Aeration, Anoxic zone, Activated Sludge, Phosphorous Removal and Final Clarification. There is also sludge thickening and dewatering. The phosphorus concentration in the final effluent is 1 mg/l ortho-P, on average. Priority substances are not limited in the existing licence.

### 2.1. Receiving waters and impact

The following table summarises the main considerations in relation to the impact of the discharge on the receiving waterbody, the Middle Suir Estuary.

**Table 2.0 Receiving waters**

Characteristic	Information	Comment
Receiving water name and code	Middle Suir Estuary (IE_SE_100_0550)	Transitional Water (salinity value: <1 p.s.u.)
WFD Status	Moderate (2011)	Less than Good status based on DO, BOD and Phytoplankton Biomass. Objective is to restore by 2021
WFD Risk	At risk, 1a (2008)	Point Sources; WWTP, Section 4 and IPPC discharges
Trophic Status	Eutrophic (2007-2009)	Eutrophic status based on DIN, BOD, DO and Chlorophyll.
Protected Areas (see Section 2.2)	UWWT Regs Nutrient Sensitive Estuary  Lower River Suir cSAC; Site Code 002137  Shellfish Area (Waterford Harbour)	SI 254/2001; Direct discharge  Direct discharge  SI 268/2006; 6 km downstream
WMU Action Plan	SERBD Transitional and Coastal Action Plan (TrAC)	Waterbody identified as 'at risk' from IPPC discharges
Programmes	Waterford Harbour Pollution Reduction Programme (PRP) (Shellfish)	Monitoring indicates faecal contamination and elevated DIN

According to the Transitional and Coastal Action Plan (TrAC) published by the South Eastern River Basin District (SERBD) in 2010, the overall status of the Middle Suir Estuary is 'Moderate'. The overall objective for the waterbody is the achievement of 'Good' status by

2021. The 'General Condition' parameters which determined the less than 'Good' status, for the waterbody, were Dissolved Oxygen (DO) and Biological Oxygen Demand (BOD). The TrAC reported 'Good' status for the remaining parameter of Molybdate Reactive Phosphorous (MRP).

A simple salinity-based desktop model was used, in conjunction with Agency monitoring data, to determine the impact of the discharge on the receiving water. The discharge was modelled at the licence limits for concentration and flow. The key parameters for transitional waters, as determined by this review under the Surface Waters Regulations 2009, are BOD and MRP (The Surface Waters Regulations 2009 do not set a limit for DIN in transitional waters.) The model indicates that, upon discharge at the licence limits, the concentrations for the key parameters in the receiving water are compliant with the Surface Waters Regulations 2009 standard, as set out in table 2.1 below.

**Table 2.1 Impact of Discharge**

Parameter	Background Conc. (mg/l)	Current ELVs (mg/l)	Proposed ELVs (mg/l)	Contribution from discharge in receiving water (mg/l) <sup>Note 1</sup>	Predicted total conc. in receiving water (mg/l) <sup>Note 1</sup>	Standard
BOD	2.05	40.0	40.0	0.05	2.10	≤4.0 mg/l <sup>Note 2</sup>
MRP (PO <sub>4</sub> -P)	0.030	1.0	1.0	0.001	0.031	≤0.06 mg/l <sup>Note 2</sup>
SS	10.0 <sup>Note 3</sup>	60.0	60.0	0.06	10.1	≤25 mg/l <sup>Note 4</sup>  <30% <sup>Note 5</sup> increase above background

**Note 1:** Based on proposed ELVs.

**Note 2:** European Communities Environmental Objectives (Surface Waters) Regulations 2009.

**Note 3:** Assumed background value.

**Note 4:** European Communities (Quality of Salmonid Waters) Regulations 1988.

**Note 5:** European Communities (Quality of Shellfish Waters) Regulations 2006.

As the Middle Suir Estuary is part of the Lower Suir sensitive area designation, under the Urban Water Treatment Regulations, 2001 Regulations (S.I. 254 of 2001) the Agency must apply BAT<sup>1</sup> with respect to the sensitivity of the receiving water. Accordingly, the Recommended Determination (RD) proposes a new Emission Limit Value (ELV) for Total Nitrogen (TN); set at 15 mg/l, which is in substitution for the current ELV of 20 mg/l for Nitrates (Data from the licensee's 2010 Annual Environmental Report indicates that this is achievable). This is discussed further in Section 2.2. No other changes to the ELVs of the current licence have been proposed in the RD.

### Priority Substances

This installation carries out a slaughtering activity and, therefore, priority substances are not a characteristic of emissions to water and were not dealt with in any further detail.

<sup>1</sup> Guidance Note on the Best Available Techniques for the Slaughtering Sector, 1<sup>st</sup> Edition, EPA 2008.

## **2.2 Specific Standards or Objectives for Protected Areas**

### Habitats and Species of European Sites directly dependant on water

The Middle Suir Estuary is part of the Lower River Suir candidate Special Area of Conservation (cSAC 002137). The installation discharges directly into this cSAC. Whilst there are conservation objectives for the Lower River Suir, there are no environmental objectives or standards for water-borne species. The objectives for the cSAC are to maintain or restore the favourable conservation condition of the Annex I habitats and Annex II species for which the cSAC has been selected. These objectives do not impact upon the ELVs specified in the RD. Nevertheless, the ELVs in the RD aim to achieve good status in the Middle Suir Estuary, and hence, will contribute to the favourable conditions objective for the area.

### European Communities (Quality of Shellfish Waters) Regulations 2006, as amended

Part of Waterford Harbour is designated as a protected area for Shellfish Waters. This protected area is 6 km downstream of the installation's discharge. The (Shellfish) Pollution Reduction Programme for Waterford Harbour notes the elevated levels of DIN, and faecal contamination, in or within the vicinity of the protected area. However, DIN is not a parameter specified in the European Communities (Quality of Shellfish Waters) Regulations 2006 (transposes Shellfish Waters Directive [2006/113/EC]). The RD specifies limits for temperature, pH, BOD, SS that aim to meet the standards specified in the European Communities (Quality of Shellfish Waters) Regulations 2006. With regard to faecal coliforms, it is anticipated that the installation is not likely to be impacting on the protected area. Nonetheless, the RD requires an assessment of the impact of the discharge on the microbiological quality of the shellfish in the designated shellfish waters and, if necessary, to install an appropriate disinfection system.

### Urban Waste Water Treatment Directive (91/271/EEC)

The population equivalents (p.e.) of the WWTP is approximately 54,000, which is greater than the equivalence of 4,000 stated in Article 13 of the Urban Waste Water Treatment Directive, for meat industry waste water discharges. As dealt with in Section 2.1 above, the receiving waters are part of the Lower Suir sensitive area designation, under S.I. 254 of 2001. TSAS<sup>2</sup> for 2007-2009 designates the receiving waters as eutrophic, and records DIN as a key factor. Therefore, in line with BAT requirements for sensitive waters, the RD sets an ELV for TN; set at 15 mg/l, which is in substitution for the current ELV of 20 mg/l for Nitrates. No other changes to the ELVs of the current licence have been proposed in the RD.

## **2.3 Emission controls and environmental quality standards**

The ELV's specified in the RD have been established according to the combined approach whereby the stricter of the requirements which would result from the application of limits which aim to achieve the quality standards and the application of limits based on BAT.

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<sup>2</sup> Trophic Status Assessment Scheme, 2007-2009, EPA

The ELVs specified in the RD aim to achieve the environmental objectives and standards established in the European Communities Environmental Objectives (Surface Waters) Regulations 2009.

### **3.0 Emissions to Groundwater**

Landspreading of organic waste/organic fertiliser (including WWTP sludge) represents a diffuse source of potential pollutant input to groundwater. The licensee states that sludge is currently sent for landspreading.

The RD updates the existing landspreading conditions and includes specific reference to the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.

As part of the Annual Environmental Report, the licensee submits monitoring data on the installation's groundwater well. This monitoring is not explicitly required in the current licence, but does provide data on groundwater conditions. The RD includes a new groundwater monitoring table to further ensure this monitoring is continued.

The requirements specified in the RD aim to achieve the environmental objectives and standards set out in the European Communities Environmental Objectives (Ground Water) Regulations 2010.

### **4.0 Updating the existing licence**

The RD has transposed all relevant existing licence conditions from P0175-01 into the Agency's current licence format. Consequently the RD specifies amendments and additional requirements

With reference to the condition and schedule numbers in the RD, Table 3 summarises the amendments made to the existing licence as a result of changes to the following;

- Requirements specified in the existing licence having been achieved (timeline exceeded)
- Clarifies meaning and requirements of existing licence conditions with regard to landspreading activities.
- The European Communities Environmental Objectives (Surface Waters) Regulations 2009
- The European Communities Environmental Objectives (Groundwater) Regulations 2010

Also, the following conditions from P0175-01 have been deleted in their entirety in the RD: 6.5, 6.6, 6.8 and 9.1.3, 9.2.1, 9.3.4. The actions required under these conditions were, confirmed by the OEE to have been completed, and were no longer required in the RD.

**Table 3: List of new or amended conditions proposed in the RD**

<b>Condition or Schedule No.</b>	<b>Reason for change</b>	<b>Description</b>
Condition 1.1, 1.2, 1.7	Clarification of Scope	Installation operation, control and maintenance.
Condition 2.2.2.8, 2.2.2.9 3.1, 3.2, 3.4, 3.6, 3.8, 3.10, 3.11, 3.12, 8.3, 8.6, 8.8, 8.9, 8.11, 8.12, 8.13	Better management of site	Management of installation, Infrastructure/Operation of installation, Composite sampling refrigeration, Silt Traps and Oil Separators, Fuel usage, Waste Handling
Condition 3.14, 5.5, 6.16, 6.17, 6.18, 8.14, Schedule B.2	Regulatory requirements and updates.	Organic Waste/Organic Fertiliser Storage, Surface Water Regulations; defining mixing zone, Landspreading, Impact assessment on Shellfish Waters, BAT requirement; TN Limit (substituted for Nitrate limit)
Condition 6.2, 6.5, 6.10, 6.12, 6.14, Schedule 6.6	Better control and monitoring	Improved measurement calibration; Improved surface water control and groundwater well protection, Trigger levels for surface water, Pollutant Release and Transfer Register, New groundwater monitoring table.
Condition 10, 12.2	Better provision for closure and incident costs	Decommissioning Management Plan / Financial Provision; Environmental Liabilities Risk Assessment / Financial Provision
Condition 11.7, 11.9, 11.10, 11.11	Better reporting and record keeping.	Notifications and Reports; Records, reports and registers

Class of Activity

The licensee has clarified that their class of activity is 7.4.1. This installation was licenced in 1998 under class 7.4 of the EPA Act 1992. The technical amendment in 2005 to achieve conformity with the IPPC Directive did not change the class of activity. The Protection of the Environment Act 2003 amended the First Schedule and introduced Class 7.4.1 to reflect the IPPC Directive and class 7.4 became 7.4.2 with additional wording so that 7.4.1 takes precedence. The licensee is operating above the thresholds specified in class 7.4.1 and the RD incorporates this amendment to ensure compliance with Annex I of Council Directive 2008/1/EC (IPPC Directive).

## **5.0 Cross Office Liaison**

The OEE confirmed the approved changes stated in the review form. In addition, it confirmed that any relevant Conditions or Schedules in the current licence which required actions to be completed, could be amended, or removed from the RD, due to those actions being completed. OEE also provided the agreed trigger levels for surface water emissions, which have been inserted into Condition 6.12.

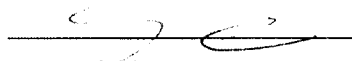
## **Charges**

The charge specified in the RD of is €11,255.68, the same as the invoice for 2011.

## **Recommendation**

I recommend that a Proposed Determination be issued subject to the conditions and for the reasons as drafted in the RD.

Signed



Gavin Clabby

## **Procedural Note**

In the event that no objections are received to the Proposed Determination of the application, a licence will be granted in accordance with Section 87(4) of the Environmental Protection Agency Acts 1992 and 2011 as soon as may be after the expiration of the appropriate period.

