### **Declaration**

The following Annual Environmental Report (AER) has been prepared by analysis of all monitoring data governed under IPPC Licence PO 175-01 for Queally Pig Slaughtering Ltd.

It has been prepared and reviewed with consultation of the Senior Management at Queally Pig Slaughtering Ltd.

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

Signature

Joanne Day,

Environmental/Quality Manager

Date

28. 3. 2012

## 1. Facility Information

Licence Register Number	PO 175-01
Name of site	Queally Pig Slaughtering t/a Dawn Pork and Bacon
Class of Activity	7.4.1 Operation of a slaughterhouse with a carcass production greater than 50 tonnes per day
RBME risk category	B3
National Grid Reference (6E, 6 N)	656853, 614430
Site Location	The facility at Grannagh is located on a site of approximately 30 acres on the main Waterford to Limerick Road, approximately 4 miles outside Waterford City. The River Suir is located to the east of the plant and runs into Waterford Harbour.
Site Description	<ul> <li>Operations at Grannagh have the capacity to slaughter 10,000 pigs per week.</li> <li>In addition to slaughtering, there are facilities for cutting, boning, curing, chilling and freezing of pork and bacon products.</li> <li>Normal hours of production at the plant are 6.00am to 6.00pm, Monday to Friday.</li> <li>Cleaning operations, which are vital component of daily activity, continue until 11.00 p.m.</li> <li>The refrigeration plant operates continuously and controls the temperature of the chill rooms and the cold store.</li> <li>Groundwater is used as a water supply to the plant, with boreholes located off- site to the south east of the plant.</li> <li>The water is chlorinated, prior to on-site storage and use.</li> <li>The energy supply for the plant is derived from electricity, natural gas and oil combustion, with two hot water boilers and one heating boiler present on the site.</li> <li>Located onsite there is a waste water treatment plant operated as a activated sludge process.</li> </ul>
Production	<ul> <li>447,660 pigs slaughtered in 2010</li> <li>489254 Pigs laughter in 2011</li> <li>8.5% production increase in 2011.</li> </ul>

## 2.0 Summary water emission data

### 2.1 Emission to water from EW 1

<u>Parameter</u>	Licence ELV	ELV Kg/Year	Kg/Year 2010 discharge	Kg/Year 2011 discharge	<u>%</u>
pH	6-9	-	-	3-	-
Temperature	25 <sup>0</sup> C	-		· ·	-
COD	100mg/l	65,700	38,912	31,607	18.7 % reduction
BOD	40mg/l	26,280	6,670	5,176	22.3 % reduction
Suspended Solids	60mg/l	39,420	6,670	6,670	Remain same
Nitrates (as N)	20mg/l	13,140	1,806	916	49 % reduction
Total Ammonia (as N)	10mg/l	6,570	1,589	1,649	3.6% Increase
Total Phosphorus (as P)	2mg/l	13,140	300	165	45% reduction
Orthophosphate (PO <sub>4</sub> <sup>3-</sup> )	1mg/l	657	305	499	38% Increase
Detergents	5mg/l	3,285	198	242	18% Increase
Oils, fats and Grease	15mg/l	9,855	711	1,832	61% Increase

COMMENT: Overall in 2011 Queally Pig Slaughtering Ltd, performed well in the reduction of potential pollutant discharges in the total emissions to water from the onsite WWTP. As part of O&T for 2012, we plan to reduce this again by 5% over 2011 total emissions. As can be seen from the table above we are also well within our licensed discharge limits. There is a continuous monitoring (as per IPPC Licence requirements) system in place for all discharge from WWTP to River Suir.

### 2.2 Emission to water from EW3

<u>Parameter</u>	<u>Unit of</u> measurement	Monitoring frequency	Average per month 2010	Average per month 2011	<u>%</u>
рН	-	Monthly	-	-	-
Conductivity	mS/cm	Continuous	-	-	-1
COD	mg/L	Monthly	15	17.2	12% Increase
Suspended Solids	mg/L	Quarterly	8.5	3.25	61% Decrease
Total Ammonia (as N)	mg/L	Quarterly	0.57	0.52	8.7% Decrease
Oils, fats and Grease	mg/L	Quarterly	<1	<1	Remains same
Chloride	mg/L	Quarterly	41	29.7	27% Decrease
Visual Inspection	-	Daily	Clear	Clear	Remains same

**COMMENT:** Overall in 2011 surface water emission from EW3 remain similar to 2011, with some parameters decreasing in emission levels.

### 2.3 Groundwater monitoring

<u>Parameter</u>	<u>Unit of</u> measurement	<u>Monitoring</u> <u>frequency</u>	<u>2010</u>	<u>2011</u>
pH	Н		7.12	7.09
TOC	ppb	Annual	254	1.53ppm
Nitrate	mg/L as N	Annual	6.06	7.04
Conductivity	uS/cm Annual		797@ 19.9°C	759 @19.8°C
Orthophosphate	-	Annual	Not tested	Not tested
Total Ammonia	otal Ammonia -		Not tested	Not tested
Total Nitrogen	-	Annual	Not tested	Not tested

<u>COMMENT:</u> All of the above limits comply with drinking water regulations and therefore there is No onsite contamination if ground water. In IPPC Licence PO 175-02 licensed parameters are specified and all of these will be analysed in 2012. Prior to this there were <u>no specified parameters</u> to be tested for groundwater, groundwater was analysed according to drinking water regulations.

### 3.0 Summary Waste Data

### 3.1 Waste removed off site for Recovery

Waste Category	<u>EWC</u>	Tonnage per year 2010	Tonnage per year 2011	% reduction/increase
Sludge	020204	5733	4919	14.2% reduction
ABP – Blood	020202	1760	1934.88	9.0 % Increase
ABP – Cat 2	020202	1622.24	956.78	41% reduction
ABP – Pet food	020202	766	698.06	8.8% increase
ABP - Offal	020202	3108.10	3680.57	15.5% increase
Packaging and Landfill waste	200101	105.8	124.6	15% Increase
Lamps	200121	0.166	0.166	Remains the same
Oil	110113	1.000	1.700	58% increase

### 3.2 Waste removed off site for disposal

Waste Category	EWC	Tonnage per year 2010	Tonnage per year 2011	% reduction/increase
Lab Waste	160506	0.05	0.052	3.8% increase

<u>COMMENT:</u> More details on waste generated and removed from Queally Pig Slaughtering Ltd. Site can be found in our PRTR data for 2011. This has been submitted to the EPA as per requirements. Increase in waste production is due to increase production in 2011 over 2010. ABP waste is a by-product of production that is processed by contractors and it is a raw material in their process. It is <u>not sent to landfill</u> it is recycled. In 2012, waste oil will be significantly reduced see EMP

### 4.0 Resource use and energy management

Resource	<u>Unit of</u> measurement	Total 2010 usage	Total 2011 usage	% Increase/Reduction
Electricity	Watts	5,245,500	5,103,360	2.7% reduction
Water	Gallons	54,117,852	45,418,210	16 % Reduction
Gas	M <sup>3</sup>	342,870.0	245,734.0	28% Reduction
Oil	Litres	191,688	193,799	1.2% Increase

### 5.0 Monitoring and compliance

Monitoring parameter	<u>Date</u>	<u>Outcome</u>	Comment
Unannounced EPA audit	23.03.2011	1 non-conformance	Non-conformance and observation closed out as of year end 2011.
External complaints	N/A	N/A	N/A

<u>COMMENT:</u> Overall in 2011 there was a reduction in energy usage onsite. This is attributed to efficient water, electricity and gas management. In 2012, with change of fuel source for the singer (EMP 12) there is a predicted 90% reduction in oil usage.

# 6.0 Environmental Management System

## 6.1 EMS Documentation

6.1 EMS Documentation  Document	Present	Comment
Onsite EMS	$\checkmark$	<ul> <li>Includes procedures and records</li> <li>Available for site inspections</li> </ul>
Significant Environmental aspects and associated impacts	$\sqrt{}$	<ul> <li>Documented</li> <li>Available for site inspections</li> </ul>
Public viewing of records	$\sqrt{}$	<ul> <li>Available for site inspections</li> </ul>
Environmental Policy	$\checkmark$	<ul> <li>Available for site inspections</li> </ul>
Objectives and targets	$\checkmark$	<ul> <li>Available for site inspections</li> <li>Included in the following pages Objectives an Targets for 2011 and proposed for 2012.</li> </ul>
Environmental Management Program	$\sqrt{}$	<ul> <li>Available for site inspections</li> </ul>
Boiler efficiency report 2011	$\checkmark$	<ul> <li>Available for site inspections</li> </ul>
Daily/weekly/monthly monitoring results	$\checkmark$	<ul> <li>Available for site inspections</li> </ul>
External lab report for 2011 groundwater monitoring	$\checkmark$	<ul> <li>Available for site inspections</li> </ul>
Waste records		<ul> <li>Available for site inspections</li> <li>This includes waste contractor collection permits and waste licences.</li> </ul>
IPPC Licence Review PO 175-02 / 2011documentation	$\checkmark$	<ul> <li>Available for site inspections</li> </ul>
Training records	<b>√</b> -	<ul> <li>Available for site inspections</li> </ul>
Organisational structure		<ul> <li>Available for site inspections</li> </ul>

### 6.2 2011 Objectives and Targets Status

### DAWN PORK AND BACON ENVIRONMENTAL OBJECTIVES AND TARGETS 2011

Issued by: Anne Marie Danaher

DATE: 03.01.2012

Approved by Joanne Day REV: 05 REF: DERC 17 DATE: 03.01.2012

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DAWN PORK AND BACOL

OBJECTIVE	EMP	Target	Completion date	Status	Responsibility	Indicator
Odour Management		Implement control measures for odour management				
	EMP 07	Odour audit	ongoing	Complete	AMD/J. Day	Reports
Reduce contribution to global warming and help achieve Ireland GHG emission reduction.		To comply with condition 5.2 of IPPC License PO 175-01 and to inform haulage companies (indirect aspect) to be environmental aware. To comply with condition 4.4.6 Operational control ISO 14001:2004				
	EMP 08	Financial Investment	Dec 11	Complete	AMD/J. Day	Documented report
	EMP 06	Boiler efficiency testing	Sept 11	Complete		Report
Create Environmental awareness		To comply with condition 2.6 IPPC license Po-175-01 To comply with condition 4.4.2 Competence training and awareness ISO 14001;2004			AMD/MB  AMD/Joanne Day	
	EMP 09	Train employees and contractors on procedures	DEC 11	Complete AMD/Joanne Day	Records	
Pollution Prevention		Comply with condition 6.2, 9.2.1, 9.1.4, 9.3, schedule1(ii) and 1(i) IPPC license PO-175-01. To comply with condition 4.4.6 Operational control ISO 14001:2004	***************************************			
	EMP 01	Monthly/quarterly surface water monitoring	On-geing	Complete	AMD	DERC 45
	EMP 02	Waste water effluent inspection	On-gcing	Complete	AMD	Records
	EMP 03	Implement control measures for odour management    Dodour audit	Report			
	EMP 04	Equipment calibration	On-gcing	Complete	AMD/J Day	Record
Waste Management	EMP 05	analysis IPPC license PO-175-01 To comply with condition 4.4.2 Competence training and awareness ISO 14001;2004		Complete	The state of the s	Report

## 6.3 2012 Objectives and Targets (Proposed)

DAWN PORK AND BACON ENVIRONMENTAL OBJECTIVES AND TARGETS 2012

Issued by: Anne-Marie Danaher

DATE: 06.02,2012

Approved by Joanne Day

DATE: 06.02.2012

REF: DERC 17

REV: 07

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	EMP	Target	Completion	Status	Responsibility	Indicator
Pollution Prevention		Comply with condition 6.2, 9.2.1, 9.1.4, 9.3, schedule1(ii) and 1(i) IPPC license PO-175-01 To comply with condition 4.4.6 Operational control ISO 14001:2004 and to reduced effluent emissions on all licensed parameter by 5% over kg/year for 2011	ине			e e e e e e e e e e e e e e e e e e e
Reduce contribution to global warming and help achieve Ireland GHG emission reduction.	EMP 01	contamination.	DEC 12	On - going	AMD	Report
	EMP 02	Waste water effluent inspection and adjustment of operational parameters to ensure optimum efficiency of WWTP	DEC 12	On - going	AMD	Report
	EMP 03	Complete groundwater analysis to ensure thee is no onsite contamination to ground water.	End Mar -11	Pending	AMD Sarah	Report
	EMP 04	Equipment calibration to ensure all WWTP parameters are monitored inline and accurately	DEC 12	On - going	AMD J Day	Report
	EMP-10	Implementation of IPPC License PO175-02 to comply with EC (Environmental Objectives) Surface water Regulations 2009	DEC 12	On - going	Senior	Records
	EMP II	Bund and tank Integrity testing to ensure all bunds and tanks are impervious and there is No contamination from these sources.	Dec 2012	Pending	Mgt AMD A. Wall J Day	Procedures Report
o global warming ind help achieve		To comply with condition 5.2 of IPPC License PO 175-01. To comply with condition 4.4.6 Operational control ISO 14001:2004 and to reduce oil usage by 90% on 2011 figures				
	EMP 08	Financial Investment	DEC 12	(A)		
mission reduction.	EMP 06	Bailer efficiency testing to ensure optimum efficiency of boilers	DEC 12	On - going	J. Day/ J.Reilly	Visual
	EMP 12	Reduce the use of oil as a fuel source (90% reduction expected)		Pending	A. Wall/J Day	Report
Vaste Management	<del> </del>		Quarter 1, 2012	Complete	A. Wall J Day	Visual
waste Wallagement		To comply with condition 2.6 and schedule 2(iii) waste analysis IPPC license PO-175-01 and to reduce oil disposal by 90% on 2011 figures				
	EMP 05	Waste sludge analysis, to ensure no waste is sent off s te contaminated	June 12 Dec 12	Dan line		
	EMP 12	Reduce amount of oil sent off site as waste (90% reduction expected)		Pending	AMD W. Norris	Report
		1 waste (90 a reduction expected)	On-going	On-going	A. Wall J Day	Visual Record

### DAWN PORK AND BACON ENVIRONMENTAL OBJECTIVES AND TARGETS 2012

Issued by: Anne-Marie Danaher

DATE: 06.02.2012

Approved by Joanne Day

DATE: 06.02.2012

Towns Ony

REF: DERC 17

REV: 07

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OBJECTIVE	EMP	Target	Completion date	Status	Responsibility	Indicator
Create Environmental awareness		To comply with condition 2.6 IPPC license PO 175-01 To comply with condition 4.4.2 Competence training and awareness ISO 14001;2004				
	EMP 09	Train employees on environmental issues	DEC 12	Ongoing	AMD/Joanne Day	Record
Odour Management		Implement control measures for odour management				
	EMP 07	Odour audit to monitor if ant odours are generated from the process and eliminate them if they occur.	ongoing	ongoing	AMD/J. Day/A. Wall	Record
		To ensure that a review of noise sources is carried out in accordance with Condition 8.3 of IPPC Licence P0175-01.				
Noise Management	EMP 13	Noise Survey and implement corrective action as if required	May 2012	Pending	AMD/J.Day	Report

Sheet: Facility ID Activities AER Returns Workbook 28/3/2012 13:7



| PRTR# : P0175 | Facility Name : Queally Pig Staughtering Limited | Filename P0175\_2011.xls | Return Year : 2011 |

Guidance to completing the PRTR workbook

# **AER Returns Workbook**

Version 1.1.1.

### REFERENCE YEAR 2011

#### 1. FACILITY IDENTIFICATION

Parent Company Name	Queally Pig Slaughtering Limited
Facility Name	Queally Pig Slaughtering Limited
PRTR Identification Number	P0175
Licence Number	P0175-01

Waste or IPPC Classes of Activity

Waste of IFFC Classes of Activity	
No.	class_name
	The operation of slaughterhouses with a carcass production capacity greater than 50 tonnes per day

Grannagh
Co. Kilkenny
Waterford
Ireland
-7.16672 52.2776
IESE
1011
Processing and preserving of meat
Anne-Marie Danaher
amdanaher@dawnpork.com
Environmental Technician
051870210
0.0
0.0
0
0
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### 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
8(a)	Slaughterhouses

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

ls it applicable?	THE RESIDENCE OF THE PARTY OF T
Have you been granted an exemption?	
If applicable which activity class applies (as per	
Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being	
used?	

4.2 RELEASES TO WATERS

Link to previous years emissions data

| PRITE TOTTS | Facility Name | Custify Pig Staughtering Limited | Fletome | P0175\_2011 vis | Return Year | 2011 |

SECTION A SECTOR SPECIFIC PRIR POLLUTANTS

SECTION A : SECTOR SPECIFIC PRTR POLLUT	RELEASES TO WATERS	STATE OF STREET			Please enter all quantities in this section in KGs			
	POLLUTANT			Method Used	Emission Polot 1	T (Total) KG/Year		F (Fugitive) KG/Year
No. Annex II	Name	MC/E	Method Code	Designation or Description	Emission Point 1	0.0	0.0	0.0

<sup>\*</sup> Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

THE REAL PROPERTY AND PERSONS	RELEASES TO WATERS	Please enter all quantities in this section in KGs QUANTITY						
No Annex II	Name Name	MC/E	Method Code	Method Used Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year

<sup>\*</sup> Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

ECTION C . REMAINING POLLO	TANT EMISSIONS (as required in your Licence) RELEASES TO WATERS		THE REAL PROPERTY.	THE RESERVE	Please enter all quantities in this section in KGs QUANTITY				
	POLLUTANT		_	Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Yea	
38 03	Ammonia (as N)	M M	ОТН ОТН	Nessier reagent method using DR2800 spectrophotometer 5 day BOD with ATU Reactor digestion method	1649.0 5176.0		0.0		
06 14	COD Fats, Oils and Greases	M M	ОТН ОТН	using DR2800 spectrophotometer Soxhelt Extract Cadmium reduction	31607.0 1832.0	31607.0 1832.0	0.0		
7	Nitrate (as N)	М	отн	method using DR2800 spectrophotmeter PhosVer3 Powder pilow mehtod using DR 2800	916.0	916.0	0.0		
2	Ortho-phosphate (as PO4) Suspended Solids Determents (as MBAS)	M M	OTH OTH OTH	spectrophotmeter Filtration method Colometric	499.0 6670.0 242.0	6670.0			

<sup>\*</sup> Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

				Please enter	all quantities on this sheet in Tonnes								10
				Quantity (Tonnes per Year)				Method Used		Haz Wasig: Name and Licence/Permit No of Next Destination Facility <u>Haz Wasie</u> : Name and Licence/Permit No of Recover/Disposer	Haz Waste: Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
Transfer	r Destination	European Waste Code	Hazardous		Description of Waste	Waste Treatment Operation	MICIE	Method Used	Location of Treatment				
Handidi	Describitori	0000	Triazardous		Description of Waste	Operation	TIVICAL	Inicalou oseu	Heatment				
		02 02 02 02 02 02	No No		Animal tissue waste CAT 2 Animal Tissue waste Lungs and Liver	R3 R3	M M	Weighed Weighed		Premier Proteins,ID3 Dawn Country Meats t/a	Dunlavin,0,0,Wicklow,Ireland Cahir,0,0,Tipperary,Ireland Hazel		
Within th	ne Country	02 02 02	No	3680.57	Animal Tissue waste Offal	R3	М	Weighed	Offsite in Ireland	Western Proteins,POO48 - 02	Hill,Ballyhaunis,Mayo,0,Irela nd		
To Other	r Countries	11 01 13	Yes	193.799		R13	м	Weighed	Abroad	Safet Kleen Ireland, WCP- DC-09-1223-01 Waste Licence W0099-1		road,Knottingly,West	Weeland road, Knottingly, West Yorkshire, 0, United Kingdom
To Other	Countries	16 05 06	Yes		laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals	D10	м	Weighed	Abroad	Veolia Ltd,WCP-ck-08-0578- 01 Waste Licence W0050- 02	Corin,Fermoy,0,Cork,Ireland	1,25541,Brunsbuttle,0,Germ	Ostertweute 1,25541,Brunsbuttle,0,Germ any
To Other	r Countries	20 01 01	No	124.6	Packaging waste and landfill waste	R5	м	Weighed	Abroad	GreenStar Ltd,WCP W0116- 02	Six cross roads,Carraiganard,Butlersto wn,Waterford,Ireland		
					fluorescent tubes and other mercury-					Irish lamp recycling.WCP/kk/030(a)/05		Irish Lamp recycling LTD,Waste Permit	Displaced Village
	Countries		Yes	0.116	containing waste	R5	М	Weighed	Abroad	Waste permit 02/2000 Agrilife	Blackpark, Kilkenny road, Athy, Kildare, Ireland Tourin, Cappoquinn, Waterfor		Blackpark,Killkenny Road,Athy,Kildare,Ireland
Within th	e Country	02 02 04	No	4919.0	sludges from on-site effluent treatment	R10	М	Weighed	Offsite in Ireland	Ltd,WCP/kk/317(a)/08	d,0,Ireland 2 Silverwood Industrial Estate,Craigavon,0,Armagh		
To Other	Countries	02 02 02	No	1934.88	animal-tissue waste blood	R3	M	Weighed	Abroad	APC Technologies, DAFF AB			