DAWN PORK AND BACON

Annual Environmental Report 2014

Licence Registration No. PO 175-02

Issued By: Sinéad Moroney **Date: 30.04.2015**

Environmental Technician

Contents

1.0

Introduction

This is the 15th Annual Environmental Report (AER) covering the environmental performance at Queally Pig Slaughtering Ltd.

1.1

Site Details

Licence Register Number	PO 175-02
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, 6N)	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.

1.2

Summary of Data

The licence annual reporting requires the submission of a completed pollution release and waste transfer (PRTR) workbook. This relates to the amount of pollutant released to the air, water, wastewater or sewers and the transfer of waste offsite.

This data was submitted electronically to the EPA. It is also under appendix 3 on this report.

1.3

Company Profile

Dawn Pork and Bacon has its origins with the Queally Group. Part of the group's original activities included the production of live pigs and in 1986 it was decided by the group to introduce a natural flow to the group's activities by slaughtering and processing its own pigs, therefore maximising the group's potential.

A new purpose built factory was constructed at Grannagh close to Waterford city. This facility would eventually house what is now Dawn Pork and Bacon. The factory is comprised of 10,125 square metres containing one of the most modern and technically efficient pork processing plants in Europe.

Dawn Pork and Bacon has evolved and progressed its activities at a rapid pace since its inception in 1986. It has established its factory, trained its staff, produced and marketed a quality product while remaining a profitable enterprise throughout this time. In 1995 a new de-boning, packing and storage facility adjacent to the existing premises was introduced. This expansion along with alterations to some of the existing facilities allowed the company to increase its slaughtering, deboning and trimming throughout.

The factory has a current slaughter capacity of 10,000 pigs over a 39 hour working shift and the capacity of fully deboning 9,000 pigs over the same shift. It has close links with the group's farming enterprises, which currently provide the factory with 2,000 pigs per week.

The current workforce including management, administration, maintenance and production staff is 270 people. Markets being served by Dawn Pork and Bacon include mainland Europe, Japan, Korea, USA, Australia and the Irish domestic market.

The operation consists of slaughtering, primal cutting, de-boning, trimming, curing, packing and freezing. The plant is both EU and USDA approved.

Dawn Pork and Bacon recognise that in order to preserve natural resources for generations to come, the food industry needs to ensure that sustainable practises are implemented. This began a few years ago and the company is committed to continuing these efforts under the Origin Green programme. This provides the essential framework to gather the company's sustainability efforts.

As Dawn Pork and Bacon is a major processor of pig meat in Ireland, we aim to conduct our business in both a responsible and sustainable manner. This involves certain approaches to business activities including close liaison with customers, suppliers, regulatory authorities, employees and other relevant stakeholders.

As a family run business, Dawn Pork and Bacon believes in providing a safe and positive environment for the workers. We also aim to contribute to the local community. The Origin Green Team and Management at Dawn Pork and Bacon have developed a sustainability plan which has 3 main strategic challenges:

- Sourcing of raw materials
- Manufacturing Process: Energy, Waste, Water and Development of ISO14001
- Social Sustainability: Community/ positive workplace promotion, staff career development and the health of employees.

2.0 Environmental Management System

2.1

Environmental Management System Documentation

Document	Present	Comment
Onsite EMS	Yes	• Includes environmental manual, operating manual for the laboratory and effluent plant, system procedures, internal audit system and records. • Available for site inspections
Environmental aspects and associated impacts	Yes	Available for site inspections
Public viewing of records	Yes	Available for site inspections
Sustainability, environmental and energy policy	Yes	Available for site inspections
Objectives and targets	Yes	Summary of 2015 Environmental Objectives and Targets included in this annual environmental report
Daily/ Weekly/ Monthly Monitoring Results	Yes	Available for site inspections
External lab report for 2014 ground water monitoring	Yes	Available for site inspections
Waste Records	Yes	Available for site inspections
Training Records	Yes	Available for site inspections
Organisational Chart	Yes	Available for site inspections
Bund and pipeline integrity report 2012	Yes	Available for site inspections
2014 Boiler Efficiency Report	Yes	Available for site inspections
Energy Audit	Yes	Available for site inspections
Noise Survey 2014	Yes	Available for site inspections
Impact on Shellfish Study	Yes	Available for site inspections

The following is a report on the progress achieved in the objectives and targets which were set for 2014.

- **EMP 01:** Ensure underground pipelines are intact. Assessment carried out every 3 years. Last completed in 2012.
  Status: To be done in 2015.
- **EMP 02:** Bund integrity testing. Assessment carried out over 3 years. Last completed in 2012.
  Status: To be done in 2015.
- **EMP 03:** Reduce hydraulic loading to the effluent plant. Analyse all waste streams to establish where improvements can be made.
  Status: Ongoing
- **EMP 04:** Reduction in biological loading to the effluent plant. Analyse all waste streams to establish where improvements can be made.
  Status: Ongoing
- **EMP 05:** Monthly/ Quarterly surface water monitoring to ensure there is no onsite contamination to ground water.
  Status: Completed.
- **EMP 06:** Waste contractors and transport companies- review of licences.
  Status: Completed.
- **EMP 07:** Complete groundwater analysis to ensure there is no onsite contamination to groundwater.
  Status: Completed.
- **EMP 08:** Equipment calibration to ensure all WWTP probes are accurate.
  Status: Completed.
- **EMP 09:** Installation of oil separator in car park to minimize the potential for contamination of ground water and surface water.
- **Status:** Completed.
- **EMP 10:** Preparation of PRTR and submission to the EPA.
  Status: Completed.
- **EMP 11:** Over ground pipelines – monthly inspection programme of flanges and valves on over ground pipelines.
- **Status:** Completed.
- **EMP 12:** Improve operational controls of our bio-filter to maximise efficiency and improve odours onsite.
- **Status:** Completed.
- **EMP 13:** Boiler efficiency testing to insure optimum efficiency of boilers and eliminating contaminated air emissions.
  Status: Completed.
- **EMP 14:** Conduct a noise survey.
  Status: Completed.
- **EMP 15:** Reduce organic waste produced in the WWTP by improving the belt press operation by increasing the dry solids.
  Status: Ongoing.
- **EMP 16:** Reduction in electricity used onsite- installation of occupancy light sensor and timers, installation of LED lighting in external areas.
  Status: Completed.
- **EMP 17:** Implement recommendations from the energy audit.
  Status: Completed.

- **EMP 18:** Reduce water usage on site – closer management of the cleaning operation, installation of more efficient valves and nozzles, recycling water, improve level control system in sterilisers, trialling of different jets for wash purposes.
  Status: Completed.
- **EMP 19:**
  Staff Training and awareness
  1. Refresher environmental awareness training for every employee.
     Status: Completed.
  2. Overview of ISO 14001 for three employees.
     Status: Completed.

2.3

The following objectives and targets have been set for 2015.

EMP	Target	Completion Date	Responsibility	Indicator
EMP 01	Ensure underground pipelines are intact. An assessment is carried out every 3 years. Last completed in 2012.	2015	Contractor	Contractor Report
EMP 02	Bund integrity testing. An assessment is carried out every 3 years. Last completed in 2012.	2015	Contractor	Contractor Report
EMP 03	Reduce the hydraulic loading to the effluent plant in order to make improvements where possible	Ongoing	Environmental Manager	Report
EMP 04	Reduce the biological loading to the effluent plant, analysis of waste streams to find out where improvements can be made	Ongoing	Environmental Manager	Report
EMP 05	Monthly/ quarterly surface water monitoring to ensure there is no onsite contamination	Ongoing	Environmental Technician	Report
EMP 06	Waste contractors and transport companies- review of licences	Annually	Environmental Technician	Report
EMP 07	Complete groundwater analysis to ensure there is no onsite contamination to ground water	Annually	Environmental Technician	Report
EMP 08	Equipment calibration to ensure all WWTP probes are accurate	February 2015	Contractor	Contractor Report
EMP 09	Preparation of PRTR and submission to the EPA.	March 2015	Environmental Technician	PRTR Report
EMP 10	Over ground pipelines- monthly inspection programme of flanges and valves on over ground pipelines	Ongoing	Environmental Manager	Report
EMP 11	Improve operational controls of the bio filter in the WWTP and maximise efficiency and improve the odours onsite	Ongoing	Environmental Manager	Report
EMP 12	Boiler efficiency testing to ensure optimum efficiency of the boilers onsite and eliminating contaminated air emissions	April 2015	Contractor	Contractor Report

EMP 13	Reduce the organic waste produced in the WTTP by improving the belt press operation	Ongoing	Maintenance Manager	Report
EMP 14	Continue to reduce the water usage onsite	Ongoing	Maintenance Manager	Report
EMP 15	Implement ISO14001	Ongoing	Environmental Manager/ Environmental Technician	System

3.0

Emissions to Water Summary

Environmental monitoring data for January to December 2015 are summarised below. Waste from Dawn Meats and Dawn Pork and Bacon are fed to the waste water treatment plant. Both waste streams undergo screening and the waste is pumped through the rest of the waste water treatment plant. The treated waste water is then discharged into the River Suir.

3.1 Emission to water (EW1)

Parameter	Licence ELV	ELV Kg/Year	Kg/Year 2012	Kg/Year 2013	Kg/Year 2014
pH	6-9	-	-	-	-
Temperature	25°C	-	-	-	-
COD	100mg/l	65,700	23,924	24,431	26,577
BOD	40mg/l	28,280	2,411	2,340	2,872
Suspended Solids	60mg/l	39,420	4,355	4,406	5,101
Total N (as N)	25mg/l	16,425	2,133	3,851	4,736
Total Ammonia (as N)	10mg/l	6,570	1,643	1,073	1,542
Total Phosphorus (as P)	2mg/l	1,314	273	266.77	306.19
Orthophosphate (PO_4^3)	1mg/l	657	362	352.83	246.96
Detergents	5mg/l	3,285	115	111.87	163.07
Fats, oils and grease	15mg/l	9,855	1,991	1,940.56	1358.29
Total Emissions		**169,506**	**37,204**	**38,773**	**42,902.51**

3.2 Emission to surface water (EW3)

Parameter	Unit of Measurement	Monitoring Frequency	2012	2013	2014
pH	Units	Monthly	-	-	-
Conductivity	mS/cm	Continuous	-	-	-
COD	mg/l	Monthly	21	31.9	26.16
Suspended Solids	mg/l	Quarterly	6	17	6.02
Total Ammonia (as N)	mg/l	Quarterly	0.52	0.152	1.77
Fats, oils and grease	mg/l	Quarterly	<1	<1	11.7
Chloride	mg/l	Quarterly	30	32.32	12.5
Visual Inspection	-	Daily	Clear	Clear	Clear

3.3 Groundwater analysis

Parameter	Unit of Measurement	Monitoring Frequency	2012	2013	2014
pH	Units	Annually	7.16	7.3	7.7
TOC	mg/l	Annually	8.3	0.99	7.3
Nitrate	mg/l as N	Annually	6.85	7.14	3.7
Conductivity	uS/cm	Annually	754	1307	149
Phosphorus	mg/l P	Annually	0.10	<0.1	0.47
Total Nitrogen	mg/l N	Annually	6.90	7.6	3.8
Orthophosphate	mg/l P	Annually	<0.02	<0.02	<0.05

4.0 Waste Management

Disposal of hazardous and non-hazardous waste is recorded in accordance with the conditions of the licence.

4.1 Waste removed off site for recovery

Waste Category	EWC	Tonnage per year 2012	Tonnage per year 2013	Tonnage per year 2014
Organic Waste from WWTP	020204	5,123.92	5,572.039	6,366,460
ABP- Blood	020202	2,054.30	1,858.76	1,983.18
ABP- CAT 2	020202	423.72	485.80	615.68
ABP- Pet food	020202	684.62	571.72	596.18
ABP- Offal	020202	4,514.64	4,375.02	4,491.9
Packaging and Landfill waste	200101	142.16	128.28	134.16
Lamps	200121	0.18	0.17	0.219
Oil	110113	0.653	0.7	1.1
Paper	200101	1.27	1.85	-
Total waste recovered/ recycled		**12,945.46**	**12,994**	**14,188.87**

4.2 Waste removed off site for disposal

Waste Category	EWC	Tonnage per year 2012	Tonnage per year 2013	Tonnage per year 2014
Lab Waste	160506	0.092	-	0.150
Blades and Knives	180202	0.431	0.1365	0.285
Total waste disposed		**0.523**	**0.1365**	**0.435**

5.0 Resource and Energy Management

Data related to energy consumption (electricity, gas and oil) and water are summarised below.

Monitoring Parameter	Unit of Measurement	2011	2012	2013	2014
Electricity	Watts	5,103,360	5,237,200	5,226,720	5,176,020
Water	Gallons	45,418,210	39,982,849	35,803,470	37,434,256
Gas	M3	245,734	265,545	210,110	214,097
Oil	Litres	193,799	29,035	14,236	8,260

6.0 Water Conservation Report

The table below outlines the number of gallons of cold and hot water per pig processed at Dawn Pork and Bacon from 2010 to 2014.

Also noted are the % reductions in water from 2010 to 2014.

6.1 Reduction in water per pig processed

Water Source	2010 Gallons used per pig processed	2011 Gallons used per pig processed	2012 Gallons used per pig processed	2013 Gallons used per pig processed	2014 Gallons used per pig processed	Overall reduction 2010-2014
Cold Water	121.42	92.81	78.11	80.07	79.31	34.6%
Hot Water	29.53	19.76	13.30	13.83	12.96	56%

In order to achieve the reduction outlined above in water usage at Dawn Pork and Bacon, the below measures were implemented at the facility:

- In 2011, the use of sub metering on hot and cold water was introduced at Dawn Pork and Bacon which allowed for the monitoring and targeting of cold and hot water usage per pig processed in certain areas in the factory. This data is recorded on a central database.
- In 2012 the steriliser system was upgraded, to switch from continuously heated water at 82 degrees to water heated when required and has stopped a huge waste of water at this high temperature.
- Recycling water from the vac pac machine into the 40 degree water tanks.
- Closer management and auditing of water usage on site.
- Training of employees at induction and refresher training to report any water leaks that they notice to their supervisor.

We have set out an aim in our Origin Green plan that we intend to reduce water consumption by 45% per tonne of carcass processed by 2019.

In 2015 we intend to do this by:

- Trailing different jets for washing purposes
- Carrying out a water usage audit for sanitation purposes
- Start using a new double belt press in the effluent plant which will reduce water usage
- Install line restrictors

APPENDIX 1

Biennial Environmental Noise Survey 2014

4 Summary of Noise Survey

A summary of the noise monitoring measurements taken at the NSLs and Boundary Locations is presented below. Boundary measurements are utilised to characterise the noise arising from site activities and are not noise sensitive locations. Historic noise measurements are included in Attachment 6 to which boundary measurements are compared to.

Boundary measurement locations have been modified, under agreement with the Agency, in 2014. Table 5 below compares the historic monitoring locations to the 2014 monitoring locations, to enable correlation between 2014 and historic data:

Table 5: Comparison of Revised Monitoring Locations to Historic Monitoring Locations

2014 Monitoring ID	Description	Pre 2014 Monitoring ID	Description
N1	North boundary of Employee Car-Park	NM3	North-western site boundary, adjacent site entrance
		NM4	North-eastern site boundary
N2	Eastern boundary, adjacent pallet area.	NM5	Eastern site boundary, adjacent extraction fan
N3	Western boundary, within the rear work yard.	NM2	Western site boundary, adjacent to DP&B chillers
N4	Southern boundary, south of the Wastewater Treatment Plant.	NM1	South-western site boundary, close to effluent treatment plant
		NM6	South-eastern site boundary, adjacent aerator 1
		NM7	Southern site boundary
NSL1	Roadside, near a collection of 3 dwelling houses located southwest of the facility and on a higher elevation than the facility.	NM9 (NSL)	Noise Sensitive Receptor located approximately 515m southwest of the facility.
		NM8 (NSL)	Noise Sensitive Receptor located approximately 750m southwest of the facility (Campion Kinsella)
		NM10 (NSL)	Noise Sensitive Receptor located approximately 245m west of the facility.

Based upon the notes taken during the noise survey, noise arising at the NSL was dominated by close proximity noise sources, such as local traffic and agricultural source noises, with national road traffic a relatively

constant ambient source. Therefore, as per chapter 7.10 of NG4 '*in instances where extraneous noise sources dominate L_{eq} noise spectra, appropriate consideration should be given to the L_{90} spectrum that may be more representative of site noise emissions alone*'. NSL compliance is rated against the L_{A90} parameter rather than the L_{Aeq}, as this is representative of noise emissions from the facility.

4.1 Noise Sensitive Locations (NSLs)

The discussion of noise measurements at NSLs is split under the two IEL time parameters of day and night for convenience of establishing limit compliance.

4.1.1 NSL Daytime Results

DPB's IEL daytime noise limit of 55 dB (L_{Aeq}) was not exceeded at the NSL when assessed against the L_{A90} parameter. Noise from the facility was not audible at NSL1 during the day-time monitoring events. Typical noise at the NSL included the constant hum of traffic movements in the distance and occasional rural noise sources including fowl within the nearby field and machinery in the distance.

Noise arising from the DPB facility was not audible at NSL1 during any of the 3 day-time measurements.

Based upon the monitoring data collected, and the interpretation of this data, DPB is in compliance at the NSL for noise emissions during the day.

4.1.2 NSL Night-Time Results

DPB IEL night-time noise limit of 45 dB (L_{Aeq}) was compared to the recorded $L_{A90\ (30\ minute)}$ measurements, to remove the influence of local extraneous noise events. NSL 1 was in compliance with the licence emission limit. It was noted during the night-time monitoring event that noise arising from the facility was not audible at NSL1. Typical noise audible at this location included the distant movement of traffic on the national roads and occasional dogs barking. Peak events at the NSL during the night-time monitoring were attributed to the movement of traffic past the sound level meter on the local road.

DPB, based upon the monitoring data collected and the interpretation of this data, night-time noise monitoring was in compliance with the licence limit.

4.1.3 NSL Tonal Assessment

Assessment for tones was completed using the guidance set out in chapter 5.1 of NG4 for positive identification of a tone within a 1/3 octave spectrum. A tone is only weighted where it is attributable to the operations at the DPB facility and is a prominent feature at a NSL.

There were no tonal or impulsive components in the noise detected (subjectively or measured) emanating from the facility at NSL1. Further tonal analysis was therefore not required.

4.2 Boundary Locations

Boundary noise monitoring results reflect the nature and scale of operations taking place close to these areas and were directly related to plant operations. As agreed with the Agency boundary monitoring locations followed the same frequency of monitoring as the NSLs. Boundary monitoring locations are not sensitive receptors and therefore are not assessed against the emission limit values set out in the IEL, but compared to historic boundary noise emissions. Table 5 outlines the comparison method between 2014 monitoring locations and the historic data.

4.2.1 Boundary Day Results

The daytime arithmetic average $L_{Aeq(30\ minute)}$ recorded at the boundary locations ranged from 57 dB at boundary location N4 to 68 dB at boundary location N3. General noise on site was attributed to truck movements in the rear yard area, pumps and water movements at the wastewater treatment plant and the hum from the louvered area along the eastern wall of the production building. Plant noise from the production facility (noise break out, external forklift movements, facility external plant, lairage area noise, or truck activities) was not dominant at N1, located to the north of the employee car-park during the day-time monitoring events.

N1 monitoring location was influenced primarily by the movement of traffic on the N24 to the north, during the day-time monitoring events.

Comparison of the boundary day-time results to historic data at boundaries on site, show 2014 results are consistent with historical norms.

4.2.2 Boundary Night-Time Results

The night time arithmetic average $L_{Aeq(30\ minute)}$ recorded at the boundary locations ranged from 45 dB at boundary location N4 to 56 dB at boundary location N2. Noise from the facility varied at each boundary location, with refrigeration truck noise dominant to the north, louver noise emission from the production plant dominant at the eastern monitoring location and wastewater treatment plant pumps the constant source at the western and southern noise monitoring locations.

The boundary locations are not NSLs and measurements taken at boundary locations are compared to historic data to identify

variations in facility noise emissions. Boundary locations are not compared to emission limit values.

Review of night-time boundary measurements to historic data show consistency with historically recorded norms for boundaries.

APPENDIX 2

Boiler Efficiency 2014 Report Summary

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Hi-Line Energy Solutions Ltd

Croughtabeg, Windgap, Callan, Co. Kilkenny.
Tel: 051 641118 Fax: 051 641122 087 2280083 Email hilineenergy@eircom.net

Service Record / Commissioning / Fault Report

Client	DAWN PORK + BACON
Address	GRANNAGH WATERFORD

Contact Name	
Tel No.	
Purchase Order No.	35653
Date	16-1-14

Service ✓ Commissioning Call Out

Burner Make:	Riello	
Model:	RS 190	
Serial No.		
Spec No.		
Fuel	NAT GAS	Output Kw

Boiler Make:	Buderus	No. 2
Model:	LOGANO SK725	
Serial No.		
Input Kw		Output Kw

Isolate power supply to appliance

	Checked	N/A
Clean burner head	✓	
Check spark probe	✓	
Check flame probe	✓	
Check photo/UV cell		
Check/Change nozzles		
Clean fan		
Clean burner body	✓	
Clean sight glass	✓	
Clean boiler	✓	
Check for oil leaks		
Check for gas leaks	✓	
Check air pressure sw	✓	
Check gas pressure sw	✓	
Check for water leaks	✓	
Check seals	✓	
Check flues	✓	
Test fire burner	✓	
Check/Reset combustion	✓	
Check Gas Detection		

Flue Analysis

	High	Low
O2 %	4.2	4.9
CO ppm	9	17
CO2 %	9.5	9.1
Ratio	0.0001	0.0002
Temp Net		
Temp Flue	167	134
Net Efficiency %	93.9	95.0
Excess Air %	25.3	31.0
Gas inlet pressure Mb running	30	
Burner pressure Mb	13	5.5
Oil pressure bar		
Smoke No.		
Nozzle Size/Degrees		

Parts used:

Main Boiler

Remarks: Serviced gas Burner / Boiler. Head of Blast tube had fallen off. Replaced back onto Burner. New head needed.

Time Sheet

Date	Travelling Time	Arrive	Depart	Total	Office Use
16-1-14	1 Hrs	9.45	13.50	Hrs	
	Hrs			Hrs	
	Hrs			Hrs	

Engineer Signature: Paul Greaney Client Signature: P McG...

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Hi-Line Energy Solutions Ltd

Croughtabeg, Windgap, Callan, Co. Kilkenny.
Tel: 051 641118 Fax: 051 641122 087 2280083 Email hilineenergy@eircom.net

Service Record / Commissioning / Fault Report

Client	Dawn Bork + Kacon
Address	Granagh, Waterford
Service ✓	Commissioning / Call Out

Contact Name	
Tel No.	
Purchase Order No.	
Date	29-1-14

Burner Make:	Riello
Model:	RS 190
Serial No.	
Spec No.	
Fuel	NAT GAS
Output Kw	

Boiler Make:	Ruderus No. 1
Model:	SE 735
Serial No.	
Input Kw	
Output Kw	

Isolate power supply to appliance

	Checked	N/A
Clean burner head	✓	
Check spark probe	✓	
Check flame probe	✓	
Check photo/UV cell		
Check/Change nozzles		
Clean fan		
Clean burner body	✓	
Clean sight glass	✓	
Clean boiler	✓	
Check for oil leaks		
Check for gas leaks	✓	
Check air pressure sw	✓	
Check gas pressure sw	✓	
Check for water leaks	✓	
Check seals	✓	
Check flues	✓	
Test fire burner	✓	
Check/Reset combustion	✓	
Check Gas Detection		

Flue Analysis

	High	Low
O2 %	5.1	5.5
CO ppm	0	1
CO2 %	9.0	8.8
Ratio	0.0000	0.0120
Temp Net		
Temp Flue	151	135
Net Efficiency %	94.2	94.2
Excess Air %	31.9	35.2

Gas inlet pressure Mb running	105	
Burner pressure Mb	13.5	3.5
Oil pressure bar		
Smoke No.		
Nozzle Size/Degrees		

Parts used: Standby Boiler

Remarks: Serviced gas Burner / Kitted & Installed Gasket around Plate then had Boiler off into Boiled. Replaced.

Time Sheet

Date	Travelling Time	Arrive	Depart	Total	Office Use
29.1.14	1 Hrs	9.50	12.05	Hrs	
	Hrs			Hrs	
	Hrs			Hrs	

Engineer Signature: Paul Sheehan Client Signature:

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Hi-Line Energy Solutions Ltd

Croughtabeg, Windgap, Callan, Co. Kilkenny.
Tel: 051 641118 Fax: 051 641122 087 2280083 Email hilineenergy@eircom.net

Service Record / Commissioning / Fault Report

Client	Dawn Pork + Bacon
Address	Grannagh Waterford

Contact Name	
Tel No.	
Purchase Order No.	35653
Date	23/01/14

Service	Commissioning	Call Out

Burner Make:	Riello	
Model:	G10	
Serial No.		
Spec No.		
Fuel	MGO	Output Kw

Boiler Make:	Buderus	No.	
Model:	G215		
Serial No.			
Input Kw		Output Kw	

Isolate power supply to appliance

	Checked	N/A
Clean burner head		
Check spark probe		
Check flame probe		
Check photo/UV cell		
Check/Change nozzles		
Clean fan		
Clean burner body		
Clean sight glass		
Clean boiler		
Check for oil leaks		
Check for gas leaks		
Check air pressure sw		
Check gas pressure sw		
Check for water leaks		
Check seals		
Check flues		
Test fire burner	✓	
Check/Reset combustion	✓	
Check Gas Detection		

Flue Analysis

	High	Low
O2 %	4.7	
CO ppm	15	
CO2 %	12.0	
Ratio	0.0001	
Temp Net		
Temp Flue	147	
Net Efficiency %	94.5	
Excess Air %	29.0	
Gas inlet pressure Mb running		
Burner pressure Mb		
Oil pressure bar	12	
Smoke No.	0	
Nozzle Size/Degrees		

Parts used: Office Boiler

Remarks: Checked Combustion on Boiler. Running O.K.

Time Sheet

Date	Travelling Time	Arrive	Depart	Total	Office Use
23.1.14	Hrs	13.10	13.25	Hrs	
	Hrs			Hrs	
	Hrs			Hrs	

Engineer Signature: Paul Greene Client Signature:

Subject to terms and conditions. Copies may be inspected at our office. All queries must be made within 5 days.

APPENDIX 3

PRTR Data 2014

Environmental Protection Agency

Guidance to completing the PRTR workbook

AER Returns Workbook

Version 1.1.18

REFERENCE YEAR	2014

1. FACILITY IDENTIFICATION

Parent Company Name	Queally Pig Slaughtering Limited
Facility Name	Queally Pig Slaughtering Limited
PRTR Identification Number	P0175
Licence Number	P0175-02

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Grannagh
Address 2	Kilkenny
Address 3	
Address 4	
	Kilkenny
Country	Ireland
Coordinates of Location	-7.16672 52.2776
River Basin District	IESE
NACE Code	1011
Main Economic Activity	Processing and preserving of meat
AER Returns Contact Name	Sinead Moroney
AER Returns Contact Email Address	smoroney@dawnpork.com
AER Returns Contact Position	Environmental Technician
AER Returns Contact Telephone Number	051 870210
AER Returns Contact Mobile Phone Number	
AER Returns Contact Fax Number	
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	270
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
8(a)	Slaughterhouses

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

Is it applicable?	No
Have you been granted an exemption ?	No
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	No

4.1 RELEASES TO AIR

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

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

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD				QUANTITY		
			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/Year
						0.0	0.0	0.0

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

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Queally Pig Slaughtering Limited

Please enter summary data on the quantities of methane flared and / or utilised	**T (Total) kg/Year**	**M/C/E**	**Method Used**		**Facility Total Capacity m3 per hour**	
			Method Code	**Designation or Description**		
Total estimated methane generation (as per site model)	0.0				N/A	
Methane flared	0.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this on

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT						QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
12	Total nitrogen	M	CRM	Test 'N Tube Method	4736.0	4736.0	0.0	0.0
13	Total phosphorus	M	CRM	Acid persulphate digestion method	306.19	306.19	0.0	0.0

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

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT						QUANTITY		
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT						QUANTITY		
			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/Year
238	Ammonia (as N)	M	CRM	Hach Lange Nessler Method	1542.0	1542.0	0.0	0.0
303	BOD	M	CRM	Adopted from standard methods for waste water analysis, 5 day test Reactor Digestion/Colormetric Analysis	2872.0	2872.0	0.0	0.0
306	COD	M	CRM	HACH	26577.0	26577.0	0.0	0.0
308	Detergents (as MBAS)	M	CRM	Anionic surfactant as MBAS	163.07	163.07	0.0	0.0
314	Fats, Oils and Greases	M	CRM	Solvent Extraction Method	1358.29	1358.29	0.0	0.0
332	Ortho-phosphate (as PO4)	M	CRM	Powder Pillows Phosver 3 Ascorbic Acid	246.96	246.96	0.0	0.0
240	**Suspended Solids**	M	CRM	Filtration Method	5101.0	5101.0	0.0	0.0

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

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

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

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			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/Year
					0.0	0.0	0.0	0.0

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

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

| PRTR# : P0175 | Facility Name : Queally Pig Slaughtering Limited | Filename : P0175_2014 PRTR Data.xls | Return Year : 2014 |

30/04/2015 12:11

Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: 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)
						M/C/E	Method Used					
Within the Country	02 02 02	No	615.68	Animal tissue waste CAT 2	R3	M	Weighed	Offsite in Ireland	Dublin By-products Ltd,R910	Dunlavin,0,0,Wicklow,Ireland		
Within the Country	02 02 02	No	596.18	Animal Tissue waste Lungs and Liver	R3	M	Weighed	Offsite in Ireland	Premier Proteins,ID3	Cahir,0,0,Tipperary,Ireland		
Within the Country	02 02 02	No	4491.9	Animal Tissue waste Offal	R3	M	Weighed	Offsite in Ireland	Dawn Country Meats t/a Western Proteins,POO48 - 02	Hazel Hill,Ballyhaunis,Mayo,0,Ireland		
To Other Countries	02 02 02	No	1983.18	animal-tissue waste blood	R3	M	Weighed	Abroad	APC Technologies,DAFF AB	2 Silverwood Industrial Estate,Craigavon,0,Armagh BT66 6LN,United Kingdom		
Within the Country	02 02 04	No	6366.46	sludges from on-site effluent treatment	R10	M	Weighed	Offsite in Ireland	Agrilife Ltd,WCP/kk/317(a)/08	Tourin,Cappoquinn,Waterford,0,Ireland		
To Other Countries	11 01 13	Yes	1.1	degreasing wastes containing dangerous substances	R13	M	Weighed	Abroad	Safet Kleen Ireland,WCP-DC-09-1223-01 Waste Licence W0099-1	Unit 5,Airton Road,Tallaght,Dublin,Ireland	Solvent Resource Mangement Ltd,TP334SF,Weeland road,Knottingly,West Yorkshire,0,United Kingdom	Weeland road,Knottingly,West Yorkshire,0,United Kingdom
To Other Countries	18 02 02	Yes	0.285	wastes whose collection and disposal is subject to special requirements in order to prevent infection	D15	M	Weighed	Abroad	Sterile Technologies Ireland Limitied,W0055-02	Units 420-430 Beech Road ,Western Industrial Estate Naas Road.,Dublin 12,Dublin 12,Ireland	AGR mbH RZR Herten/Im-Linien,E56252039,Im Emscherbruch ,11D-45699,Herten,.,Germany	Im Emscherbruch ,11D-45699,Herten,.,Germany
Within the Country	20 01 01	No	134.16	Packaging waste and landfill waste	R5	M	Weighed	Offsite in Ireland	GreenStar Ltd,WCP W0116-02	Six cross roads,Carraiganard,Butlerstown,Waterford,Ireland		
Within the Country	20 01 21	Yes	0.219	fluorescent tubes and other mercury-containing waste	R5	M	Weighed	Offsite in Ireland	Irish lamp recycling,WCP/kk/030(a)/05 Waste permit 02/2000	Blackpark,Kilkenny road,Athy,Kildare,Ireland	Irish Lamp recycling LTD,Waste Permit 02/2000,Blackpark,Killenny road,Athy,Kildare,Ireland	Blackpark,Killkenny Road,Athy,Kildare,Ireland

* Select a row by double-clicking the Description of Waste then click the delete button