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County Wexford
Ireland

INTEGRATED POLLUTION PREVENTION & CONTROL LICENCE
Recommended Determination

Licence Register Number:	P0175-02
Licensee:	Queally Pig Slaughtering Limited
Location of Installation:	Grannagh, Co. Kilkenny

INTRODUCTION

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

Queally Pig Slaughtering Limited operates an IPPC licenced pig slaughtering installation at Grannagh, Co. Kilkenny. The installation is located on a site of approximately 30 acres on the main Waterford to Limerick Road, approximately 4 miles outside Waterford City. Tidal stretches of the River Suir (Middle Suir Estuary) are located to the east of the plant and run into Waterford Harbour.

The activity has the capacity to slaughter 240 pigs per hour. The average daily kill at the installation is 2,000. The licensed class of activity under the EPA Acts 1992 to 2011 is 7.4.1: The operation of slaughterhouses with a carcase production capacity greater than 50 tonnes per day. The category for this activity, under the IPPC Directive (2008/1/EC), is 6.4(a). Hours of production at the plant are 0600 hrs to 1700 hrs Monday to Friday.

Effluent from the Wastewater Treatment Plant (WWTP) discharges (at EW-1) to the Middle Suir Estuary (WFD code: IE_SH_25_335). 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 facilities on-site.

Sludge from the WWTP is landspread in accordance with S.I. No. 610 of 2010 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.

There is also one licenced storm water emission point (EW-3) at the installation. EW-3 is licenced as an uncontaminated surface water discharge and has monitoring requirements only.

The licence sets out in detail the conditions under which **Queally Pig Slaughtering Limited** will operate and manage this installation.

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Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Acts 1992 to 2011 + Waste Management Acts 1996 to 2011, unless otherwise defined in the section.

Adequate lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Agreement	Agreement in writing.
Annually	All or part of a period of twelve consecutive months.
Application	The application by the licensee for this licence.
Appropriate Facility	A waste management facility, duly authorised under relevant law and technically suitable.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
BAT	Best Available Techniques.
Biannually	At approximately six – monthly intervals.
Biennially	Once every two years.
BOD	5 day Biochemical Oxygen Demand (without nitrification suppression).
Buffer Zone	Area excluded from landspreading of organic waste/organic fertiliser.
CBOD	5 day Carbonaceous Biochemical Oxygen Demand (with nitrification suppression).
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
Client List	A list of farmers and associated farmlands used for the landspreading of organic waste/organic fertiliser from the installation.
COD	Chemical Oxygen Demand.
Containment boom	A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
Daily	During all days of plant operation and, in the case of emissions, when emissions are taking place: with at least one measurement on any one day.

Day	Any 24 hour period.
Daylight hours	Outside lighting-up time plus one hour.
Daytime	0800 hrs to 2200 hrs
dB(A)	Decibels (A weighted).
DO	Dissolved oxygen.
Documentation	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
EMP	Environmental Management Programme.
Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , of this licence.
Environmental damage	As defined in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
European Waste Catalogue (EWC)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
Facility	Any site or premises used for the purpose of the recovery of disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
Freeboard	The difference in elevation between the maximum elevation of the slurry/manure and the minimum elevation of the storage tank.
Gas Oil	Gas Oil as defined in Council Directive 1999/32/EC and meeting the requirements of S.I. No. 119 of 2008.
GC/MS	Gas chromatography mass spectroscopy.
ha	Hectare.

Heavy metals	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.
Hours of operation	The hours during which the installation is authorised to be operational.
ICP	Inductively coupled plasma spectroscopy.
Incident	The following shall constitute as incident for the purposes of this licence: (i) an emergency; (ii) any emission which does not comply with the requirements of this licence; (iii) any trigger level specified in this licence which is attained or exceeded; and (iv) any indication that environmental pollution has, or may have, taken place.
Installation	A stationary technical unit or plant where the activity concerned referred to in the First Schedule of EPA Acts 1992 to 2011 is or will be carried on, and shall be deemed to include any directly associated activity, which has a technical connection with the activity and is carried out on the site of the activity.
IPPC	Integrated Pollution Prevention & Control.
K	Kelvin.
kPa	Kilopascals.
Landspreading	The application of organic waste/organic fertiliser to farmland.
Lairage	Area where animals are held before slaughter.
L_{eq}	Equivalent continuous sound level.
Licensee	Queally Pig Slaughtering Limited, Grannagh, County Kilkenny.
List I	As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.
List II	As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.
Local Authority	Kilkenny County Council.
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.

Mass flow limit	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.
Mass flow threshold	A mass flow rate above which a concentration limit applies.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
Night-time	2200 hrs to 0800 hrs.
Noise-sensitive location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other installation or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
NMP	Nutrient Management Plan.
Organic Fertiliser	Any fertiliser other than that manufactured by an industrial process and includes livestock manure, dungstead manure, farmyard manure, slurry, soiled water, silage effluent, non-farm organic substances such as sewage sludge, industrial by-products and sludges and residues from fish farms.
PRTR	Pollutant Release and Transfer Register.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Sample(s)	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.
Sanitary effluent	Wastewater from installation toilet, washroom and canteen facilities.
SOP	Standard operating procedure.
Specified emissions	Those emissions listed in <i>Schedule B: Emission Limits</i> , of this licence.
Standard method	A National, European or internationally recognised procedure (e.g. I.S., I.N., ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
Storm water	Rain water run-off from roof and non-process areas.
The Agency	Environmental Protection Agency.
TA Luft	Technical Instructions on Air Quality Control – TA Luft in accordance with art. 48 of the Federal Immission Control Law (BImSchG) dated 15 March 1974 (BGBl. I p 721). Federal Ministry for Environment, Bonn 1986.

including the amendment for Classification of Organic Substances according to section 3.1.7 TA. Luft, published in July 1997.

TOC	Total organic carbon.
Trade effluent	Trade effluent has the meaning given in the Water Services Act, 2007.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Water Services Authority	Kilkenny County Council.
Weekly	During all weeks of plant operation and, in the case of emissions, when emissions are taking place: with at least one measurement in any one week.
WWTP	Waste water treatment plant.

Decision & Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Acts 1992 to 2011.

In reaching this decision the Environmental Protection Agency has considered the application and supporting documentation received from the applicant, and the report of its inspector.

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Acts 1992 to 2011, the Agency proposes to determine the review of the existing licence (Reg. No. P0175-01) granted to:

Queally Pig Slaughtering Limited

Section 90(2) of the said Acts to carry on the following activity:

- : **The operation of slaughterhouses with a carcase production capacity greater than 50 tonnes per day.**

at **Grannagh, County Kilkenny** subject to the following twelve Conditions, with the reasons therefor and associated schedules attached thereto.

Part II Schedule of Activities Refused

None of the proposed activities as set out in the licence application have been refused.

Part III Conditions

Condition 1. Scope

- 1.1** IPPC activities at this installation shall be restricted to those listed and described in *Part I Schedule of Activities Licensed*, and shall be as set out in the licence application or as modified under **Condition 1.4** of this licence and subject to the conditions of this licence.
- 1.2** Activities at this installation shall be limited as set out in *Schedule A: Limitations*, of this licence.
- 1.3** For the purposes of this licence, the installation authorised by this licence is the area of land outlined in Figure 5.1, labelled 'Site Plan', of the application for P0175-01 received by the Agency on the 1st October 1996. Any reference in this licence to "installation" shall mean the area thus outlined. The licensed activity shall be carried on only within the area outlined.
- 1.4** No alteration to, or reconstruction in respect of, the activity, or any part thereof, that would, or is likely to, result in
- (i) a material change or increase in:
 - the nature or quantity of any emission;
 - the abatement treatment or recovery systems;
 - the range of processes to be carried out;
 - the raw materials, intermediates, products or wastes generated, or
 - (ii) any changes in:
 - site management, infrastructure or control with adverse environmental significance;
- shall be carried out or commenced without prior notice to, and without the agreement of, the Agency.
- 1.5** The installation shall be controlled, operated and maintained, and emissions shall take place as set out in the licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6** This licence is for the purpose of IPPC licensing under the EPA Acts 1992 to 2011 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.7** This licence has been granted in substitution for the licence granted to the licensee on 26/02/1998 (Register No P0175-01). The previous IPPC licence (Reg No. P0175-01) is superseded by this revised licence.

<i>Reason: To clarify the scope of this licence.</i>
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Condition 2. Management of the Installation

- 2.1** Installation Management
- 2.1.1** The licensee shall employ a suitable qualified and experienced installation manager who shall be designated as the person in charge. The installation manager or a nominated, suitably qualified and experienced deputy shall be present on the installation at all times during its operation or as otherwise required by the Agency.
- 2.1.2** The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence.

2.2 Environmental Management System (EMS)

2.2.1 The licensee shall **maintain** an Environmental Management System (EMS). The EMS shall be updated on an annual basis.

2.2.2 The EMS shall include, as a minimum, the following elements:

2.2.2.1 Management and Reporting Structure.

2.2.2.2 Schedule of Environmental Objectives and Targets.

The licensee shall **maintain** a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, including an evaluation of practicable options, for energy and resource efficiency, the use of cleaner technology, cleaner production, production related carbon footprint, and the prevention, reduction and minimisation of waste and shall include waste reduction targets. The schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

2.2.2.3 Environmental Management Programme (EMP)

The licensee shall **maintain** an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be **maintained** by the licensee. It shall include:

- designation of responsibility for targets;
- the means by which they may be achieved;
- the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.4 Documentation

(i) The licensee shall **maintain** an environmental management documentation system which shall be to the satisfaction of the Agency.

(ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.5 Corrective Action

The licensee shall **maintain** procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined.

2.2.2.6 Awareness and Training

The licensee shall **maintain** procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

2.2.2.7 Communications Programme

The licensee shall **maintain** a Public Awareness and Communications Programme to ensure that members of the public are informed, at all

reasonable times, concerning the environmental performance of the installation.

2.2.2.8 Maintenance Programme

The licensee shall establish and maintain a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above).

2.2.2.9 Efficient Process Control

The licensee shall establish and maintain a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

Reason: To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.

Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish and maintain, for each component of the installation, all infrastructure referred to in this licence or as required by the conditions of this licence. Infrastructure specified in the application that relates to the environmental performance of the installation and is not specified in the licence, shall be installed in accordance with the schedule submitted in the application.
- 3.2 Installation Notice Board
- 3.2.1 The licensee shall, within one month of the date of grant of this licence, provide an Installation Notice Board on the installation so that it is legible to persons outside the main entrance to the installation. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
- 3.2.2 The board shall clearly show:
- (i) the name and telephone number of the installation;
 - (ii) the normal hours of operation;
 - (iii) the name of the licence holder;
 - (iv) an emergency out of hours contact telephone number;
 - (v) the licence reference number; and
 - (vi) where environmental information relating to the installation can be obtained.
- 3.3 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.4 In the case of composite sampling of aqueous emissions from the operation of the installation, a separate composite sample or homogeneous sub-sample (of sufficient

volume as advised) shall be refrigerated immediately after collection and retained as required for EPA use.

- 3.5 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.
- 3.6 Tank, Container and Drum Storage Areas

3.6.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. **Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).**

3.6.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:

- (i) 110% of the capacity of the largest tank or drum within the bunded area; or
- (ii) 25% of the total volume of substance that could be stored within the bunded area.

3.6.3 All drainage from bunded areas shall be treated as hazardous waste unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal.

3.6.4 **All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.**

3.6.5 **All tanks, containers and drums shall be labeled to clearly indicate their contents.**

- 3.7 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the installation. Once used, the absorbent material shall be disposed of at an appropriate facility.

3.8 Silt Traps and Oil Separators

The licensee shall, within six months of date of grant of this licence, install and maintain silt traps and oil separators at the installation:

- (i) **Silt traps to ensure that all storm water discharges, other than from roofs, from the installation pass through a silt trap in advance of discharge;**
- (ii) **An oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator.**

The silt traps and separator shall be in accordance with E.S. EN-858-2: 2003 (separator systems for light liquids)

- 3.9 All pumps, sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms.

3.10 The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2 of this licence for the reduction in fugitive emissions.

3.11 All wellheads shall be adequately protected to prevent contamination or physical damage within 12 months from the date of grant of this licence.

3.12 All boilers on-site shall be operated using gas, or with the prior written agreement of the Agency, a fuel oil with no more than 1% sulphur, may be used as an alternative.

3.13 The licensee shall provide a minimum of 16 weeks storage of organic waste/organic fertiliser on-site or at storage locations as agreed by the Agency. The licensee shall demonstrate the minimum storage capacity within six months of the date of grant of licence. The licensee may provide less than 16 weeks storage if the licensee has a contract for the transfer of organic waste/organic fertiliser to a person authorised or exempted under and in accordance with the Waste Management Acts 1996 to 2011 or the

Environmental Protection Agency Acts 1992 to 2011 to undertake the collection and recovery of the organic waste/organic fertiliser.

Reason: *To provide for appropriate operation of the installation to ensure protection of the environment.*

Condition 4. Interpretation

- 4.1 Emission limit values for emissions to waters in this licence shall be interpreted in the following way:
- 4.1.1 Continuous Monitoring
- (i) No flow value shall exceed the specific limit.
 - (ii) No pH value shall deviate from the specified range.
 - (iii) No temperature value shall exceed the limit value.
- 4.1.2 Composite Sampling
- (i) No pH value shall deviate from the specified range.
 - (ii) For parameters other than pH and flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual results similarly calculated shall exceed 1.2 times the emission limit value.
- 4.1.3 Discrete Sampling
- For parameters other than pH, temperature, no grab sample value shall exceed 1.2 times the emission limit value.
- 4.2 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.3 Noise
- Noise from the installation shall not give rise to sound pressure levels (Leq, T) measured at the NSLs and boundary of the installation which exceed the limit value(s).

Reason: *To clarify the interpretation of limit values fixed under the licence.*

Condition 5. Emissions

- 5.1 No specified emission from the installation shall exceed the emission limit values set out in *Schedule B: Emission Limits*, of this licence. There shall be no other emissions of environmental significance.
- 5.2 No emissions, including odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.
- 5.3 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.
- 5.4 Boilers shall be operated so as to give a smoke colour less than or equal to shade number 1 on the Ringelmann chart except during periods of start up. Such start up periods shall not exceed 30 minutes in any 24 hour period.

- 5.5 Discharges from the installation shall not artificially increase the ambient temperature of the receiving water by more than 1.5°C outside the mixing zone. **In relation to temperature, the mixing zone shall not exceed 25% of the cross sectional area of the river at any point.**

Reason: *To provide for the protection of the environment by way of control and limitation of emissions*

Condition 6. Control and Monitoring

- 6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring*, of this licence.
- 6.1.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures.
- 6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
- 6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
- 6.1.4 Where any analysis is sub-contracted it shall be to a competent laboratory.
- 6.2 **The licensee shall ensure that:**
- (iii) **sampling and analysis for all parameters listed in the Schedules to this licence; and**
- (iv) **any reference measurements for the calibration of automated measurement systems;**
- shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards that will ensure the provision of data of an equivalent scientific quality shall apply.**
- 6.3 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as agreed by the Agency.
- 6.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission discharge (or ambient conditions where that is the monitoring objective).
- 6.5 **The licensee shall ensure that sampling equipment for any groundwater monitoring wells is installed/ available on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.**
- 6.6 All treatment abatement and emission control equipment shall be calibrated and maintained at all times when in use, in accordance with the instructions issued by the manufacturer supplier or installer, and in accordance with the information submitted in Table 13A(iii) of the IPC licence application for P0175-01, or as otherwise agreed with the Agency under the EMP.
- 6.7 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.

- 6.8 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.9 The integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee to the satisfaction of the Agency. This testing shall be carried out by the licensee at least once every three years and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.10 The drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) and bunds, silt traps and oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected for safe disposal. The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times.**
- 6.11 An Inspection for leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be carried out weekly. A log of such inspections shall be maintained.
- 6.12 Storm Water
- 6.12.1 A visual examination of the storm water discharges shall be carried out daily. A log of such inspections, shall be maintained.
- 6.12.2 The licensee shall **maintain** any works necessary to the site drainage system to ensure that only uncontaminated surface water run-off is discharged from the surface water drainage system. Any surface water arising from process related activities shall be discharged to the WWTP. Any surface water originating from outside the boundary of the activity shall be diverted from the licensee's surface water drainage system. A report detailing the completion of this work shall be submitted to the Agency within eighteen months of the date of grant of this licence.
- 6.12.3 The licensee shall have in place a response programme to the achievement or exceedence of trigger level values. This response programme shall include actions proposed to ensure there will be no emissions to storm water of environmental significance.**
- 6.12.4 The trigger levels for storm water discharges from the installation measured at the monitoring point EW-3 are:
- a) Warning (Conductivity): 2000 $\mu\text{S}/\text{cm}$
 - b) Action (Conductivity): 2500 $\mu\text{S}/\text{cm}$
 - c) Other parameters as required by the Agency
- 6.13 Noise
- The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.
- 6.14 Pollutant Release and Transfer Register (PRTR)**
- The licensee shall prepare and report a PRTR for the site. The substance and/or wastes to be included in the PRTR shall be as agreed by the Agency each year by reference to EC Regulations No. 166/2006 concerning the establishment of the European Pollutant Release and Transfer Register. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.

- 6.15 Boilers shall be inspected and maintained annually and boiler combustion efficiency shall be tested annually and results reported as part of the AER.
- 6.16 The licensee shall ensure that a freeboard of at least 200mm from the top of each covered slurry storage tank is maintained, as a minimum, at all times. The required freeboard shall be clearly indicated in each tank.
- 6.17 Monitoring of organic waste/organic fertiliser shall be undertaken as outlined in *Schedule C.4 Waste/Material Monitoring*, of this licence. Results shall be retained on site and records of the results shall be available for inspection by authorised personnel, including Agency personnel, at all reasonable times. The results shall be submitted to the Agency in a summary report included as part of the AER.
- 6.18 Shellfish Waters
- 6.18.1 The licensee shall, within eighteen months of the date of grant of licence, carry out an assessment of the impact of the discharge(s) from the installation on the microbiological quality of the shellfish in the designated shellfish waters in consultation with the Sea Fisheries Protection Authority (SFPA), the Marine Institute and Bord Iascaigh Mhara (BIM). A report on the assessment shall be submitted as part of the AER.
- 6.18.2 Where the assessment outlined in Condition 6.18.1 indicates that the discharge(s) are having a deleterious microbiological effect on the quality of shellfish in the designated shellfish waters, the licensee shall install UV or other appropriate disinfection system within the timeframe identified.
- 6.18.3 Where a UV or other appropriate disinfection system is installed the licensee shall ensure that it is operating to the designed disinfection efficiency at all times. The disinfection efficiency of the system shall be measured to demonstrate that the system is operated within its design range. The records from this verification process shall be recorded and maintained.

Reason: To provide for the protection of the environment by way of treatment and monitoring of emissions

Condition 7. Resource Use and Energy Efficiency

- 7.1 The licensee shall **repeat, at intervals to be agreed with Agency**, an audit of the energy efficiency of the site within one year of the date of grant of this licence. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 7.2 The audit shall identify all practicable opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.
- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

Reason: To provide for the efficient use of resources and energy in all site operations.

Condition 8. Materials Handling

- 8.1 Disposal or recovery of waste on-site shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols. No other waste shall be recovered on-site or disposed of recovered off-site without prior notice to, and prior written agreement of the Agency.
- 8.2 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.2.1 Animal tissue or carcasses sent off site for disposal/recovery shall be transported in covered, leak-proof containers.**
- 8.2.2 The transport of organic waste/organic fertiliser via the public road shall be carried out in sealed containers/ covered trailers, as appropriate such that no spillage can occur.**
- 8.3 The licensee shall ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.4 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.5 Waste shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste shall be clearly labelled and appropriately segregated.
- 8.6 No waste classified as green list waste in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended) shall be consigned for recovery without the agreement of the Agency.
- 8.7 Waste for disposal recovery off-site shall be analysed in accordance with *Schedule C: Control & Monitoring*, of this licence.
- 8.8 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 8.9 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.
- 8.10 All waste by-products of blood, offal, hair, bones, fat, and WWTP sludge, sent off-site for disposal/recovery shall be transported in covered, water retaining containers.
- 8.11 All areas where animal by-products are deposited and stored shall be constructed so that the surfaces are impervious and laid to fall to drains to the onsite waste water treatment plant.
- 8.12 Animal by-products stored on-site pending recovery/disposal shall be placed in leak proof containers which shall be covered at all times except during loading and shall at a minimum be removed daily, unless otherwise agreed by the Agency.
- 8.13 All vehicles, trailers and containers used for the transport of animal by-products, blood, and WWTP screenings and sludge from the installation shall be fully enclosed. The design shall be such as to minimise the emission of any odour or spillage of any liquid or solid matter. All such receptacles and any associated sheeting or covers shall be impervious and maintained in a clean condition.
- 8.14 Organic waste/organic fertiliser shall only be recovered by landspreading subject to the following conditions and the prior agreement of the Agency:

- 8.14.1 The licensee shall, prior to the first of January each year, submit to the Agency and maintain on-site the following information:
- (i) The projected figures for annual production of organic waste/organic fertiliser and the nitrogen and phosphorus content of the organic waste/organic fertiliser;
 - (ii) A summary table of customer farmers receiving organic waste/organic fertiliser. This table shall be updated based on a Nutrient Management Plan, as required to include additional lands acquired during the year. The table shall include as a minimum 'Customer Code' (name to be maintained on site), Townlands and Quantity of Organic Waste.
 - (iii) A Map (scale of 1:50,000) showing the location of farms where organic waste/organic fertiliser may be recovered.
 - (iv) A Declaration by suitable qualified person that lands, for recovery of organic waste/organic fertiliser have been inspected and are suitable for landspreading; and
 - (v) A Nutrient Management Plan for all lands demonstrating adequate capacity for recovery of organic waste/organic fertiliser generated at the installation. Nutrient management plans shall be to the satisfaction of the Agency and shall be agreed prior to the movement of organic waste/organic fertiliser off site. Nutrient Management Plans may be based on the 'Nitrogen and Phosphorus' Statements issued by the Department of Agriculture, Food and the Marine. Nutrient Management Plans shall be maintained on site for inspection by authorised persons.
- 8.14.2 The licensee shall ensure, in all cases where there is a transfer of organic waste/organic fertiliser from the installation to storage provided on the farms in the client list, that the recipient farmer is advised of the need to store the organic waste/organic fertiliser in a purpose – built holding structure adequate for the protection of groundwater and surface water.
- 8.14.3 Soil monitoring shall be undertaken as outlined in *Schedule C6: Ambient Monitoring, Land Used for Landspreading* of this licence and a summary report included as part of the Nutrient Management Plan.
- 8.14.4 Landspreading shall, as a minimum, be carried out in accordance with S.I. No. 610 of 2010 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010. All landspreading activities shall be carried out in such a manner as to avoid contamination of surface waters and groundwaters, and so as to minimise odour nuisance.
- 8.14.5 Landspreading from this activity shall take place only on lands agreed in advance in writing by the Agency. Alterations to this landbank are subject to prior written agreement with the Agency.
- 8.14.6 Landspreading shall be undertaken using soil injection, bandspreading or low trajectory splashplate methods only.
- 8.14.7 Organic waste/organic fertiliser monitoring at the site shall be analysed in accordance with *Schedule C4: Waste/Material Analysis*, of this licence

<p><i>Reason: To provide for the appropriate handling of material and the protection of the environment.</i></p>
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Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
- 9.3.1 In the event of an incident the licensee shall immediately:
- (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - (ii) isolate the source of any such emission;
 - (iii) evaluate the environmental pollution, if any, caused by the incident;
 - (iv) identify and execute measures to minimise the emissions malfunction and the effects thereof;
 - (v) identify the date, time and place of the incident;
 - (vi) notify the Agency and other relevant authorities.
- 9.3.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency, to:
- (i) identify and put in place measures to avoid recurrence of the incident; and
 - (ii) identify and put in place any other appropriate remedial actions.

<i>Reason: To provide for the protection of the environment.</i>
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Condition 10. Decommissioning & Residuals Management

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.2 **Decommissioning Management Plan (DMP)**
- 10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement within six months of the date of grant of the licence.
- 10.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.
- 10.2.3 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Condition 10.2.1 above.

- 10.3 The Decommissioning Management Plan shall include, as a minimum, the following:
- (i) a scope statement for the plan;
 - (ii) the criteria that define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment;
 - (iii) a programme to achieve the stated criteria;
 - (iv) where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan; and
 - (v) details of the costings for the plan and the financial provisions to underwrite those costs.
- 10.4 A final validation report to include a certificate of completion for the Decommissioning Management Plan, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

Reason: To make provision for the proper closure of the activity ensuring protection of the environment.

Condition 11. Notification, Records and Reports

- 11.1 The licensee shall notify the Agency by both telephone and facsimile, if available, to the Agency's headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
- (i) any release of environmental significance to atmosphere from any potential emissions point including bypasses;
 - (ii) any emission that does not comply with the requirements of this licence;
 - (iii) any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control and Monitoring*, of this licence which is likely to lead to loss of control of the abatement system; and
 - (iv) any incident with the potential for environmental contamination of surface water or groundwater, or posing an environment threat to air or land, or requiring an emergency response by the Local Authority.
- The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions and avoid reoccurrence.
- 11.2 In the case of any incident relating to discharges to water, the licensee shall notify the Local and Water Services Authority and the **Department of Agriculture, Food and the Marine and in the case of discharges likely to impact a designated shellfish water, the Marine Institute (MI), Sea Fisheries Protection Authority (SFPA), Food Safety Authority of Ireland (FSAI) and an Bord Iascaigh Mhara (BIM)**, as soon as practicable after such an incident
- 11.3 In the event of any incident, as set out in Condition 11.1(iv), having taken place, the licensee shall notify the Local Authority as soon as practicable, after such an incident.
- 11.4 The licensee shall make a record of any incident. The licensee shall record all incidents which affect the normal operation of the activity and which may create an environmental risk. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall, as soon as practicable following incident notification, submit to the Agency the incident record. A summary report of reported incidents shall be submitted to the Agency as part of the AER. The information contained in this report shall be prepared in accordance with any relevant guidelines issued by the Agency.

- 11.5 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint. The licensee shall submit a report to the Agency, during the month following such complaints, giving details of any complaints which arise. A summary of the number and nature of complaints received shall be included in the AER.
- 11.6 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation.
- 11.7 **The licensee shall as a minimum keep the following documents at the site:**
- (i) **the licences relating to the installation;**
 - (ii) **the current EMS for the installation;**
 - (iii) **the previous year's AER for the installation;**
 - (iv) **records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation;**
 - (v) **relevant correspondence with the Agency;**
 - (vi) **up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;**
 - (vii) **up-to-date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment;**
 - (viii) **any elements of the licence application or EIS documentation referenced in this licence.**
- This documentation shall be available to the Agency for inspection at all reasonable times.**
- 11.8 The licensee shall submit to the Agency, by the 31st March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D: Annual Environmental Report*, of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.9 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall as a minimum contain details of the following:
- (i) the tonnages and EWC Code for the waste materials sent off-site for disposal/recovery;
 - (ii) the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);
 - (iii) details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;
 - (iv) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
 - (v) **details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;**
 - (vi) details of any rejected consignments;
 - (vii) **details of any approved waste mixing;**

- (viii) the results of any waste analyses required under *Schedule C: Control & Monitoring* of this licence; and
 - (ix) **the tonnage and EWC Code for the waste materials recovered/disposed on-site.**
- 11.10 The licensee shall maintain an "organic waste/organic fertiliser register", which shall be to the satisfaction of the Agency. The register shall include as a minimum:
- (i) The results of any analysis required under *Schedule C.4: Waste Material Analysis*, of this licence;
 - (ii) **Time and date of despatch/spreading of organic waste/organic fertiliser;**
 - (iii) Name of contractor/person who transported the organic waste/organic fertiliser;
 - (iv) **Name of contractor/person who landspread the organic waste/organic fertiliser, when landspread by or on behalf of the licensee;**
 - (v) **Name and address of farmer or facility who received the organic waste/organic fertiliser;**
 - (vi) **The quantity of organic waste/organic fertiliser in each consignment;**
 - (vii) **The quantity of nitrogen and phosphorus in each consignment; and**
 - (viii) **Details in accordance with Article 23 of S.I. No. 610 of 2010 European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010.**
- 11.11 **The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency.**
- 11.12 All reports shall be certified accurate and representative by the installation manager or a nominated, suitably qualified and experienced deputy.
- 11.13 The format of all records required by this licence shall be to the satisfaction of the Agency. Records shall be retained on-site for a period of not less than seven years and shall be available for inspection by the Agency at all reasonable times.
- 11.14 Provision shall also be made for the transfer of environmental information, in relation to this licence, to the Agency's computer system, as may be requested by the Agency.
- 11.15 All written procedures controlling operations affecting this licence shall be available on-site for inspection by the Agency at all reasonable times.

Reason: *To provide for the collection and reporting of adequate information on the activity.*

Condition 12. Financial Charges and Provisions

12.1 Agency Charges

- 12.1.1 The licensee shall pay to the Agency an annual contribution of **€11,255.68**, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Environmental Protection Agency Acts 1992 to 2011. The first payment shall be a pro-rata amount for the period from the date of grant of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable

performance by the Agency of its relevant functions under the Environmental Protection Agency Acts 1992 to 2011, and all such payments shall be made within one month of the date upon which demanded by the Agency.

12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

12.2 Environmental Liabilities

12.2.1 The licensee shall as part of the AER, provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events or accidents/incidents, as may be associated with the carrying on of the activity.

12.2.2 The licensee shall arrange for the completion, by an independent and appropriate qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) which addresses the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the DMP. A report on this assessment shall be submitted to the Agency for agreement within twelve months of date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. Review results are to be notified as part of the AER.

12.2.3 As part of the measures identified in Condition 12.2.1, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities associated with the operation (including closure). The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.2.1.

12.2.4 The licensee shall revise the cost of closure, annually and any adjustments shall be reflected in the financial provision made under Condition 12.2.3.

12.2.5 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Conditions 12.2.2 and 12.2.3 above.

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the

SCHEDULE A: Limitations

A.1

There are no limitations on the installation specified in the Schedule.



SCHEDULE B: Emission Limits

B.1 Emissions to Air

Other than emissions from boilers there shall be no emissions to air of environmental significance.



B.2 Emissions to Water

Emission Point Reference No:	EW-1
Name of Receiving Waters:	Middle Suir estuary
Location:	E256851 N114197
Volume to be emitted:	Maximum in any one day: 1800 m ³
	Maximum in any one hour: 90 m ³

Parameter	Emission Limit Value
Temperature ^{Note 1}	25 °C
pH	6 - 9
	mg/l
COD	100
BOD	40
Suspended Solids	60
Total Nitrogen	15
Ammonia (as N)	10
Total Phosphorus (as P)	2
Orthophosphate (as P)	1
Detergents	5
Fats, Oils and Grease	15



B.3 Emissions to Sewer

There shall be no process effluent emissions to sewer.



B.4 Noise Emissions

Daytime dB(A) L_{Aeq} (30 minutes)	Night-time dB(A) L_{Aeq} (30 minutes)
55 ^{Note 1}	45 ^{Note 1}

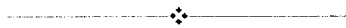
Note 1: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity of any noise-sensitive location.



SCHEDULE C: Control & Monitoring

C.1.1. Control of Emissions to Air

There shall be no additional control of emissions to air in this schedule.



C.1.2. Monitoring of Emissions to Air

There shall be no additional monitoring of emissions to air in this schedule.



C.2.1. Control of Emissions to Water

Emission Point Reference No: EW-1
 Description of Treatment: Waste Water Treatment Plant

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Fats, Oils and Grease	Fixed DO meters	Dissolved Air Flootation Unit
Suspended Solids (primary)		Surface Aerator
Effluent Balancing		Feed-forward pump
Dissolved Oxygen		Surface aerators
Suspended Solids (secondary) Clarification		Sludge Return Pumps Scraper Mechanism
Sludge Dewatering		Belt Press

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



C.2.2. Monitoring of Emissions to Water

Emission Point Reference No:

EW-1 ^{Note 2}

Location:

E256851 N114197

Control Parameter	Monitoring Frequency	Key Equipment/Technique
Flow ^{Note 1}	Continuous	On-line flow meter with recorder
Temperature	Continuous	Thermometer
pH	Continuous	pH electrode meter with recorder
Chemical Oxygen Demand	Daily	Standard Method
Biochemical Oxygen Demand	Weekly	Standard Method
Suspended Solids	Daily	Standard Method
Total Nitrogen	Weekly	Standard Method
Ammonia (as N)	Daily	Standard Method
Total Phosphorus (as P)	Weekly	Standard Method
Oils, fats and greases	Monthly	Standard Method
Detergents	Weekly	Standard Method

Note 1: Total effluent discharged over the 24 hour period in which the composite sample is collected shall be recorded.

Note 2: All samples shall be collected on a 24 hour flow proportional composite sampling basis.

**C.2.3. Monitoring of Storm Water Emissions**

Emission Point Reference No:

EW-3

Parameter	Monitoring Frequency	Analysis Method/Technique
Conductivity	Continuous	Standard method
COD	Monthly	Standard method
Total Ammonia	Quarterly	Standard method
Suspended Solids	Quarterly	Standard method
Chloride	Quarterly	Standard Method
Fats, Oils and Grease	Quarterly	Standard method
Visual Inspection	Weekly	Sample and examine for colour and odour.

**C.3.1. Control of Emissions to Sewer**

There shall be no process effluent emissions to sewer.



C.3.2. Monitoring of Emissions to Sewer

There shall be no process effluent emissions to Sewer.



C.4 Waste Monitoring

Waste Class	Frequency	Parameter	Method
Organic Waste/Organic Fertiliser	Bi-annually	% Dry Matter, total N, total P, total K	As agreed by the Agency
	Daily	Volume Mass	As agreed by the Agency
Other ^{Note 1}	-	-	-

Note 1: Analytical requirements to be determined on a case by case basis

C.5 Noise Monitoring

No additional noise monitoring is required in this schedule.



C.6 Ambient Monitoring

Groundwater Monitoring

Location: Site Well ^{Note 1}

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Annually	pH electrode/meter
TOC	Annually	Standard Method
Orthophosphate	Annually	Standard Method
Nitrate	Annually	Standard Method
Total Ammonia	Annually	Standard Method
Total Nitrogen	Annually	Standard Method
Conductivity	Annually	Standard Method
Any other parameter as may be required by the Agency	To be agreed with the Agency	To be agreed with the Agency

Note 1: Borehole included in figure 5.1 of the application for P0175-01 received by the Agency on the 1st October 1996.



Land used for Landspreading

Monitoring Location:

All lands included in the landbank ^{Note 1}

Conditions	Monitoring Frequency ^{Note 2 & 5}	Analysis Method/Techniques ^{Note 3/4}
Soil Sampling ^{Note 1}	Prior to the preparation of an NMP or Every six years	Morgan's P test Morgan's P test

- Note 1:** Each sample should be representative of a maximum area of 4 ha except where uniform cropping and land use has been in place for the previous five years or more. In the latter situation a sample of 12 ha is acceptable.
- Note 2:** the licensee may assume 'Index 3' for preparation of nutrient management plans where no soil samples are available.
- Note 3:** Peach, M. and English, L. (1944) 'Rapid micro chemical test'. Soil Science 57: 167.
- Note 4:** Soil analysis shall only be conducted by Department of Agriculture, Food and the Marine approved laboratories.
- Note 5:** The above requirements may be substituted by the transitional provisions of Article 34 of S.I. 610 of 2010.



SCHEDULE D: Annual Environmental Report

Annual Environmental Report Content ^{Note 1}
<p>Emissions from the installation</p> <p>Waste management record.</p> <p>Resource consumption summary.</p> <p>Complaints summary.</p> <p>Schedule of Environmental Objectives and Targets.</p> <p>Environmental management programme – report for previous year.</p> <p>Environmental management programme – proposal for current year.</p> <p>Pollutant Release and Transfer Register – report for previous year.</p> <p>Pollutant Release and transfer Register – proposal for current year.</p> <p>Noise monitoring report summary.</p> <p>Ambient monitoring summary.</p> <p>Nutrient Management Plan.</p> <p>Waste/Material Monitoring</p> <p>Tank and pipeline testing and inspection report.</p> <p>Reported incidents summary.</p> <p>Energy efficiency audit report summary.</p> <p>Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.</p> <p>Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharges.</p> <p>Review of decommissioning management plan.</p> <p>Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).</p> <p>Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions.</p> <p>Any other items specified by the Agency.</p>

Note 1: Content may be revised subject to the agreement of the Agency.

Signed on behalf of the said Agency _____

On the xx day of xxxxx, 200X xxxxxxxxxxxx **Authorised Person**