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Ireland

**INDUSTRIAL EMISSIONS LICENCE
Recommended Determination**

Licence Register Number:	P0040-03
Company Register Number:	217122
Licensee:	Anglo Beef Processors Ireland Unlimited Company
Location of Installation:	Christendom Ferrybank County Waterford

INTRODUCTION

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

Anglo Beef Processors Ireland Unlimited Company is located at Christendom, Ferrybank, Waterford. The licensee currently operates a rendering plant and associated odour abatement plant (biofiltration system and thermal oxidiser) at this site and has a maximum intake of 450 tonnes per day (tpd). The animal by-products accepted in the rendering plant consist of animal by-product category 1, 2 and 3 materials. The cooked material is separated into tallow oil and meat and bone meal. Tallow oil generated on-site is sent off site as a source of fuel, to be destroyed or occasionally used on-site as a replacement fuel oil in the thermal oxidiser burner and standby boiler subject to on-going agreement by the Agency.

A thermal oxidiser was installed at the installation around 2004 to treat gases from the rendering and product cooling processes at the installation. This licence review is to incorporate the operation, control and maintenance of the thermal oxidiser which is not regulated under the existing licence.

The licensee is required to carry out regular environmental monitoring and to submit monitoring results and a range of reports on the operation and management of the installation to the Agency. All process effluent is discharged to the waste water treatment plant of the adjacent Anglo Beef Processors Ireland Unlimited Company slaughtering site, Reg. No. P0205-02.

For the purposes of the European Union Industrial Emissions Directive (2010/75/EU), this installation falls within the scope of category 6.5:

- Disposal or recycling of animal carcasses or animal waste with a treatment capacity exceeding 10 tonnes per day.

The licence sets out in detail the conditions under which Anglo Beef Processors Ireland Unlimited Company will operate and manage this installation.

Table of Contents

	Page No
Glossary of Terms.....	1
Decision and Reasons for the Decision	7
Part I Schedule of Activities Licensed.....	9
Part II Schedule of Activities Refused.....	9
Part III Conditions.....	10
Condition 1. Scope	10
Condition 2. Management of the Installation	10
Condition 3. Infrastructure and Operation	13
Condition 4. Interpretation	17
Condition 5. Emissions	18
Condition 6. Control and Monitoring	18
Condition 7. Resource Use and Energy Efficiency	23
Condition 8. Materials Handling	24
Condition 9. Accident Prevention and Emergency Response	26
Condition 10. Closure, Restoration and Aftercare Management	26
Condition 11. Notification, Records and Reports	26
Condition 12. Financial Charges and Provisions	29
SCHEDULE A: Limitations	30
SCHEDULE B: Emission Limits	30
SCHEDULE C: Control & Monitoring	33
SCHEDULE D: Annual Environmental Report	37

Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Act 1992 as amended, unless otherwise defined in the glossary.

Accident	For the purpose of this licence an accident means an unplanned event that may result in pollution.
Adequate lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Animal By-Product	Means entire bodies or parts of animals, products of animal origin or other products obtained from animals, which are not intended for human consumption, including oocytes, embryos and semen.
Approval	Approval in writing/electronically.
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 or installation, 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 review form.
BAT	Best Available Techniques (BAT).
BAT conclusions	A document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.
BAT reference document	A document drawn up by the Commission of the European Union in accordance with Article 13 of the Industrial Emissions Directive, resulting from the exchange of information in accordance with that Article of that Directive and describing, in particular, applied techniques, present emissions and consumption levels, techniques considered for the determination of best available techniques as well as BAT conclusions and any emerging techniques.
Biannually	At approximately six – monthly intervals.

Biennially	Once every two years.
BOD	5 day Biochemical Oxygen Demand (without nitrification suppression).
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
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.
CRO Number	Company Register Number.
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.
Daytime	0700hrs to 1900hrs.
dB(A)	Decibels (A weighted).
Diffuse Emissions	Non-channelled emissions which can result from ‘area’ sources (e.g. tanks) or ‘point’ sources (e.g. pipe flanges).
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 review form, unless otherwise specified in this licence.
Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , of this licence.
EMP	Environmental Management Programme.
EMS	Environment Management System. The aspect of the organisation’s overall management structure that addresses immediate and long-term impacts of its products, services and processes on the environment.
Environmental damage	As defined in Directive 2004/35/EC.

EPA	Environmental Protection Agency.
Evening Time	1900hrs to 2300hrs.
Facility	Any site or premises used for the purpose of the recovery or disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
Gas Oil	Gas oil as defined in DIRECTIVE (EU) 2016/802 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 May 2016 relating to a reduction in the sulphur content of certain liquid fuels.
GC/MS	Gas chromatography/mass spectroscopy.
Groundwater	Has the meaning assigned to it by Regulation 3 of the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010), as amended.
ha	Hectare.
Hazardous Substances	Substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.
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.
IE	Industrial Emissions.
Incident	The following shall constitute an 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 malfunction or breakdown of key environmental abatement, control or monitoring equipment; (iv) any trigger level specified in this licence which is attained or exceeded; (v) any indication that environmental pollution has, or may have, taken place.
Industrial Emissions Directive	Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast).

Installation	A stationary technical unit or plant where the activity concerned referred to in the First Schedule of EPA Act 1992 as amended 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.
Installation Manager	The licensee or an authorised representative of the licensee with the appropriate seniority and authority to ensure compliance with the licence.
Irish Water	Irish Water, Colvill House, 24/26 Talbot Street, Dublin 1.
K	Kelvin.
kPa	Kilopascals.
$L_{Aeq,T}$	This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T).
$L_{A,T}$	The Rated Noise Level, equal to the L_{Aeq} during a specified time interval (T), plus specified adjustments for tonal character and/or impulsiveness of the sound.
Licensee	Anglo Beef Processors Ireland Unlimited Company, 14 Castle Street, Ardee, Louth, CRO Number: 217122
Local Authority	Kilkenny County Council.
List of Wastes (LoW)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2014/955/EU, as amended by any subsequent amendment published in the Official Journal of the European Community.
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	2300hrs to 0700hrs.
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.
Odour-sensitive location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other premises or area of high amenity which for its proper enjoyment requires the absence of odour at nuisance levels.
Oil separator	Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of normal size, installation, operation and maintenance).
Potential emissions	Emissions which take place only under abnormal operating conditions. Examples include emissions from overpressure valves, bursting discs, and emergency generators.
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.
Relevant Hazardous Substances	Those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) which, as a result of their hazardousness, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater and are used, produced and/or released by the installation.
SAC	Special Area of Conservation designated under the Habitats Directive, Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.
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.
Soil	The top layer of the Earth's crust situated between the bedrock and the surface. The soil is composed of mineral particles, organic matter, water, air and living organisms.
SOP	Standard operating procedure.
SPA	Special Protection Area designated under the Birds Directive, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.
SRM	Specified Risk Material means specified risk material as defined in Article 3(1)(g) of regulation (EC) No.999/2001.

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. EN, 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.
Storage	Includes holding of waste.
Storm water	Rain water run-off from roof and non-process areas.
The Agency	Environmental Protection Agency.
TOC	Total organic carbon.
TVOC	Total Volatile Organic Compound
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.
Waste	Any substance or object which the holder discards or intends or is required to discard.
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 and 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 Act 1992 as amended.

The Agency also considers that the activity will not adversely affect the integrity of any European Site, and has decided to impose conditions for the purposes of ensuring it does not do so. It has determined that the activity, if managed, operated and controlled in accordance with the licence, will not have any adverse effect on the integrity of any of those sites.

The Agency accordingly proposes to grant a licence to Anglo Beef Processors Ireland Unlimited Company to carry on the activities listed in *Part I, Schedule of Activities Licensed*, subject to the conditions set out in *Part III, Conditions*; **such licence to take effect in lieu of Licence Register Number: P0040-02.**

In reaching this decision the Agency has considered the documentation relating to: **the existing licence, Register Number: P0040-02, the review form, Register Number: P0040-03** and the supporting documentation received from the licensee; the submissions received, the Inspector's Report dated **12/01/2023**, and has carried out an Appropriate Assessment of the likely significant effects of the activities on European Sites.

EIA, as respects the matters that come within the functions of the Agency, was not required for the activities to which this decision relates. The requirements of Section 83(2A) and Section 87(1A) to (1I) of the EPA Act 1992 as amended do not apply to a review of a licence carried out by the Agency under 90(4)(a)(i) of the EPA Act 1992 as amended. Therefore, this licence review has not been made subject to an Environmental Impact Assessment (EIA).

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activities, individually or in combination with other plans or projects are likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at **Lower River Suir SAC (Site Code 002137), River Barrow and River Nore SAC (Site code 002162), Mid-Waterford Coast SPA (Site Code 004193), Tramore Dunes and Backstrand SAC (Site Code 000671) and Tramore Backstrand SPA (Site Code 004027).**

The activities are not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it cannot be excluded, on the basis of objective information, that the activities, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activities was required.

This determination was made based on the following:

- Proximity to European Sites.

The Agency has completed the Appropriate Assessment of potential impacts on these sites and has made certain, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats Directive, that the activity, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular **Lower River Suir SAC (Site Code 002137), River Barrow and River Nore SAC (Site code 002162), Mid-Waterford Coast SPA (Site Code 004193), Tramore Dunes and Backstrand SAC (Site Code 000671) and Tramore Backstrand SPA (Site Code 004027)**, having regard to their conservation objectives and will not affect the preservation of these sites at favourable conservation status if carried out in accordance with this licence and the conditions attached hereto for the following reasons:

- **The licence requires trigger levels to be maintained for SW1, SW2 and SW3, which discharge to the River Suir via a WWTP (SW1) and a soakaway (SW2 and SW3), to ensure that the discharges will not negatively impact water quality and ensure the continued protection of water dependent species.**

- **Air Dispersion modelling demonstrates that the impact of emissions from the installation will be below the relevant air quality standards and the standards for protection of vegetation.**
- **The licence specifies ELVs and control measures for emissions to air to ensure that the discharges will not negatively impact air quality.**
- **The licence specifies ELVs in *Schedule B.3 Emissions to Waste Water Treatment*, of this licence for W1-SEP1 and W1-CEP1 to ensure that the discharges will not negatively impact water quality and ensure the continued protection of water-dependent species.**
- **The licence specifies ELVs in *Schedule B.4 Noise Emissions*, of this licence to ensure that the emissions will not have a negative impact on the surrounding environment;**
- **While there is potential for accidents and unplanned releases from the installation, it is considered that the conditions of the licence in relation to bunding and the protection of surface water and groundwater, are sufficient to ensure that accidental emissions from the activity will not impact on the qualifying interests of any of the European sites identified above. The licence specifies accident prevention and emergency response requirements.**

The Agency is satisfied that no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of those European Sites at **Lower River Suir SAC (Site Code 002137), River Barrow and River Nore SAC (Site code 002162), Mid-Waterford Coast SPA (Site Code 004193), Tramore Dunes and Backstrand SAC (Site Code 000671) and Tramore Backstrand SPA (Site Code 004027).**

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act 1992 as amended, the Agency proposes to determine the review of the existing licence (P0040-02) granted to:

Anglo Beef Processors Ireland Unlimited Company, 14 Castle Street, Ardee, Co. Louth, and CRO Number 217122,

under Section 90(2) of the said Act to carry on the following activities:

- 7.7.1 The disposal or recycling of animal carcasses or animal waste with a treatment capacity exceeding 10 tonnes per day.

at **Christendom, Ferrybank, County Waterford** 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 Industrial Emissions Directive 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 review form or as modified under Condition 1.4 of this licence and subject to the conditions of this licence.
- 1.2 The licensee shall carry on the licensed activities in accordance with the limitations 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 colour (red) on **Drawing No. WP-06-137, provided as part of the review form**. Any reference in this licence to “installation” shall mean the area thus outlined in red. 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 fuels, 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 approval 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 licensing under the EPA Act 1992 as amended 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 shall have effect in lieu of the licence granted **on 02 April 2001 (Register No P0040-02)**.

Reason: *To clarify the scope of this licence.*

Condition 2. Management of the Installation

- 2.1 Installation Management
- 2.1.1 The licensee shall employ a suitably 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 and implement** an Environmental Management System (EMS), **within six months of the date of grant of this licence**. The EMS shall be reviewed by senior management for suitability, adequacy and effectiveness and updated on an annual basis.

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

2.2.2.1 A statement of commitment, leadership and accountability of management, including senior management for the implementation of an effective EMS.

2.2.2.2 An environmental policy, defined by Management, that includes a commitment to continuous improvement of the environmental performance of the installation.

2.2.2.3 Management and Reporting Structure and responsibility for environmental aspects, including for the planning and provision of financial and human resources to manage and implement the EMS.

2.2.2.4 An analysis of the organisation's regulatory and environmental obligations, including the potential risks to the environment from the activity.

2.2.2.5 The procedures required by this licence, including procedures for;

- (i) ensuring compliance with environmental legislation;
- (ii) ensuring employee awareness of and involvement in complying with environmental legislation; and
- (iii) checking performance and developing performance indicators by sectoral benchmarking on a regular basis, including for energy efficiency.

2.2.2.6 Schedule of Environmental Objectives and Targets

The licensee shall **maintain and implement** a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, as referred to in the conditions of this licence, including an evaluation of practicable options for:

- (i) energy and resource efficiency;
- (ii) the reduction in water consumption;
- (iii) the reduction in effluent generation;
- (iv) the optimisation of Cleaning in Place (CIP) system;
- (v) the use of cleaner technology, cleaner production;
- (vi) odour and noise management;
- (vii) the prevention, reduction and minimisation of waste including waste reduction targets;
- (viii) the impacts from eventual decommissioning of the installation, and
- (ix) a monitoring and measurement programme

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.

2.2.2.7 Environmental Management Programme (EMP)

The licensee shall **maintain and implement** an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.6 above. The EMP shall include:

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

The EMP shall be reviewed annually.

A report on the programme, including the success in meeting agreed targets and an evaluation of non-conformities and associated corrective actions and the potential for further non-conformities to occur 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.

2.2.2.8 Documentation

- (i) The licensee shall **maintain and implement** an environmental management documentation system.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.9 Corrective and Preventative Action

- (i) The licensee shall **maintain and implement** procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.
- (ii) Where a breach of one or more of the conditions of this licence occurs, the licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- (iii) All corrective and preventative actions shall be documented.

2.2.2.10 Internal Audits

The licensee shall **maintain and implement** a programme for independent internal audits of the EMS. Such audits shall be carried out at least once every three years. The audit programme shall determine whether or not the EMS is being implemented and maintained properly, and in accordance with the requirements of the licence. Audit reports and records of the resultant corrective and preventative actions shall be maintained as part of the EMS in accordance with Condition 2.2.2.8.

2.2.2.11 Awareness, Training and Competence

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

2.2.2.12 Public Awareness and Communications Programme

- (i) The licensee shall **establish, maintain and implement** a Public Awareness and Communications Programme to ensure that members of the public are informed, and can obtain information at the installation, at all reasonable times, concerning the environmental performance of the installation. The Public Awareness and Communication Programme shall include a specific programme of outreach to interested local residents on matters relating to the prevention of nuisance, including odours and noise and other factors at the installation.
- (ii) The Programme shall include a specific public awareness campaign to inform local residents about the actions being taken to ensure compliance with the conditions of the licence including the

prevention of nuisance, including odours and noise and other factors at the installation, and a community engagement programme, which highlights the information that is maintained at the installation as required in Condition 11.9, for public inspection.

- (iii) The programme shall be agreed by the Agency and a report on the programme shall be prepared and submitted to the Agency annually.

2.2.2.13 Maintenance Programme

The licensee shall **maintain and implement** 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). The maintenance programme shall use appropriate techniques and measures to ensure the optimisation of energy efficiency in plant and equipment.

2.2.2.14 Efficient Process Control

The licensee shall **maintain and implement** 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 ensure, at all times after the grant of this licence, that all infrastructure and all equipment required under this licence has been and is:
- (i) installed;
 - (ii) commissioned;
 - (iii) present on site; and
 - (iv) maintained in full working order.
- 3.2 Where any condition / schedule of this licence specifies any later deadline for installation of any piece of infrastructure or equipment, Condition 3.1 shall apply as and from the deadline specified.
- 3.3 The licensee shall establish and maintain, for each component of the installation, all infrastructure referred to in this licence in advance of the commencement of the licensed activities in that component, or as required by the conditions of this licence. Infrastructure specified in the review form 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 review form.
- 3.4 The licensee shall have regard to the following when choosing and/or designing any new plant/infrastructure:
- (i) Energy efficiency, and
 - (ii) The environmental impact of its construction/installation, maintenance, operation and eventual decommissioning.

3.5 Installation Notice Board

- (i) The licensee shall maintain 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 1200mm by 750mm. The notice board shall be maintained thereafter.
- (ii) 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.

3.6 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.

3.7 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.

3.8 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.

3.9 Tank, Container and Drum Storage Areas

- 3.9.1 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).
- 3.9.2 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.
- 3.9.3 All drainage from bunded areas shall be treated as contaminated unless it can be demonstrated to be otherwise.
- 3.9.4 All drainage from bunded areas shall be diverted for collection and safe disposal, unless it can be deemed uncontaminated and does not exceed the trigger levels set for storm water emissions under Condition 6.17.
- 3.9.5 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.9.6 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.9.7 All bunds shall be uniquely identified and labelled at the bund.
- 3.9.8 The licensee shall apply a leak detection system to all storage tanks, container and drum storage areas that contain liquid material other than water.

3.10 Water metering and records

- 3.10.1 The licensee shall maintain a water meter on all water supplies serving the installation, within 6 months of the date of grant of this licence. In the case of new water supplies installed on site, the meters shall be fitted in advance of utilisation.
- 3.10.2 Records of water usage shall be maintained on site and a summary records report shall be submitted annually as part of the AER.

- 3.11 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.
- 3.12 Silt Traps and Oil Separators
- The licensee shall **install and maintain** silt traps and oil separators at the installation for SW1, SW2 and SW3:
- (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 operational yard areas (i.e. any delivery areas, storage areas and/or loading areas). The separators shall be a **Class II full retention separator at SW1** and a **Class I full retention separator at SW2**.
 - (iii) A Class 1 Bypass separator shall be installed and maintained on the storm water discharges from non-operational yard areas (i.e. carparks and reception areas) at **SW3**.
- The separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).
- 3.13 Fire-water Retention
- 3.13.1 The licensee shall carry out a risk assessment to determine the retention requirements for fire water run-off from the installation. The risk assessment, and any subsequent reports or programmes, shall be completed in accordance with any guidelines issued by the Agency with regard to firewater retention.
- 3.13.2 The licensee shall submit the Firewater Risk Assessment Report based on the assessment in Condition 3.13.1 to the Agency for approval within nine months of the date of grant of this licence.
- 3.13.3 The licensee shall implement the Firewater Risk Assessment Report as approved by the Agency under Condition 3.13.2, within the timeframes specified by the Agency.
- 3.14 All pump 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 (or oil detectors as appropriate) within three months from the date of grant of this licence.
- 3.15 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 diffuse emissions.
- 3.16 All wellheads at the installation shall be adequately protected to prevent contamination or physical damage within six months from the date of grant of this licence.
- 3.17 The licensee shall **maintain** a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.18 The licensee shall install, maintain and implement automated shut off valves at all storm water discharges (**SW1, SW2 and SW3**) within 12 months of the date of grant of this licence.
- 3.19 The licensee shall operate a weather monitoring station on the site at a location agreed by the Agency, which records conditions of wind speed and wind direction.
- 3.20 Fuel Usage: Boiler and Thermal Oxidiser
- 3.20.1 Natural gas, tallow or low sulphur fuel (<1%) shall be used in the **thermal oxidiser and Standby Boiler 1** on-site. A record of the fuel being used shall be maintained.
- 3.20.2 **Tallow derived from the processing of animal by-products may be used as fuel in the on-site thermal oxidiser and Standby Boiler subject to on-going agreement of the Agency.**
- 3.20.3 **Written approval from the Department of Agriculture, Food and the Marine for the use of tallow as a fuel in the thermal oxidisers and the standby boiler shall be maintained. The written approval shall be maintained on-site for inspection by**

authorised personnel. The use of tallow as a fuel shall be ceased immediately where this approval is withdrawn.

- 3.21** All areas where animal by-products and blood are deposited and stored shall be constructed so that the surfaces are impervious and laid to fall to drains which lead **to the Emission to Waste Water Treatment point W1-SEP1.**
- 3.22 Negative pressure
- 3.22.1 Negative air pressure shall be maintained throughout all buildings where animal by-products, blood, intermediates or finished products are deposited, stored, processed or manufactured to ensure that there is no significant escape of odours.
- 3.22.2 Doors shall be close fitting and remain closed other than for the movement of personnel and materials, during the carrying on of the activity. Personnel doors shall be fitted with self-closing mechanisms. Doors other than personnel doors shall have closing mechanisms fitted such that collection/delivery vehicles or personnel cannot over ride them and leave doors open during these services.
- 3.23 Building Integrity
- 3.23.1 The integrity of all buildings where raw materials, intermediates or finished products are deposited, stored, processed or manufactured shall be maintained to prevent the uncontrolled release of ventilation air to atmosphere.
- 3.23.2 The licensee shall annually undertake an assessment of the integrity of all process buildings on-site.
- 3.23.3 A report on the assessment, including recommendations and works completed shall be maintained on-site and shall be available for inspection by authorised persons of the Agency.
- 3.24 The licensee shall ensure that all air emissions from on-site tallow tanks, effluent tanks and blood storage tanks are vented by specific extract to a suitable air abatement plant.
- 3.25 The licensee shall permanently enclose the biofilter, whereby the abated gases will be extracted through a stack, within six months of the date of grant of the licence, unless otherwise approved by the Agency.**
- 3.26 Condensate Pipeline**
- 3.26.1 All liquid wastes arising from the condensers and boiler blowdown shall be directed via Emission point W1-CEP1 to the off-site waste water treatment plant via an impermeable pipeline.
- 3.26.2 **The licensee shall install and maintain a continuous flow meter on the condensate pipeline.**
- 3.27 The licensee shall install and maintain a screen to remove larger suspended material from the waste stream prior to heat treatment. The screening shall have perforations of less than 4mm and shall be self cleaning. All screenings derived during the processing of Specified Risk Material (SRM) shall be returned for processing with raw material.
- 3.28 Installation Roads and Site Surfaces
- 3.28.1 The road network and outside yard surfaces shall be kept clean and spillages shall be cleaned up immediately.
- 3.28.2 Effective site roads shall be provided and maintained to ensure the safe and nuisance free movement of vehicles within the installation.
- 3.28.3 The licensee shall provide and maintain an impermeable concrete surface in all areas of the installation used for the movement, holding, storage or processing of waste/animal by-products.
- 3.28.4 The concrete surface shall be constructed to British Standard 8110 Standard BS EN 1992-1-1:2004+A1:2014, as amended or an alternative as approved by the Agency.
- 3.28.5 Any repairs required to ensure the integrity of any concrete surfaces shall be carried out as soon as practicable.

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 atmosphere in this licence shall be interpreted in the following way:
- 4.1.1 Continuous Monitoring
- (i) No 24 hour mean value shall exceed the emission limit value.
 - (ii) 97% of all 30-minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
 - (iii) No 30-minute mean value shall exceed twice the emission limit value.
- 4.1.2 Non-Continuous Monitoring
- (i) For any parameter where, due to sampling/analytical limitations, a 30-minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
 - (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
 - (iii) For all other parameters, no 30-minute mean value shall exceed the emission limit value.
- 4.2 The concentration and volume flow limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of:
- 4.2.1 From non-combustion sources:
Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).
- 4.2.2 From combustion sources (**Standby Boiler A1-AEP1**):
Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels.
- 4.2.3 **In the case of the Thermal Oxidiser (A2-AEP2)**:
Temperature 273K, Pressure 101.3 kPa, **17%** oxygen for the thermal oxidiser.
- 4.2.4 For odour monitoring **by olfactometry**:
Temperature 293K, Pressure 101.3 kPa, **no** correction for oxygen or water content as per relevant process (combustion / non-combustion sources) **in accordance with EPA Emissions Monitoring Guidance (AG2)**.
- 4.3 Emission limit values for waste water emissions at W1-SEP1 and W1-CEP1 shall be achieved without the introduction of dilution, and shall be interpreted in the following way:
- 4.3.1 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.
- 4.3.2 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.

4.3.3 Discrete Sampling

- (i) For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.

4.4 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.

4.5 Noise

Noise from the installation shall not give rise to sound pressure levels measured at the noise sensitive locations which exceed the limit values.

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

Condition 5. Emissions

5.1 Emissions may be made from the specified emission points set out in *Schedule B: Emission Limits*, of this licence subject to compliance with the Emission Limit Values specified in that Schedule.

5.1.1 Uncontaminated storm water may be discharged to surface water.

5.1.2 Uncontaminated storm water may be emitted to groundwater or to soil.

5.1.3 Minor, diffuse and potential emissions may be emitted to air as specified in the review form, or as approved by the Agency under Condition 1 of this licence.

5.2 Notwithstanding the requirements of Condition 5.1, there shall be no other emissions from the installation.

5.3 No emissions, including odours and dust, 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.

5.4 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.

5.5 The licensee shall ensure that all or any of the following: Vermin, Birds, Flies, Mud, Litter associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the installation or beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution.

5.6 The licensee shall, at a minimum of daily intervals inspect the installation and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours.

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

Condition 6. Control and Monitoring

6.1 Test Programme

6.1.1 The licensee shall prepare a test programme for abatement equipment installed to abate emissions.

6.1.2 The programme shall be completed within three months of the commencement of operation of the abatement equipment.

6.1.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures.

- 6.1.4 The test programme shall as a minimum:
- (i) establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence;
 - (ii) assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor. and
 - (iii) be prepared in accordance with the guidance published by the Agency, 'Odour Emissions Guidance Note (AG9)', as may be amended or replaced.
- 6.1.5 A report on the test programme shall be submitted to the Agency within one month of completion.
- 6.2 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance, calibrations and control techniques as set out below and as in accordance with *Schedule C: Control and Monitoring*, of this licence.
- 6.2.1 Sampling and analysis shall be undertaken by competent staff in accordance with documented operating procedures. Unless otherwise approved by the Agency, sampling and analysis of emissions to atmosphere shall be carried out by ISO 17025 accredited persons/organisations, with accreditation for the relevant scope of sampling and analysis, and in accordance with the Agency's air monitoring policy.
- 6.2.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
- 6.2.3 Such procedures shall be subject to a programme of Analytical Quality Control using appropriate control standards with evaluation of test responses.
- 6.2.4 Where any analysis is sub-contracted it shall be outsourced to a competent laboratory.
- 6.3 The licensee shall ensure that:
- (i) sampling and analysis for all parameters listed in the schedules to this licence; and
 - (ii) 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, which will ensure the provision of data of an equivalent scientific quality, shall apply.
- 6.4 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 approved 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 approved by the Agency.
- 6.5 Monitoring and analysis equipment shall be installed, operated and maintained as necessary so that all monitoring results accurately reflect any emission, discharge or parameter specified in this licence.
- 6.6 The licensee shall ensure that groundwater monitoring well sampling equipment is available or installed on-site at the installation and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
- 6.7 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.8 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended as required or approved by the Agency following evaluation of test results.
- 6.9 The licensee shall prepare and implement a programme, to the satisfaction of the Agency, for the identification and reduction of diffuse emissions using an appropriate combination of best

- available techniques. This programme shall be included in the Environmental Management Programme.
- 6.10 The integrity and water tightness of all tanks, bunding structures, containers and underground pipes and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee within twelve months of the date of grant of this licence.
- 6.10.1 In the case of new bunding structures, tanks, underground pipelines and containers installed on site, the testing for integrity and water tightness shall be undertaken in advance of utilisation;
- 6.10.2 Testing shall be carried out by a suitably qualified and experienced person;
- 6.10.3 Testing shall be carried out in accordance with any guidance published by the Agency;
- 6.10.4 Testing shall be carried out at least once every three years thereafter and reported to the Agency on each occasion;
- 6.10.5 Any repairs required to ensure the ensure the integrity and water tightness of tanks, bunding structures, containers and underground pipes shall be carried out as soon as practicable; and
- 6.10.6 A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.’
- 6.11 The licensee shall, test and demonstrate **at least once every three years**, the suitability, adequacy, integrity and water tightness of all areas used to store animal by-products, including collection tanks used to collect runoff and washings arising from animal by-products.
- 6.12 Building integrity and negative pressure programme: The licensee shall maintain, to the satisfaction of the Agency, a programme to demonstrate negative pressure throughout all buildings where animal by-products, blood, intermediates or finished products are deposited, stored, processed or manufactured to ensure that there is no significant escape of odours.
- 6.12.2 The programme shall include as a minimum, the following:
- (i) Maintain all criteria for operation, control and management of the negative pressure system to ensure compliance with the emission limit values specified in this licence;
- (ii) Assess the performance of any monitors on the system and maintain a maintenance and calibration programme for each monitor.
- 6.12.3 The programme shall be reviewed at least annually.
- 6.12.4 A report on the programme shall be submitted to the Agency.
- 6.13 The storm water drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be required by the Agency), bunds, silt traps and oil separators shall be inspected weekly, desludged as necessary, and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal. The licensee shall maintain a drainage map on site. The drainage map shall be reviewed annually and updated as necessary.
- 6.14 All process effluent from the site shall be discharged to the waste water treatment plant of ABP Ireland Unlimited Company, Reg. No. P0205-02 via a fat trap at W1-SEP1.**
- 6.15 Process Effluent
- 6.15.1 The acute toxicity of the undiluted final effluent to at least four aquatic species from different trophic levels shall be determined by standardised and internationally accepted procedures and carried out by a competent laboratory.
- 6.15.2 Having identified the most sensitive species outlined in Condition 6.15.1, subsequent compliance toxicity monitoring shall be carried out on the two most sensitive species.
- 6.15.3 A representative sample of effluent shall be screened for the presence of organic compounds. Such screening shall be repeated at intervals as requested by the Agency thereafter.

- 6.16 An inspection system for the detection of leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be developed within six months of the date of grant of this licence and maintained thereafter.
- 6.17 Storm Water
- 6.17.1 A visual examination of the storm water discharges shall be carried out daily. A log of such inspections, shall be maintained.
- 6.17.2 Trigger Values
- 6.17.2.1 The licensee shall, within six months of the commencement of the activity, establish suitable trigger levels for **pH, TOC, conductivity, and suspended solids** in storm water discharges, to the satisfaction of the Agency. The trigger values shall be established in accordance with the methods outlined in the Environmental Protection Agency's "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*".
- 6.17.2.2 The trigger values may be revised, to the satisfaction of the Agency, following evaluation of appropriate storm water monitoring data in accordance with the methods outlined in the Environmental Protection Agency's "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*".
- 6.17.2.3 The licensee shall establish, maintain and implement a response programme to address any exceedance of the trigger values.
- 6.18 Noise
- 6.18.1 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 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency.
- 6.18.2 Noise Management Plan
- 6.18.2.1 The licensee shall prepare, maintain and implement, to the satisfaction of the Agency, a Noise Management Plan.
- 6.18.2.2 The plan shall be submitted within six months of the date of grant of this licence.
- 6.18.2.3 The plan shall outline noise reduction and abatement measures.
- 6.18.2.4 The plan to reduce noise emissions should include the following mitigation measure(s): abatement and enclosure of operations, processes and equipment giving rise to exceedances of noise limit values measured at noise sensitive locations.
- 6.18.2.5 The plan shall be prepared in accordance with the Agency's Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4).
- 6.18.2.6 The plan shall be implemented within 12 months of the date of grant of this licence.
- 6.18.2.7 The plan shall be reviewed annually.

- 6.19 Odour
- 6.19.1 The licensee shall carry out an odour survey of the site operations daily.
- 6.19.2 The survey programme shall be undertaken in accordance with the methodology specified in the 'Air Guidance Note 5 (AG5) Odour Impact Assessment Guidance for EPA Licensed Sites' as published by the Agency.
- 6.20 Odour Management Plan
- 6.20.1 The licensee shall prepare, maintain and implement, to the satisfaction of the Agency, an Odour Management Plan.
- 6.20.2 The plan shall be submitted within 12 months of the date of grant of this licence.
- 6.20.3 The plan shall outline odour reduction and abatement measures.
- 6.20.4 The plan shall as a minimum address storage areas and the storage and handling of wastes and other materials with a potential for causing odour.
- 6.20.5 The plan shall be prepared in accordance with the Agency's Odour Emissions Guidance Note (Air Guidance Note AG9).
- 6.20.6 The plan shall be reviewed annually.
- 6.21 Pollutant Release and Transfer Register (PRTR)
- The licensee shall submit a PRTR data report for the site. The pollutants and/or wastes to be included in the PRTR shall be determined by reference to EC Regulations No. 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register. The PRTR shall be prepared in accordance with any relevant Agency guidance and shall be submitted electronically in the format specified by the Agency.
- 6.22 The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.23 Groundwater and Soil Monitoring
- The licensee shall carry out monitoring for relevant hazardous substances in soil and groundwater at the site of the installation. The substances for monitoring shall be identified by the licensee by undertaking a risk-based assessment. The risk assessment, sampling and monitoring shall be carried out in accordance with any guidance published by the Agency. The licensee shall have regard to the '*Classification of Hazardous and Non-Hazardous Substances in Groundwater*' as published by the Agency
- 6.23.1 Monitoring shall be carried out in accordance with *Schedule C.5 Groundwater Monitoring* of this licence.
- 6.23.2 Monitoring shall be carried out in accordance with *Schedule C.5 Soil Monitoring* of this licence.
- 6.24 Thermal Oxidiser Operation (**Emission Point A2-AEP2**)
- 6.24.1 The temperature as measured within the combustion zone of the thermal oxidiser shall be maintained at not less than **750°C**. This temperature shall be continuously monitored and recorded and the results shall be available for inspection by authorised persons of the Agency at all reasonable times.
- 6.24.2 The thermal oxidiser shall be fitted with audible and visual alarms which shall be triggered when the temperature within the combustion chamber falls below what is specified under Condition 6.24.1 above.
- 6.24.3 Gases shall only be introduced to the thermal oxidiser when the appropriate operating conditions, which as a minimum shall meet those set out in *Schedule B.1 Emissions to Air*, of this licence have been achieved and when:
- (i) The burners in the combustion chamber are on and operating satisfactorily;

- (ii) The temperature required under Condition 6.24.1 has been reached and maintained in the combustion chamber;
- 6.25 The licensee shall operate a system to prevent waste gas feed **entering the treatment units of the Thermal Oxidiser** in the following circumstances:
- (i) during start-up, until the temperature of 750°C has been reached;
 - (ii) Whenever the temperature of 750°C is not maintained;
 - (iii) Whenever the continuous measurements show that any emission limit value is exceeded due to disturbances or failures of the purification devices;
 - (iv) Whenever stoppages, disturbances, or failure of the purification devices or the measurement devices may result in the exceedance of the emissions limit values.
- 6.26 Thermal Oxidiser Shut-down
- 6.26.1 In the event of any of the following:
- (i) the failure of any piece of control equipment related to the thermal oxidisers or failure of any continuous monitor related to operating parameters or emissions of the thermal oxidiser, where a contingency system, which must have been previously agreed by the Agency, is not implemented;
 - (ii) the failure of the thermal oxidiser to achieve the operating parameters and emission limit values given in *Schedule B: Emission Limits* of this licence and *Schedule C: Control and Monitoring*, of this licence.
 - (iii) where a by-pass of the regenerative thermal oxidiser is initiated, the relevant processes shall, be shut down immediately, unless otherwise agreed by the Agency. The shutdown shall be carried out in a manner consistent with safety and the protection of the environment. Emission of contaminated exhaust air through the by-pass shall be notified to the Agency in accordance with the requirements of Condition 11 of this licence or such relevant guidance as issued by the Agency.
- 6.26.2 The licensee shall maintain a detailed log of all bypass events, including date, time, duration, operational activities at the time of bypass, and time taken to shut down all relevant processes. A log of bypass shall be submitted to the Agency on a quarterly basis, and shall also be reported annually as part of the AER.
- 6.26.3 The licensee shall maintain a record of the operation of Thermal Oxidiser (**No. A2-AEP2**). The record shall include the date and time, operating temperature and residence time in the thermal oxidiser.

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 carry out 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 The licensee shall ensure that waste generated in the carrying on of the activity shall be prepared for re-use, recycling or recovery or, where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.
- 8.2 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.
- 8.3 Waste sent off-site for recovery or disposal
- 8.3.1 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor.
- 8.3.2 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.
- 8.3.3 Waste sent off-site for recovery or disposal shall be transferred only to an appropriate facility.
- 8.4 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.
- 8.5 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.6 Waste and materials shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste and materials shall be clearly labelled and appropriately segregated.
- 8.7 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control and 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 Animal by-products shall be transported from the point of production to the site of the activity as soon as practicable. During the period April to September inclusive, animal by-products delivered to the site from IPC/IE licensed slaughtering facilities shall not be more than 24 hours old. Animal by-products received from all other facilities shall not be more than 48 hours old. Animal by-products older than 48 hours may only be accepted for processing on the basis that adequate refrigeration or cooling is provided.
- 8.11 Animal by-products shall be processed as soon as practicable but not later than 24 hours after receipt at the site of the activity, with the exception of Public Holiday weekends when animal by-products shall be processed within 72 hours of receipt at the installation.

- 8.12 A record shall be maintained of all animal by-products delivered to the site for processing, to include:
- (i) the date and time of delivery;
 - (ii) a description of the materials;
 - (iii) the place from where the materials were dispatched;
 - (iv) where the materials were stored on-site;
 - (v) date and time of processing; and
 - (vi) the tonnage, animal by-product category and list of waste (LoW) code for the materials recovered/disposed on-site.**
- 8.13 All vehicles, trailers and containers used for the transport of animal by-products to the site of the activity shall be totally enclosed. The design shall be such as to minimise the emission of any nuisance odour or spillage or 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 The licensee shall maintain a programme to ensure that all vehicles, trailers and containers **transporting** animal by-products to **or from** the site of the activity are adequately contained and covered.
- 8.15 Animal by-products and blood for processing shall be uncovered, unloaded and deposited within the confines of the animal by-products intake building. Animal by-products shall not be uncovered or deposited or stored in the open yard.
- 8.16 There shall be no liquid materials other than blood passed through the rendering process without the prior written approval of the Agency.
- 8.17 All vehicles, trailers and containers used for the transport of animal by-products and blood to the site of the activity shall be washed down and shall have their coverings refitted prior to leaving the confines of the animal by-products intake building. All vehicles shall pass through a wheel wash after exiting the material intake building and prior to leaving the site of the activity.
- 8.18 **All wash waters arising from vehicles, trailers, containers, storage areas, equipment used for the collection, transfer, handling and processing of animal by-products, blood and runoff arising from animal by-product storage shall be collected and conveyed to heat treatment to achieve the minimum requirements set down in Regulation (EC) No. 1069/2009.**
- 8.19 Meat and bone meal and/or tallow oil derived from the processing of animal by-products destined for removal off-site shall be transported in sealed covered containers or vehicles in such a way as to prevent loss or spillage.
- 8.20 All vehicles, skips or containers used for removing meal from the site, shall be designed constructed and operated so as to minimise the emissions of offensive odour and spillages of meal.
- 8.21 The transportation and handling of dusty material shall be carried out in a manner which does not give rise to dust emissions. Stocks of dusty material shall be stored in suitable silos, closed containers or an enclosed store.
- 8.22 No fallen bovine animals, over 48 months old (and subject to ongoing review by the Agency), shall be processed at the installation without having first been tested negative for the presence of the abnormal protease-resistant form of a normal host protein.
- 8.23 Whole fallen animals; suspect BSE animals/by-products, depopulated herds or cohorts of BSE infected animals; animals or by-products arising from a disease outbreak listed under the Diseases of Animals Act, 1966, Part III Diseases of Animals and Poultry, Class A and/or Class B; shall only be processed with the prior written approval of the Agency.

Reason: *To provide for the appropriate handling of material and the protection of the environment.*

Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, within six months of date of grant of this licence, 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, within six months of date of grant of this licence, 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; and
 - (vi) notify the Agency as required by Condition 11.3 of this licence.
- 9.3.2 Where an incident or accident that significantly affects the environment occurs, the licensee shall, without delay take measures to limit the environmental consequences of the incident or accident and to prevent further incident or accident.

Reason: *To provide for the protection of the environment.*

Condition 10. Closure, Restoration and Aftercare 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. A final validation report to include a certificate of completion to demonstrate there is no continuing risk to the environment shall be submitted to the Agency within three months of termination or planned cessation of the activity.

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 submit the reports, proposals and submissions required by this licence by the deadlines specified. The licensee shall not be in compliance with the requirements of this

condition unless and until it has submitted every report, proposal and submission, the deadline for which has passed.

11.2 The licensee shall carry out every action required by the Agency, and arising out of such reports, proposals or submissions, by such deadline as the Agency may specify. The licensee shall not be in compliance with the requirements of this condition unless and until it has carried out every such action.

11.3 The licensee shall notify the Agency, in a format as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:

- (i) an incident or accident as defined by the glossary;
- (ii) any release of environmental significance to atmosphere from any potential emissions point including bypasses; or
- (iii) any breach of one or more of the conditions attached to this licence.

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. All details required to be communicated must be in accordance with any guidance provided by the Agency.

11.4 In the event of any incident which relates to discharges to sewer having taken place, the licensee shall notify Irish Water and the Local Authority in a manner prescribed by Irish Water, as soon as practicable after such an incident.

11.5 The following shall be notified, as soon as practicable after the occurrence of any incident which relates to a discharge to water:

- (i) Inland Fisheries Ireland / Department of Agriculture, Food and the Marine in the case of discharges to receiving waters.
- (ii) Irish Water and /or Water Services Authority in the case of any incident where the discharge(s) have been identified as upstream of a drinking water abstraction point.
- (iii) The local authority, in the case of discharges to designated bathing waters.

11.6 The licensee shall make a record of any notification made under Condition 11.3. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident or accident. The record shall include all corrective actions taken to manage the incident or accident, minimise wastes generated and the effect on the environment, and avoid recurrence. In the case of a breach of a condition, the record shall include measures to restore compliance.

11.7 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.

11.8 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.

11.9 The licensee shall as a minimum ensure that the following documents are accessible at the site:

- (i) the licences relating to the installation;
- (ii) the current EMS for the installation including all associated procedures, reports, records and other documents;
- (iii) records of time and date of tallow usage;
- (iv) the previous year's AER for the installation;
- (v) 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;
- (vi) relevant correspondence with the Agency;
- (vii) up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;

- (viii) 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; and
- (ix) any elements of the licence review form.

This documentation shall be available to the Agency for inspection at all reasonable times.

11.10 The licensee shall submit to the Agency annually, or as otherwise approved by the Agency

11.10.1 An AER covering the previous calendar year, which shall be;

- (i) To the satisfaction of the Agency and include as a minimum the information specified in *Schedule D: Annual Environmental Report*, of this licence,
- (ii) Prepared in accordance with any relevant guidelines issued by the Agency, and
- (iii) Submitted by the 31st March of each year,

11.10.2 The results of all emission monitoring carried out in accordance with the requirements of this licence; including an assessment and interpretation of the results.

11.11 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 be maintained on a monthly basis and shall as a minimum contain details of the following:

- (i) the tonnages and LoW Code for the waste materials, **including animal by-products**, imported and/or 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 and Monitoring*, of this licence; and
- (ix) the tonnage and LoW Code for the waste materials recovered/disposed on-site.

11.12 The licensee shall submit reports electronically as required by the conditions of this licence to the Agency.

11.13 All reports shall be certified accurate and representative by the installation manager or a nominated, suitably qualified and experienced deputy.

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 **€15,232**, 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 Act 1992 as amended. The first payment shall be a pro-rata amount for the period from the date of grant of this to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of this 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 Act 1992 as amended, 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 Agency may amend this licence at any time in certain circumstances in accordance with section 96 of the Environmental Protection Agency Act 1992 as amended to require, or not require as the case may be, the putting in place of a financial provision to incorporate costings for CRAMP and/or Environmental Liabilities Risk Assessment. This amendment may be implemented by the Agency in the event of an incident that creates a significant residual environmental liability or where the environmental risk profile changes on site.

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

SCHEDULE A: Limitations

A.1 Materials and Waste Categories and Quantities for Acceptance

Table A.1.1 Animal By-Product/Waste Categories and Quantities for Acceptance at the Rendering Plant

Animal By-Product	List of Wastes (LoW) and Animal By-Product Types	Maximum Tonnage Accepted Per Day ^{Note 1}
Animal By-Products	02 01 02, 02 02 01, 02 02 02, 02 02 03 (Category 1, Category 2 and Category 3)	450
Total Animal By-Products per Week		2,625

Note 1: The daily tonnage may be varied with the approval of the Agency subject to the total weekly tonnage limit (2,625 tonnes) staying the same.

SCHEDULE B: Emission Limits

B.1 Emissions to Air

Emission Point Reference No.:	A1-BEP3 (Standby Boiler 1)
Location:	E262112, N112127
Volume to be emitted:	
Maximum in any one day:	264,000 Nm³
Maximum rate per hour:	11,000 Nm³
Minimum discharge height:	14.6 m above ground

Parameter	Emission Limit Value (mg/Nm ³)	
	Natural Gas	Low Sulphur Fuel or Tallow
Nitrogen Oxides (as NO ₂)	220	650
Sulphur Dioxide (as SO ₂)	-	350
Particulates	-	30

Emission Point Reference No:	A2-AEP1 (Biofiltration System - rear of process building) ^{Note 1}	
Location:	E262206, N112131	
Volume to be emitted:	Maximum rate per hour:	150,000 Nm ³
Stack height:	10m above ground	
Loading Rate:	<150 m ³ /m ² /hr	

Parameter	Emission Limit Value (mg/Nm ³) ^{Note 2}
Odour (OU _E /m ³)	1000
Total Volatile Organic Compounds (TVOC)	10

Note 1: The Biofilter shall be operated in accordance with Condition 3.25.

Note 2: The licensee shall comply with the Emission Limit Values specified within six months of date of grant of this licence.



Emission Point Reference No:	A2-AEP2 (Recuperative Thermal Oxidiser)	
Location:	E262131, N112135	
Volume to be emitted:	Maximum in any one day:	3,600,000 Nm ³
	Maximum rate per hour:	150,000 Nm ³
Chamber operating temperature:	750°C minimum ^{Note 1}	
Residence time:	2 seconds minimum	
Minimum discharge height:	40 m above ground	

Parameter	Emission Limit Value (mg/Nm ³)	
	Natural Gas	Low Sulphur Fuel or Tallow
Nitrogen Oxides (as NO ₂)	220	650
Sulphur Dioxide (as SO ₂)	-	400
Particulates	-	30
Parameter	Emission Limit Value	
Odour (OU _E /m ³)	1,000	
Total Volatile Organic Compounds (TVOC)	10	

Note 1: A chamber operating temperature of 850°C shall be maintained as a minimum when using tallow as a fuel.



B.2 Emissions to Sewer

There shall be no trade effluent emissions to sewer.



B.3 Emissions to Waste Water Treatment

Emission Point Reference No:	W1-SEP1 (Process effluent)
Sampling Location:	E262021, N112048
Volume to be emitted:	Maximum in any one day: 300m³
	Maximum rate per hour: 60 m³

Parameter	Emission Limit Value	Daily Mean Concentration (mg/l)	Daily Mean Load (Kg/day)
Temperature	35 °C (max)		
pH	6 - 9		
Toxicity	5 TU		
	mg/l		
Biochemical Oxygen Demand	5,000	2,100	840
Suspended Solids	1,500	-	450

Emission Point Reference No:	W1-CEP1 (Condensate)
Sampling Location:	E262180, N112114
Volume to be emitted:	Maximum in any one day: 100m ³
	Maximum rate per hour: 10m ³

Parameter	Emission Limit Value	Daily Mean Concentration (mg/l)	Daily Mean Load (Kg/day)
Temperature	35 °C (max)		
pH	6 - 9		
	mg/l		
Chemical Oxygen Demand	10,000	-	100

**B.4 Noise Emissions**

Daytime dB L _{Ar,T} (30 minutes)	Evening time dB L _{Ar,T} (30 minutes)	Night-time dB L _{Aeq,T} (30 minutes) ^{Note 1}
55	50	45

Note 1: During night time hours, there shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at the noise sensitive locations.



SCHEDULE C: Control & Monitoring

C.1.1 Control of Emissions to Air

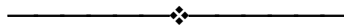
Emission Point Reference No: A1-AEP1
Description of Treatment: Biofiltration Bed

Parameter	Frequency	Analysis Method/Technique ^{Note 1}
Bed Media		
Olfactory Assessment	Quarterly	EN Standard Reference Method 13725
Bed Material-Moisture Content	Quarterly	Standard Method
Bed Material-Ammonia	Quarterly	Standard Method
Bed Material-pH	Quarterly	Standard Method
Bed Material-Oils, Fats and Grease	Quarterly	Agreed Method
Bed Material-Total viable counts	Biannually	Agreed Method
General		
Fan Operation	Daily	Visual Inspection
Pressure Drop Across Filter	Daily	Differential Pressure Gauge
Sprinkler System	Daily	Visual Inspection
Visual inspection of bed ^{Note 2}	Weekly	Visual Inspection
Gas Temperature ^{Note 3}	Weekly	Temperature Sensor
Gas Loading ^{Note 3}	Weekly	Flow Sensor
Relative Humidity ^{Note 3}	Weekly	Humidity Sensor
Residence time of gas in biofilter in the range 30-60 seconds	Biannually	Gas Flow Measurement

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

Note 2: The biofilter bed shall be examined to ensure that no channelling or drying out of the bed material is evident. Turning, restructuring and dampening of the bed material and the addition of supplementary bed material, or total bed material replacement shall be carried out, as required, subject to bed performance.

Note 3: Analysis of gases shall be carried out at inlet and outlet of biofilter.



Emission Point Reference No: A2-AEP2
Description of Treatment: Thermal Oxidiser

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Inlet Lower Explosive Limits (LEL)	Continuous	LEL Analyser
Combustion chamber temperature	Continuous	Temperature probe
Oxygen content of flue gases	Continuous	Oxygen analyser
Pressure of flue gas	Continuous	Pressure transmitter
Temperature of flue gas	Continuous	Temperature probe
Inlet and outlet air flow	Continuous	Flow meter

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



C.1.2 Monitoring of Emissions to Air

Emission Point Reference No: A1-BEP1-Standby Boiler

Parameter	Monitoring Frequency	Analysis Method/Technique
NO₂	Annually	Flue gas analysis
SO₂	Annually	Flue gas analysis
CO	Annually	Flame Ionisation Detection
Boiler Combustion Efficiency	Annually	Standard Method



Emission Point Reference No: A2-AEP1-Biofiltration Bed

Parameter ^{Note 1}	Monitoring Frequency	Analysis Method/Technique
Odour	Quarterly	Standard Method
Volatile Organic Carbon	Biannually	Flue gas analysis
Volumetric Flow	Quarterly	Flow Meter

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



Emission Point Reference No: A2-AEP2-Thermal Oxidiser

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous	Flow Meter
Odour	Quarterly	Standard Method
CO	Biannually	Standard Method
NO _x	Biannually	Standard Method
SO _x	Biannually	Standard Method
Particulates	Biannually	Standard Method
TVOC	Biannually	Standard Method



C.2.1 Monitoring of Emissions to Waste Water Treatment

Emission Point Reference No: W1-SEP1 and W1-CEP1

Control Parameter	Monitoring Frequency	Key Equipment/Technique
Flow	Continuous ^{Note 1}	On-line flow meter with recorder
Temperature	Weekly	On-line temperature probe with recorder
pH	Weekly	pH electrode/meter with recorder
Total Phosphorus ^{Note 3}	Monthly	Standard Method
Total Nitrogen ^{Note 3}	Monthly	Standard Method
Total Ammonia	Monthly	Standard Method
BOD ^{Note 3}	Weekly - grab at peak discharge	Standard Method
BOD ^{Note 3}	Weekly ^{Note 2}	Standard Method
COD ^{Note 4}	Weekly ^{Note 2}	Standard Method
Suspended Solids ^{Note 3}	Weekly ^{Note 2}	Standard Method
Oils, fats and greases ^{Note 3}	Monthly ^{Note 2}	Standard Method
Organic Compounds ^{Note 3 & 5}	Monthly ^{Note 2}	Standard Method
Toxicity ^{Note 6}	As may be required	To be agreed by the Agency

Note 1: Total effluent volume 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.

Note 3: Monitoring of this parameter shall apply to W1-SEP1 only.

Note 4: Monitoring of this parameter shall apply to W1-CEP1 only.

Note 5: Screening for priority pollutant list substances (such as US EPA volatile and/or semi-volatile compounds). This analysis shall include those organic solvents in use in the process, which are likely through normal process operators to be diverted to the wastewater streams.

Note 6: The number of toxic units (TU) = 100/x hour EC/LC50 in percentage vol/vol so that higher TU values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.



C.2.2. Monitoring of Storm Water Emissions

Emission Point Reference No: SW1 (262095E, 112090N), SW2 (262130E, 112180N), SW3 (262162E, 112173N)

Parameter	Monitoring Frequency	Analysis Method/Technique
Visual Inspection	Daily	Sample and examine for colour and odour.
pH	Monthly	Standard method
Conductivity	Monthly	Standard method
Suspended Solids	Monthly	Standard method
BOD	Monthly	Standard method
TOC	Continuous	Standard method
Total Ammonia	Monthly	Standard method
Ortho-phosphate	Monthly	Standard method



C.3.1 Control of Emissions to Sewer

There shall be no trade effluent emissions to sewer

C.3.2 Monitoring of Emissions to Sewer

There shall be no trade effluent emissions to sewer



C.4 Noise Monitoring

Location	Measurement	Frequency
NSL1 (south), NSL2 (south), NSL3 northwest), NSL4 (north), NSL5 (east), NSL6 (east)	L _{Aeq, T} L _{A90} L _{A10} 1/3 Octave Band Analysis	Annually
Period	Minimum Survey Duration	
Daytime	A minimum of 3 sampling periods at each noise monitoring location ^{Note 1}	
Evening-time	A minimum of 1 sampling period at each noise monitoring location.	
Night-time ^{Note 2}	A minimum of 2 sampling periods at each noise monitoring location.	

Note 1: Sampling period is to be the time period T stated as per *Schedule B.4 Noise Emissions*, of this licence. This applies to day, evening and night time periods.

Note 2: Night-time measurements should be made between 2300hrs and 0400hrs, Sunday to Thursday, with 2300hrs being the preferred start time.



C.5 Ambient Monitoring

Groundwater Monitoring

Emission Point Reference No: GW1 (E262877, N112966), GW2 (E262718, N112726), GW3 (E262488, N112643), GW4 (E262468, N112487) and GW5 (E262634, N112394) or alternative monitoring location(s) agreed by the Agency

Parameter	Monitoring Frequency	Analysis Method/Techniques
Water level	Biannually	Interface probe
pH	Biannually	pH electrode/meter
Conductivity	Biannually	Standard Method
TOC	Biannually	Standard Method
Nitrate	Biannually	Standard Method
Total Ammonia	Biannually	Standard Method
Total Nitrogen	Biannually	Standard Method
Relevant Hazardous Substances ^{Note1}	Every five years	Standard Method

Note 1: Groundwater monitoring for relevant hazardous substances shall be in accordance with Condition 6.23.



Soil Monitoring

Installation Monitoring Locations: TP1, TP2, TP 3 and TP4 or alternative monitoring location(s) as agreed by the Agency

Parameter	Monitoring Frequency	Analysis Method/Technique
Relevant hazardous Substances ^{Note 1}	Every ten years	Standard Method

Note 1: Soil monitoring for relevant hazardous substances shall be in accordance with Condition 6.23.



SCHEDULE D: Annual Environmental Report

Annual Environmental Report Content ^{Note 1&2}
Environment Management objectives and targets summary. Energy and water use and generation summary. Complaints summary. Incidents Summary. Emissions Summary. Waste Management Summary. Any other items specified in the licence conditions or by the Agency.

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

Note 2: The AER shall be completed in accordance with current Agency guidance.

Signed on behalf of the said Agency _____

On the xx day of xxxxx, 202X xxxxxxxxxxxx **Authorised Person**