



Headquarters  
P.O. Box 3000  
Johnstown Castle Estate  
County Wexford  
Ireland

**WASTE LICENCE  
Proposed Decision**

<b>Licence Register Number:</b>	W0194-02
<b>Applicant:</b>	Advanced Environmental Solutions (Ireland) Limited.
<b>Location of Facility:</b>	Kyletalesha Waste Transfer Facility, Kyletalesha & Kyleclonhobert, Portlaoise, County Laois.

# ***INTRODUCTION***

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

This licence relates to a review of the current licence for a Waste Transfer and Recycling Facility run by Advanced Environmental Solutions (Ireland) Limited at Kyletalesha & Kyleclonhobert, Portlaoise, County Laois, Register Number W0194-01.

When all necessary infrastructure is in place the facility will be permitted to accept 99,000 tonnes per annum (tpa) of waste from the date of grant of the licence, consisting of household waste, commercial waste, industrial waste, construction & demolition waste, hazardous waste (WEEE), sewage sludges and non-hazardous industrial sludges. Household, commercial and industrial waste streams will provide for the majority of material entering the site at 80,000 tpa. The facility will have the capacity to handle up to 40,000 tpa of source separated organic waste which will be converted to compost on-site. The licence also allows for the acceptance of sewage sludge (6,000tpa) and non-hazardous industrial sludges (3,000 tpa).

The licence sets out in detail the conditions under which Advanced Environmental Solutions (Ireland) Limited will operate and manage this facility.

# *Table of Contents*

	Page No.
Glossary of Terms	1
Decision & Reasons for the Decisions	6
Part I Schedule of Activities Licensed	7
Part II Conditions	8
Condition 1.    Scope	8
Condition 2.    Management of the Facility	9
Condition 3.    Infrastructure and Operation	11
Condition 4.    Interpretation	16
Condition 5.    Emissions	17
Condition 6.    Control and Monitoring	18
Condition 7.    Resource Use and Energy Efficiency	21
Condition 8.    Materials Handling	22
Condition 9.    Accident Prevention and Emergency Response	24
Condition 10.   Decommissioning & Residuals Management	25
Condition 11.   Notifications, Records and Reports	25
Condition 12.   Financial Charges and Provisions	28
SCHEDULE A:   Limitations	29
SCHEDULE B:   Emission Limits	30
SCHEDULE C:   Control & Monitoring	31
SCHEDULE D:   Specified Engineering Works	35
SCHEDULE E:   Standards for Compost Quality	36
SCHEDULE F:   Annual Environmental Report	38

## *Glossary of Terms*

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Acts 1992 and 2003 / Waste Management Acts 1996 to 2005, unless otherwise defined in this section.

<b>Aerosol</b>	A suspension of solid or liquid particles in a gaseous medium.
<b>Adequate lighting</b>	20 lux measured at ground level.
<b>AER</b>	Annual Environmental Report.
<b>Agreement</b>	Agreement in writing.
<b>Annually</b>	At approximately twelve monthly intervals.
<b>Attachment</b>	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
<b>Application</b>	The application by the licensee for this licence.
<b>Appropriate facility</b>	A waste management facility, duly authorised under relevant law and technically suitable.
<b>BAT</b>	Best Available Techniques.
<b>Bi-annually</b>	All or part of a period of six consecutive months.
<b>Biennially</b>	Once every two years.
<b>Biaerosol</b>	An aerosol of biological particles.
<b>Biodegradable waste</b>	Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard.
<b>BOD</b>	5 day Biochemical Oxygen Demand.
<b>CEN</b>	Comité Européen De Normalisation – European Committee for Standardisation.
<b>COD</b>	Chemical Oxygen Demand.
<b>Compost</b>	Stable, sanitised and humus like material rich in organic matter and free from offensive odours resulting from composting, of separately collected biowaste which complies with the environmental quality classes outlined in <i>Schedule E: Standards for Compost Quality</i> of this licence.
<b>Consignment Note</b>	All movements of hazardous waste within Ireland must be accompanied by a “C1” consignment note issued by the local authority under the Waste Management (Movement of Hazardous Waste) Regulations (S.I. No. 147 of 1998).
<b>Construction and Demolition Waste</b>	Wastes that arise from construction, renovation and demolition activities: Chapter 17 of the EWC or as otherwise may be agreed.
<b>Containment boom</b>	A boom which can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.

<b>Daily</b>	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.
<b>Day</b>	Any 24 hour period.
<b>Daytime</b>	0800 hrs to 2200 hrs.
<b>dB(A)</b>	Decibels (A weighted).
<b>DO</b>	Dissolved Oxygen.
<b>Documentation</b>	Any report, record, result, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
<b>Drawing</b>	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
<b>EMP</b>	Environmental Management Programme.
<b>Emission Limits</b>	Those limits, including concentration limits and deposition rates established in <i>Schedule B: Emission Limits</i> of this licence.
<b>Environmental Damage</b>	Has the meaning given it in Directive 2004/35/EC.
<b>EPA</b>	Environmental Protection Agency.
<b>European Waste Catalogue (EWC)</b>	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
<b>Facility</b>	Any site or premises used for the purposes of the recovery or disposal of waste.
<b>Forced aeration</b>	The supply of air to a compost pile, by pumping (positive pressure) or by sucking air through the composting material (negative pressure).
<b>Fortnightly</b>	A minimum of 24 times per year, at approximately two week intervals.
<b>GC/MS</b>	Gas Chromatography/Mass Spectroscopy.
<b>Green waste</b>	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
<b>Heavy Metals</b>	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.
<b>HFO</b>	Heavy Fuel Oil.
<b>Hours of Operation</b>	The hours during which the facility is authorised to be operational.
<b>Hours of Waste Acceptance</b>	The hours during which the facility is authorised to accept waste.
<b>ICP</b>	Inductively Coupled Plasma Spectroscopy.

<b>Incident</b>	The following shall constitute an incident for the purposes of this licence: <ul style="list-style-type: none"><li>(i) an emergency;</li><li>(ii) any emission which does not comply with the requirements of this licence;</li><li>(iii) any exceedence of the daily duty capacity of the waste handling equipment;</li><li>(iv) any trigger level specified in this licence which is attained or exceeded; and,</li><li>(v) any indication that environmental pollution has, or may have, taken place.</li></ul>
<b>Industrial Waste</b>	As defined in Section 5(1) of the Waste Management Acts 1996 to 2005.
<b>Inert waste</b>	Waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater.
<b>In-vessel composting</b>	Different composting methods in which material for composting is contained in a building, reactor or vessel.
<b>IPPC</b>	Integrated Pollution Prevention & Control.
<b>K</b>	Kelvin.
<b>kPa</b>	Kilo Pascals.
<b>Landfill Directive</b>	Council Directive 1999/31/EC.
<b>Leq</b>	Equivalent continuous sound level.
<b>Licence</b>	A Waste Licence issued in accordance with the Acts.
<b>Licensee</b>	Advanced Environmental Solutions (Ireland) Limited, Unit 1, Monread Commercial Park, Monread Road, Naas, County Kildare.
<b>Liquid Waste</b>	Any waste in liquid form and containing less than 2% dry matter.
<b>List I</b>	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
<b>List II</b>	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
<b>Local Authority</b>	Laois County Council.
<b>Maintain</b>	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately perform its function.
<b>Mass Flow Limit</b>	An Emission Limit Value which is expressed as the maximum mass of a substance which can be emitted per unit time.
<b>Mass Flow Threshold</b>	A mass flow rate, above which, a concentration limit applies.
<b>Monthly</b>	A minimum of 12 times per year, at approximately monthly intervals.

<b>Municipal waste</b>	As defined in Section 5(1) of the Acts.
<b>Night-time</b>	2200 hrs to 0800 hrs.
<b>Noise Sensitive Location (NSL)</b>	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
<b>Oil Separator</b>	Device installed according to the International Standard I.S.EN 858-2:2003 (Separator systems for light liquids, (e.g. oil and petrol)-Part 2: Selection of nominal size, installation, operation and maintenance.
<b>PRTR</b>	Pollutant Release and Transfer Register.
<b>Quarterly</b>	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
<b>Regional Fisheries Board</b>	Southern Regional Fisheries Board.
<b>Sanitary Authority</b>	Laois County Council.
<b>Sanitary Effluent</b>	Waste water from facility toilet, washroom and canteen facilities.
<b>Sample(s)</b>	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
<b>Sludge</b>	The accumulation of solids resulting from chemical coagulation, flocculation and/or sedimentation after water or wastewater treatment, with greater than 2% dry matter.
<b>SOP</b>	Standard Operating Procedure.
<b>Specified Emissions</b>	Those emissions listed in <i>Schedule B: Emission Limits</i> of this licence.
<b>Specified Engineering Works</b>	Those engineering works listed in <i>Schedule D: Specified Engineering Works</i> of this licence.
<b>Stabilised Biowaste</b>	Waste resulting from the mechanical/biological treatment of unsorted waste or residual municipal waste including treated biowaste which does not comply with the environmental quality classes outlined in <i>Schedule E: Standards for Compost Quality</i> , of this licence.
<b>Standard Method</b>	A National, European or internationally recognised procedure (e.g., I.S. EN, ISO, CEN, BS or equivalent), as 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.
<b>Storm Water</b>	Rain water run-off from roof and non-process areas.
<b>The Agency</b>	Environmental Protection Agency.

<b>TOC</b>	Total Organic Carbon.
<b>Trade Effluent</b>	Trade Effluent has the meaning given in the Water Pollution Acts 1977 and 1990.
<b>Trigger Level</b>	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
<b>WEEE</b>	Waste Electrical & Electronic Equipment.
<b>Weekly</b>	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.
<b>Windrow</b>	An elongated pile of composting material.
<b>WWTP</b>	Waste Water Treatment Plant.



## ***Decision & Reasons for the Decisions***

The 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 40(4) of the Waste Management Acts 1996 to 2005.

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

## ***Part I Schedule of Activities Licensed***

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2005, the Environmental Protection Agency (the Agency) proposes, under Section 46(8) of the said Acts to grant this Waste Licence to Advanced Environmental Solutions (Ireland) Limited, Unit 1, Monread Commercial Park, Monread Road, Naas, County Kildare to carry on the waste activities listed below at Kyletalesha Waste Transfer Station, Kyletalesha & Kyleclonhobert, County Laois, subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

### ***Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2005***

<b>Class 6.</b>	<b>Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 7 to 10 of this Schedule.</b>
<b>Class 11.</b>	<b>Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 12.</b>	<b>Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 13.</b>	<b>Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.</b>

### ***Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2005***

<b>Class 2.</b>	<b>Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).</b>
<b>Class 3.</b>	<b>Recycling or reclamation of metals and metal compounds.</b>
<b>Class 4.</b>	<b>Recycling or reclamation of other inorganic materials.</b>
<b>Class 9.</b>	<b>Use of any waste principally as a fuel or other means to generate energy.</b>
<b>Class 11.</b>	<b>Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 13.</b>	<b>Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.</b>

## ***Part II Conditions***

### **Condition 1. Scope**

- 1.1 Waste activities at this facility shall be restricted to those listed and described in *Part I: Activities Licensed*, and shall be as set out in the licence application or as modified under Condition 1.5 of this licence and subject to the conditions of this licence.
- 1.2 Activities at this facility shall be limited as set out in *Schedule A: Limitations*, of this licence.
- 1.3 The facility shall be controlled, operated, and maintained and emissions shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purposes of this licence, the facility authorised by this licence, is the area of land outlined in red on Drawing No. 2006-081-01-102 of the application. Any reference in this licence to “facility” shall mean the area thus outlined in red. The licensed activities shall be the carried on only within the area outlined.
- 1.5 No alteration to, or reconstruction in respect of, the activity or any part thereof which 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 agreement of, the Agency.
- 1.6 Waste Acceptance Hours and Hours of Operation
  - (i) Waste shall be accepted and processed at the facility only between 0700hrs and 2000hrs Monday to Friday inclusive and between 0700hrs and 1800hrs Saturdays.
  - (ii) Waste shall not be accepted or processed at the facility on Sundays or Bank Holidays.
  - (iii) Construction activities, excluding any emergency works, shall occur only between the hours of 0800hrs and 2000hrs Monday to Friday inclusive and between 0800hrs and 1700hrs on Saturdays unless otherwise agreed by the Agency.
  - (iv) No construction activities shall be carried out on Sundays or Bank Holidays unless otherwise agreed by the Agency.
- 1.7 Before commencing operations the licensee must satisfy the Agency that it has obtained consent from the Department of Agriculture and Food to treat animal by-products in composting/anaerobic digestion facilities.
- 1.8 In relation to compost production and anaerobic digester operation, and unless otherwise agreed by the Agency, only the wastes as outlined in *Schedule A: Limitations*, of this licence and as listed under Annex 1 of the EC Working Document ‘Biological Treatment of Biowaste’ (2nd draft) or subsequent amendments, shall be accepted for use in such production or operation.
- 1.9 This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2005 only and nothing in this licence shall be construed as negating the

licensee's statutory obligations or requirements under any other enactments or regulations.

- 1.10 This licence has been granted in substitution for licence granted to the licensee on 09/02/2005 (Register No.: W0194-01). The previous licence (Reg. No. W0194-01) is replaced by this revised licence.

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

## **Condition 2. Management of the Facility**

### 2.1 Facility Management

2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility 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. In addition, the facility manager and his/her deputy shall successfully complete FAS waste management training programme or equivalent agreed by the Agency.

### 2.2 Environmental Management System (EMS)

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

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

2.2.2.1 Management and Reporting Structure.

2.2.2.2 Schedule of Environmental Objectives and Targets.

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

2.2.2.3 Environmental Management Programme (EMP)

The licensee shall maintain an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2. Once agreed the EMP shall be maintained by the licensee. It shall include:

- (i) designation of responsibility for targets;
- (ii) the means by which they may be achieved;
- (iii) the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (Condition 11.7).

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

#### 2.2.2.4 Documentation

- (i) The licensee shall maintain an environmental management documentation system which shall be to the satisfaction of the Agency.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

#### 2.2.2.5 Corrective Action

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

#### 2.2.2.6 Awareness and Training

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

#### 2.2.2.7 Communications Programme

The licensee shall maintain a Public Awareness and Communications Programme to ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

#### 2.2.2.8 Maintenance Programme

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

#### 2.2.2.9 Efficient Process Control

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

<p><i>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.</i></p>
--

### Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish all infrastructure referred to in this licence in advance of the commencement of the licensed activities or as required by the conditions of this licence.
- 3.2 Specified Engineering Works
- 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule D: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.
- 3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
- 3.2.3 Following the completion of all specified engineering works; the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall, as appropriate, include the following information:-
- (i) A description of the works;
  - (ii) As-built drawings of the works;
  - (iii) Any other information requested in writing by the Agency.
- 3.3 Facility Notice Board
- 3.3.1 The licensee shall provide and maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.
- 3.3.2 The board shall clearly show:-
- (i) the name and telephone number of the facility;
  - (ii) the normal hours of opening;
  - (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 facility can be obtained.
- 3.3.3 A plan of the facility clearly identifying the location of each storage and treatment area shall be displayed as close as is possible to the entrance to the facility. The plan shall be displayed on a durable material such that it is legible at all times. The plan shall be replaced as material changes to the facility are made.
- 3.4 Facility Security
- 3.4.1 Security and stockproof fencing and gates shall be installed and maintained. The base of the fencing shall be set in the ground. Subject to the implementation of the restoration plan and to the agreement of the Agency, the requirement for such site security may be removed.
- 3.4.2 Gates shall be locked shut when the facility is unsupervised.

- 3.4.3 The licensee shall remedy any defect in the gates and/or fencing as follows:-
- (i) a temporary repair shall be made by the end of the working day; and
  - (ii) a repair to the standard of the original gates and/or fencing shall be undertaken within three working days.
- 3.5 Facility Roads and Site Surfaces
- 3.5.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 3.5.2 The licensee shall provide and maintain an impermeable concrete surface in all areas of the facility, the surfaces shall be concreted and constructed to British Standard 8110 or an alternative as agreed by the Agency.
- 3.6 Facility Office
- 3.6.1 The licensee shall maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.6.2 The licensee shall maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.7 Compost/Anaerobic Digestion facility
- 3.7.1 Appropriate infrastructure for the composting or anaerobic digestion of waste shall be established and maintained at the facility in advance of any waste being composted or digested. This infrastructure shall at a minimum comprise the following:
- (i) provide for in-vessel composting, an appropriately sized biofilter and associated plant as outlined in the application documentation (Attachments –Part 1), or
  - (ii) provide an anaerobic digester with appropriately sized energy utilisation plant and associated infrastructure as outlined in the application documentation (Attachments –Part 1).
- 3.7.2 The compost feed-stock preparation building shall be maintained under negative pressure with ventilated air passed through an appropriately designed biofilter/energy utilisation plant. The design of the biofilter/energy utilisation plant shall be approved by the Agency in advance of installation.
- 3.7.3 For aerobic composting the licensee shall provide a 5% minimum concentration of oxygen within the pore spaces, appropriate moisture levels, pH 6.0-9.0 and appropriate C:N ratio to the composting material.
- 3.8 Waste Inspection and Quarantine Areas
- 3.8.1 A Waste Inspection Area and a separate Waste Quarantine Area shall be provided and maintained at the facility.
- 3.8.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.

- 3.8.3 Drainage from the waste inspection area shall be directed to the trade effluent management system.
- 3.8.4 The licensee shall provide on-site storage tanks for the collection, attenuation and temporary storage of roof water from any site buildings. This water shall be re-used in the process where possible.
- 3.8.5 While awaiting collection, mature compost shall be stored in areas protected against uncontrolled run-off and nuisance formation.
- 3.9 Weighbridge and Wheel Cleaning
- 3.9.1 The licensee shall maintain a weighbridge and access to appropriate wheel cleaning at the facility.
- 3.9.2 The wheel cleaner shall be used by all vehicles leaving the facility as required to ensure that no process water or waste is carried off-site. All water from the wheel cleaning area shall be directed to the trade effluent drainage network.
- 3.9.3 The wheel-wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheel-wash and disposed of appropriately.
- 3.10 Waste handling, ventilation and processing plant
- 3.10.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including inter alia waste loading vehicles and ejector trailers) shall be provided on the following basis:-
- (i) 100% duty capacity;
  - (ii) 20% standby capacity available on a routine basis; and
  - (iii) Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.
- 3.10.2 Within three months of the date of grant of this licence, the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the licensed waste intake, as per *Schedule A.2: Waste Acceptance*, of this licence.
- 3.10.3 The quantity of waste to be accepted at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedance of this intake shall be treated as an incident.
- 3.10.4 If sludges are being accepted the licensee must ensure that an enclosed tank be provided for storage of sludge to ensure safe coupling system for loading/unloading from road tankers.
- 3.11 Leachate Management Infrastructure
- 3.11.1 Leachate management infrastructure shall be provided and maintained at the facility as described in the Application Documentation, or as may be varied by a licence condition.
- 3.11.2 All structures for the storage and/or treatment of leachate shall be fully enclosed except for inlet and outlet piping.
- 3.11.3 Any leachate produced from waste recovery activities shall be directed to the leachate collection system.



### 3.12 Continuous Monitoring System

Within nine months of the date of grant of this licence a continuous monitoring system shall be installed and maintained at the facility. All facility operations linked to the telemetry system shall also have a manual control which will be reverted to in the event of break in power supply or during maintenance. As a minimum the system shall record and relay the following information:

- (i) temperature and oxygen content of the compost at all stages during its production.

### 3.13 Gas Flare/Energy Utilisation

3.13.1 The gas flare shall be used as a by-pass facility to be employed only during emergency situations and periods of downtime for essential maintenance of the energy utilisation plant.

3.13.2 The licensee shall ensure that sufficient utilisation capacity and/or flaring capacity is provided for and maintained at the facility to deal with all the ventilated gas generated at the facility.

3.13.3 The flare shall be of an enclosed type design and the combustion air supply shall be controlled so as to achieve a minimum temperature of 1000°C with 0.3 seconds retention time at this temperature. Flare unit efficiency shall be tested annually.

### 3.14 Landfill Gas Management

Having regard to the adjacent landfill, any structures on the site shall be constructed with regard to the Department of Environment published, *Protection of New Buildings and Occupants from Landfill Gas, 1994* and Part C of the Building Regulations, 1997.

3.15 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.

3.16 In the case of composite sampling of aqueous emissions from the operation of the facility a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) should be refrigerated immediately after collection and retained as required for EPA use.

3.17 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.

### 3.18 Tank, Container and Drum Storage Areas

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

3.18.2 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 which could be stored within the bunded area.

- 3.18.3 All drainage from bunded areas shall be treated as hazardous waste unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.18.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.18.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.19 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 facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 3.20 Silt Traps and Oil Separators
- The licensee shall install and maintain silt traps and oil separators at the facility to ensure that all storm water discharges from the facility pass through a silt trap and oil separator in advance, of discharge. The separator shall be a Class I full retention separator and the silt traps and separator shall be in accordance with I.S. EN 858-2:2003 (separator systems for light liquids).
- 3.21 Firewater Retention
- 3.21.1 The licensee shall carry out a risk assessment to determine if the activity should have a fire-water retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment within six months from the date of grant of this licence.
- 3.21.2 In the event that a significant risk exists for the release of contaminated fire-water, the licensee shall, based on the findings of the risk assessment, prepare and implement, with the agreement of the Agency, a suitable risk management programme. The risk management programme shall be fully implemented within three months from date of notification by the Agency.
- 3.21.3 In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the containment pond. The licensee shall examine as part of the response programme in Condition 9.2 above the provision of automatic diversion of storm water to the containment pond. The licensee shall have regard to any guidelines issued by the Agency with regard to firewater retention.
- 3.21.4 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities when implementing Conditions 3.21.1 and 3.22.2 above.
- 3.22 All pump sumps, 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 separator, shall be fitted with high liquid level alarms (or oil detectors as appropriate) within six months from the date of grant of this licence.
- 3.23 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 objectives and targets set out in Condition 2.2 of this licence for the reduction in fugitive emissions.

- 3.24 All wellheads, whose locations are shown on Map 2006-081-01-FIG 2.5, attachment 2.5 of the licence application, shall be adequately protected to prevent contamination or physical damage.
- 3.25 The licensee shall, within three months of the date of grant of this licence, install in 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.
- 3.26 The licensee shall provide and maintain a Wastewater Treatment plant at the facility for the treatment of sanitary effluent arising on-site. Any percolation area shall satisfy the criteria set out in the *Wastewater Treatment Manual, Treatment Systems for Small Communities, Business, Leisure Centres and Hotels, 1999*, published by the Environmental Protection Agency.

**Reason:** To provide for appropriate operation of the facility 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 For 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 In the case of non-combustion gases:  
Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).
- 4.2.2 In the case of combustion gases:  
Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels; 6% oxygen for solid fuels.
- 4.3 Emission limit values for emissions to waters in this licence shall be interpreted in the following way:-
- 4.3.1 Continuous monitoring:

- (i) No flow value shall exceed the specified 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 result similarly calculated shall exceed 1.2 times the emission limit value.
- 4.3.3 Discrete Sampling
- 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 facility shall not give rise to sound pressure levels (Leq,T) measured at the boundary of the facility which exceed the limit value(s).
- 4.6 Dust and Particulate Matter
- Dust and particulate matter from the activity shall not give rise to deposition levels which exceed the limit value(s).

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

## Condition 5. Emissions

- 5.1 No specified emission from the facility shall exceed the emission limit values set out in *Schedule B: Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 5.2 No emissions, including odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary.
- 5.3 Unless otherwise agreed by the Agency no trade effluent, leachate and/or contaminated storm water shall be discharged to surface water drains and courses.
- 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 There shall be no direct emissions to groundwater.
- 5.6 The licensee shall ensure that all or any of the following:–
  - vermin
  - birds
  - flies
  - mud
  - dust
  - litter,

which are associated with the activity do not result in an impairment of, or an interference with amenities or the environment at the facility or beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution.

- 5.7 There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.

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

## Condition 6. Control and Monitoring

- 6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring* of this licence:
- 6.1.1 Analysis shall be undertaken by competent staff in accordance with documented operating procedures.
- 6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics determined.
- 6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
- 6.1.4 Where analysis is sub-contracted it shall be to a competent laboratory.
- 6.2 Sampling and analysis of all pollutants as well as reference measurement methods to calibrate 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.
- 6.3 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 6.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 6.5 The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
- 6.6 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.7 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.

- 6.8 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions. This programme shall be included in the Environmental Management Programme.
- 6.9 The integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee. This testing shall be carried out by the licensee at least once every three years and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.10 The drainage system, 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.
- 6.11 Dust/Odour Control
- 6.11.1 In dry weather, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
- 6.11.2 The licensee shall maintain adequate measures for the control of odours and dust emissions, including fugitive dust emissions, from the facility. Such measures shall include the installation of an odour management system as outlined in Section 2.5.2 of the EIA accompanying the licence application to include but not limited to the following:
- (i) Installation of an appropriately designed air extraction system so as to maintain the waste reception and maturation areas under negative pressure.
  - (ii) The treatment of all odourous air streams extracted from the waste reception and maturation areas by an appropriately designed air abatement system, such as a woodchip biofilter.
- 6.11.3 Proposals for the air extraction system and abatement systems shall be submitted to the Agency and shall be approved by the Agency prior to installation.
- 6.12 Litter Control
- 6.12.1 The measures and infrastructure as described in the application documentation for licence register W0194-02 shall be applied to control litter at the facility.
- 6.12.2 All loose litter or other waste, placed on or in the vicinity of the facility, other than in accordance with the requirements of this licence, shall be removed, subject to the agreement of the landowners, immediately and in any event by 10.00am of the next working day after such waste is discovered.
- 6.12.3 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.
- 6.13 Operational Controls
- 6.13.1 Scavenging shall not be permitted at the facility.
- 6.13.2 Gates shall be locked shut when the facility is unsupervised.
- 6.13.3 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 6.13.4 Fuels shall be stored only at appropriately bunded locations on the facility.
- 6.13.5 All waste handling/processing plant shall be cleared of all waste and washed down on a weekly basis.

- 6.13.6 All wastewater from composting/anaerobic digestion operations shall be collected and re-used in the process where possible. Any leachate from the composting/anaerobic digestion operations that is not re-used shall be discharged to the leachate containment system and tankered off-site for treatment at a location to be agreed in advance by the Agency.
- 6.13.7 Any biowaste accepted at the facility for composting (other than bulking agents, e.g. woodchip, cardboard) shall be processed and put into the aerated composting area within twelve hours of its arrival at the facility.
- 6.13.8 The licensee shall ensure that the doors to the biowaste treatment building remain closed at all times other than to facilitate the delivery/removal of wastes from the building.
- 6.13.9 The licensee shall on a daily basis monitor and record the temperature and the moisture content of the material at a number of locations to be agreed in advance by the Agency.
- 6.14 Compost Quality
- Compost quality monitoring shall be undertaken as set out in *Schedule E: Standards for Compost Quality*, of this licence.
- 6.15 Storm water
- A visual examination of the storm water discharge shall be carried out daily. A log of such inspections shall be maintained.
- 6.16 Surface Water
- No wastewater, leachate or contaminated surface water run-off shall be discharged to any surface drain or any other watercourse.
- 6.17 Ground Water
- The licensee shall within three months of date of grant of this licence provide a report identifying an alternative groundwater monitoring point to replace monitoring point LW-2 for the adjacent licensed facility (Kyltalesha Landfill Register Number W0026-02). The report shall be prepared by an appropriately qualified person. Any recommendations arising from the report on this investigation must be implemented within such a period to be agreed by the Agency.
- 6.18 Noise
- The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.
- 6.19 Pollutant Release and Transfer Register (PRTR)
- The licensee shall prepare and report a PRTR for the site. The substances and/or waste to be included in the PRTR shall be agreed by the Agency each year by reference to EC Regulation No.166/2006 concerning the establishment of the European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.
- 6.20 Test Programme
- 6.20.1 The licensee shall prepare, to the satisfaction of the Agency, a test programme for abatement equipment installed to treat emissions to atmosphere. This programme shall be submitted to the Agency in advance of implementation.

- 6.20.2 This programme, following agreement with the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.
- 6.20.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures.
- 6.20.4 The test programme shall include as a minimum, the following:
- (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.
  - (iii) A report on the test programme shall be submitted to the Agency within one month of completion.
- 6.21 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 environmental monitoring data generated as a result of this licence.

*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 opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.
- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

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



## Condition 8. Materials Handling

- 8.1 Disposal or recovery of waste on-site shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols.
- 8.2 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported only from the site of the activity to the site of recovery/disposal in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.3 The licensee shall ensure that waste in advance, of transfer to another person shall be classified packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.4 Waste Acceptance and Characterisation Procedures
- 8.4.1 Waste shall be accepted at the facility only from Local Authority waste collection or transport vehicles or holders of waste collection permits, unless exempted or excluded, issued under the Waste Management (Collection Permit) Regulations 2001. Copies of these waste collection permits must be maintained at the facility.
- 8.4.2 Waste Acceptance Procedures shall be carried out in accordance with Attachment D.2 of the licence application. Within six months of the date of grant of this licence, the licensee establish and maintain detailed written procedures for the acceptance and handling of wastes.
- 8.4.3 Waste arriving at the facility shall be inspected at the point of entry to the facility and subject to this inspection, weighed, documented and directed to the Waste Transfer Building. Each load of waste arriving at the Waste Transfer Building shall be inspected upon tipping within this building. Only after such inspections shall the waste be processed for disposal or recovery.
- 8.4.4 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time. Temporary storage of such wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
- 8.4.5 A record of all inspections of incoming waste loads shall be maintained.
- 8.4.6 No waste shall be stored overnight at the facility other than in designated storage areas in the biowaste reception buildings.
- 8.4.7 Waste shall be accepted at the facility only from known customers or new customers subject to initial waste profiling and waste characterisation off-site. The written records of this off-site waste profiling and characterisation shall be retained by the licensee for all active customers and for a two year period following termination of licensee/customer agreements. There shall be no casual public access to the facility.
- 8.4.8 The licensee shall carry out analysis on a minimum of one sample per annum for each industrial sludge source being accepted at the facility. The results of these analyses shall be presented in the Annual Environmental Report (AER).
- 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 shall be stored in designated areas, protected as may be appropriate, against spillage and leachate run-off. The waste is to be clearly labelled and appropriately segregated.
- 8.7 All waste processing shall occur inside an appropriate building, unless otherwise agreed by the Agency.
- 8.8 Compost
- 8.8.1 In order not to be considered a waste, compost produced by the facility shall, unless otherwise agreed by the Agency, comply with the quality standards established in *Schedule E: Standards for Compost Quality*, of this licence. Analysis of the compost shall be in accordance with the requirements of that Schedule.
- 8.8.2 Compost not meeting the above standard will be regarded as waste and records shall be kept of such waste.
- 8.8.3 No waste shall be deposited outside the biodegradable waste composting area without the prior permission of the Agency.
- 8.9 Waste Electrical and Electronic Equipment (WEEE)
- Appropriate infrastructure for the storage of Waste Electrical and Electronic Equipment shall be established and maintained at the facility in advance of any such waste being stored. This infrastructure shall at a minimum comprise the following:
- (i) impermeable surfaces for appropriate areas with the provision of spillage collection facilities and, where appropriate, decanters and cleaner degreasers;
  - (ii) weatherproof covering for appropriate areas.
- 8.10 Off-site Disposal and Recovery
- 8.10.1 Waste sent off-site for recovery or disposal shall be conveyed only by an authorised waste contractor agreed by the Agency.
- 8.10.2 All wastes removed off-site for recovery or disposal shall be transported from the facility in a manner which will not adversely affect the environment.
- 8.11 Leachate Management
- All leachate shall be directed to, and stored in, on-site storage tanks. This leachate shall be transported off-site in fully enclosed road tankers to a designated Local Authority Wastewater Treatment Plant, subject to prior written agreement of the Local Authority.
- 8.12 No waste classified as green list waste in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No.259/1993, as amended) shall be consigned for recovery without the agreement of the Agency.
- 8.13 Waste for disposal/recovery off-site and on-site shall be analysed in accordance with *Schedule C: Control & Monitoring* of this licence.
- 8.14 Unless approved in writing 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.

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

## Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall ensure that a documented Accident Prevention Procedure is in place which will address 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 maintain a documented Emergency Response Procedure for the facility, which shall address any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
- 9.3.1 In the event of an incident the licensee shall immediately:-
- (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - (ii) isolate the source of any such emission;
  - (iii) evaluate the environmental pollution, if any, caused by the incident;
  - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
  - (v) identify the date, time and place of the incident;
  - (vi) notify the Agency and other relevant authorities.
- 9.3.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency to:-
- (i) identify and put in place measures to avoid reoccurrence of the incident; and
  - (ii) identify and put in place any other appropriate remedial action.
- 9.4 In the event of a complete breakdown of equipment or any other occurrence which results in the closure of the transfer station building, any waste arriving at or already collected at the facility shall be transferred directly to appropriate landfill sites or any other appropriate facility until such time as the transfer station building is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.
- 9.5 All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
- 9.6 No waste shall be burned within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.

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

## Condition 10. Decommissioning & Residuals Management

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution. The licensee shall carry out such tests, investigation or submit certification, as requested by the Agency, to confirm that there is no risk to the environment.

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

## Condition 11. Notifications, Records and Reports

- 11.1 The licensee shall notify the Agency by both telephone and either facsimile or electronic mail, if available, to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:

- (i) Any release of environmental significance to atmosphere from any potential emission point including bypasses.
- (ii) Any emission which does not comply with the requirements of this licence.
- (iii) Any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control & Monitoring*, of this licence which is likely to lead to loss of control of the abatement system.
- (iv) Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to air or land, or requiring an emergency response by the Local Authority.

The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions.

- 11.2 In the case of any incident which relates to discharges to water, the licensee shall notify the Local Authority and the Southern Regional Fisheries Board as soon as practicable after such an incident.
- 11.3 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to; manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall as soon as practicable following incident notification, submit to the Agency the incident record.
- 11.4 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 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.

- 11.5 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 facility.
- 11.6 The licensee shall as a minimum keep the following documents at the site:-
- (i) the licences relating to the facility;
  - (ii) the current EMS for the facility;
  - (iii) the previous year's AER for the facility;
  - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility;
  - (v) relevant correspondence with the Agency;
  - (vi) up to date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;
  - (vii) up to date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment;
- and this documentation shall be available to the Agency for inspection at all reasonable times.
- 11.7 The licensee shall submit to the Agency, by the 31<sup>st</sup> March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule F: Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.8 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 EWC Code for the waste materials 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 wastes consigned abroad for Recovery and classified as 'Green' in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
  - (vi) Details of any rejected consignments.
  - (vii) Details of any approved waste mixing.
  - (viii) The results of any waste analyses required under *Schedule C: Control & Monitoring*, of this licence.

- (ix) The tonnages and EWC Code for the waste materials recovered/disposed on-site.

#### 11.9 Waste Recovery Reports

Within six months of the date of grant of this licence, a report examining waste recovery options shall be submitted to the Agency for its agreement. This report shall address methods to contribute to the achievement of the recovery targets stated in National and European Union waste policies and shall include the following:-

- (i) proposals for the contribution of the facility to the achievement of targets for the reduction of biodegradable waste to landfill as specified in the Landfill Directive;
- (ii) the separation of recyclable materials from the waste;
- (iii) the recovery of Construction and Demolition Waste;
- (iv) the recovery of metal waste and white goods including written procedures for the de-gassing of CFC's from refrigerators; and
- (v) the recovery of commercial waste, including cardboard.

#### 11.10 A record shall be kept at the facility of the programme for the control and eradication of vermin and fly infestations at the facility. These records shall include as a minimum the following:-

- (i) the date and time during which spraying of insecticide is carried out;
- (ii) contractor details;
- (iii) contractor logs and site inspection reports;
- (iv) details of the rodenticide(s) and insecticide(s) used;
- (v) operator training details;
- (vi) details of any infestations;
- (vii) mode, frequency, location and quantity of application; and,
- (viii) measures to contain sprays within the facility boundary.

#### 11.11 A record shall be kept of each consignment of trade effluent, leachate and/or contaminated storm water removed from the facility. The record shall include the following:-

- (i) the name of the carrier;
- (ii) the date and time of removal of trade effluent, leachate and/or contaminated storm water from the facility;
- (iii) the volume of trade effluent, leachate and/or contaminated storm water, in cubic metres, removed from the facility on each occasion;
- (iv) the name and address of the Waste Water Treatment Plant to which the trade effluent, leachate and/or contaminated storm water was transported; and
- (v) any incidents or spillages of trade effluent, leachate and/or contaminated storm water during its removal or transportation.

#### 11.12 Where compost product contains sewage sludge the licensee shall retain the following records on site:

- (i) A copy of the notifications to the Local Authority as required under Article 8 (1) and Article 8 (3) of SI 148 of 1998 (Waste Management (Use of sewage sludge in agriculture) Regulations, 1998).

- (ii) This shall include inter alia; sludge analysis, records of sludge quantities, sludge properties, treatment type and location/name of the recipient of the sludge (sludge meaning compost containing treated sludge).

*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 €15,559, 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 Waste Management Acts 1996 to 2005. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2005, 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 defraying its costs in regard to items not covered by the said annual contribution.

### 12.2 Environmental Liabilities

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

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

## SCHEDULE A: Limitations

### A.1

The following waste related processes are authorised:

- i. Composting
- ii. Shredding, crushing, bailing, repackaging processes
- iii. Non-Hazardous C & D waste recovery (incl. crushing, screening, sorting, blending)
- iv. Storage of waste
- v. Use of inert waste for land improvement
- vi. Recovery of dry recyclables
- vii. Recovery of energy from waste processing activities
- viii. Processing of sewage sludges and non-hazardous industrial sludges
- ix. Acceptance and storage of hazardous waste (WEEE).

No addition to these processes are permitted unless agreed in advance by the Agency.



### A.2 Waste Acceptance

**Table A.2 Waste Categories and Quantities**

WASTE TYPE <sup>Note 1</sup>	MAXIMUM (TONNES PER ANNUM) <sup>Note 2</sup>
Non-Hazardous Household, Commercial & Industrial	80,000
Non-Hazardous Industrial Sludges	3,000
Hazardous Waste (WEEE)	5,000.
C & D	5,000
Sewage Sludge	6,000
<b>TOTAL</b>	<b>99,000</b>

**Note 1:** Any proposals to accept other compatible waste streams must be agreed in advance with the Agency and the total amount of waste must be within that specified.

**Note 2:** The individual limitation on waste streams may be varied with the agreement of the Agency subject to the overall total limit staying the same.





## SCHEDULE B: Emission Limits

### B.1 Emissions to Air

**Emission Point Reference No.:** A2-1  
**Location:** Outlet of Energy Utilisation (E245447 N202759)  
 Maximum rate per hour: 3,600m<sup>3</sup>  
**Minimum discharge height:** 5m above ground

Parameter	Emission Limit Value <sup>Note 1</sup>
Nitrogen oxides (NOx)	500 mg/m3
CO	1400 mg/m3
Particulates	130 mg/m3

**Note 1:** Dry gas referenced to 5% oxygen by volume for utilisation plants.

**Emission Point Reference No.:** Biofilter Cells 1 - 4 – A2-2  
**Location:** North western edge of site (E245481 N202747)  
 Maximum rate per hour: 310,000 m<sup>3</sup>

Parameter	Emission Limit Value
Ammonia	50ppm
Amines	5ppm
Hydrogen sulphide & Mercaptans	5ppm



### B.2. Noise Emissions

Daytime dB(A) L <sub>Aeq</sub> (30 minutes)	Night-time dB(A) L <sub>Aeq</sub> (30 minutes)
55 <sup>Note 1</sup>	45 <sup>Note 1</sup>

**Note 1:** There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at the boundary.



### B.3. Dust Deposition

Parameter	Level (mg/m <sup>2</sup> /day) <sup>Note 1</sup>
Dust	350

**Note 1:** 30 day composite sample with the results expressed as mg/m<sup>2</sup> /day.



## SCHEDULE C: Control & Monitoring

### C.1.1 Control of Emissions to Air

**Emission Point Reference No.:** A2-1

**Description of Treatment:** Energy Utilisation Outlet

Control Parameter	Monitoring	Key Equipment <sup>Note 1</sup>
Passive Vents Carbon filtration	Olfactory & visual (monthly)	Carbon filters
Continuous burn	Continuous with alarm/call-out	Flame detector or equivalent approved
Extraction	Continuous with alarm/call-out	Pressure gauge or equivalent approved Pumps/engines

**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.:** A2-1

**Description of Treatment:** Energy Utilisation Outlet

Parameter	Utilisation Plant Monitoring Frequency	Analysis Method <sup>Note1</sup> /Technique <sup>Note 2</sup>
<b>Inlet</b>		
Carbon dioxide (CO <sub>2</sub> )%v/v	Weekly	Infrared analyser/ thermal conductivity
Oxygen (O <sub>2</sub> ) %v/v	Weekly	Electrochemical/thermal conductivity
Methane (CH <sub>4</sub> ) %v/v	Weekly	Infrared analyser or equivalent approved
<b>Process Parameters</b>		
Combustion Temperature	Continuous <sup>Note 3</sup>	Temperature Probe/datalogger
Residence Time	Quarterly	To be agreed
<b>Outlet</b>		
Carbon Monoxide (CO)	Continuous <sup>Note 4</sup>	Flue gas analyser/datalogger
Nitrogen Oxides (NO <sub>x</sub> )	Biannually	Flue gas analyser
SO <sub>2</sub>	Biannually	Flue gas analyser
Particulates	Annually	Isokinetic/Gravimetric

**Note 1:** All monitoring equipment used should be intrinsically safe.

**Note 2:** Or other methods agreed in advance by the Agency.

**Note 3:** Temperature level must be maintained above 650°C.

**Note 4:** Continuous monitoring of carbon monoxide and nitrogen oxides is required. Monitoring of one of these parameters may be reduced to quarterly with the prior agreement of the Agency.

### C.1.3 Control & Monitoring of Composting Process & Emissions

**Emission Point Reference No.:** Biofilters A2-2 (Biofilter Cells 1-4)

**Description of Treatment:** Biofiltration

#### Control of Composting process

Control Parameter	Monitoring Required <sup>Note7</sup>	Monitoring Equipment <sup>Note 8</sup>
<b>Biofilter</b>		
<b>Inlet Gas</b>		
Gas loading	Monthly	Flow meter
Differential Pressure Drop across the filter	Continuous	Manometer
Temperature	Daily	Temperature sensor
Relative Humidity	Weekly	Hygrometer
<b>Inlet and Outlet Gas</b>		
Ammonia	Weekly	Colorimetric Indicator Tubes <sup>Notes 1 &amp; 3</sup>
Hydrogen sulphide	Weekly	Colorimetric Indicator Tubes <sup>Notes 1 &amp; 3</sup>
Mercaptans	Weekly	Colorimetric Indicator Tubes <sup>Notes 1 &amp; 3</sup>
Amines	Bi - annually	NIOSH method 2010 <sup>Notes 1 &amp; 3</sup>
<b>Bed Media</b>		
Condition	Daily	Visual Inspection <sup>Note 2</sup>
Moisture content	Quarterly	Standard laboratory method <sup>Note 1</sup>
pH	Quarterly	pH probe
Ammonia	Quarterly	Standard laboratory method <sup>Note 1</sup>
Oils, fats and grease	Quarterly	Standard laboratory method <sup>Note 1</sup>
Total viable counts	Quarterly	Standard laboratory method <sup>Note 1</sup>
<b>General</b>		
Drains	Daily check for free-flow	Visual Inspection
Water Sprinkler System	Check operation Daily	Visual Inspection
Fan	Check operation Daily	Visual Inspection
Olfactory Assessment	Daily	Assessment by appropriate personnel <sup>Note 4</sup>
Negative Pressure <sup>Notes 5 &amp; 6</sup>	Monthly	Air current tubes <sup>Note 1</sup>

**Note 1:** Or an equivalent method acceptable to the Agency.

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

**Note 3:** Outlet samples from the biofilter shall be collected in a hood or tent covering an area of 0.5 -2.0 square meters with an outlet of 50 - 100 mm, for sample collection. The hood/tent shall be left on the surface for at least ten minutes before the sample is collected. Samples shall be collected with the hood in various positions on the emitting surface to ensure the sample is representative. (CEN TC264/WG2 ‘ODOURS’, 1994).

**Note 4:** As agreed by the Agency.

**Note 5:** To be carried out on all buildings under negative pressure.

**Note 6:** A log shall be kept on-site with records of the date and time of analysis, building tested and weather on date of testing.

**Note 7:** All measurements shall be made at peak bed loading.

**Note 8:** The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

**Monitoring of Composting process**

Parameter	Monitoring Frequency	Analysis Method/Technique
<b>Composting piles</b> <i>Temperature vs. time</i> <i>Oxygen Content</i>	Continuous Daily	Temperature probe/recorder Oxygen Probe with recorder
<b>Compost maturation (curing) piles</b> <i>Temperature</i>	Continuous	Temperature probe

**C.2 Monitoring of Storm Water Emission**

Emission Point Reference No.: SW1, SW2, SW4 &amp; SW6

Parameter	Monitoring Frequency	Analysis Method/Technique
<b>pH</b>	Biannually	pH electrode/meter
<b>Biochemical Oxygen Demand</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Suspended Solids</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Total Phosphorous</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Total Ammonia</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Total Nitrogen</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Chemical Oxygen Demand</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Electrical Conductivity</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Temperature</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Oils, Fats &amp; Grease</b>	Biannually	Standard Method <sup>Note 1</sup>
<b>Visual Inspection</b>	Weekly	Sample and examine for colour and odour

**Note 1:** "Standards Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F) 20th Ed., American Public Health Association, 1015 Fifteenth Street, Washington DC 20005, USA.



### C.3 Waste Monitoring

**Waste Monitoring Reference(s):** Locations to be agreed by the Agency

Waste Materials	Frequency	Parameter	Waste Monitoring Reference
Sludge (per type) <sup>Note 1</sup>	Annually	%Dry matter, total N, total P, total K, Metals, storage capacity.	—
Leachate removed from site	Per Consignment	BOD, COD, Chloride, pH, Metals, Ammonia.	

**Note 1:** e.g.; municipal, dairy, brewing etc



### C.4 Noise Monitoring

**Emission Point Reference No.:** At the boundary of facility.

Parameter	Monitoring Frequency	Analysis Method/Technique
L(A) <sub>eq</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
L(A) <sub>10</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
L(A) <sub>90</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
Frequency Analysis(1/3 Octave band analysis)	Annual	Standard <sup>Note 1</sup>

**Note 1:** “International Standards Organisation. ISO 1996. Acoustics - description and Measurement of Environmental noise. Parts 1, 2 and 3.”



### C.5 Ambient Monitoring

**Table C.5.1 Dust Monitoring Frequency and Technique**

**Emission Point Reference No.:** D1, D2, D3 & D4

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust (mg/m <sup>2</sup> /day)	Three times per year <sup>Note 2</sup>	Standard Method <sup>Note 1</sup>

**Note 1:** Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute). A modification (not included in the standard) which 2 methoxy ethanol may be employed to eliminate interference due to algae growth in the gauge.

**Note 2:** Samples shall be taken at intervals of not less than 3 months.



## **SCHEDULE D: Specified Engineering Works**

### **Specified Engineering Works**

Development of the facility including preparatory works and importation of clean fill material to raise the site to formation level prior to commencement of construction works.

Development of the facility including installation of waste handling, processing, recycling/recovery infrastructure and installation of increased waste processing capacity as well as any abatement system(s).

Installation of surface water management network including silt traps, attenuation cells and oil interceptors etc.

Installation of compost area, abatement technology and associated infrastructure.

Installation of the Anaerobic Digestion technology, energy utilisation, gas flare and associated infrastructure.

Any other works notified in writing by the Agency.



## SCHEDULE E: Standards for Compost Quality

The following criteria are deemed a quality standard for the use of compost as a soil improver and should not be deemed as criteria for fertiliser. In addition N, P, K, NH<sub>4</sub>-N, NO<sub>3</sub>-N, pH and dry matter content should also be measured.

Compost shall be deemed unsatisfactory if more than 10% of samples fail the criteria below. No sample shall exceed 1.2 times the quality limit values set.

### 1. Maturity

Compost shall be deemed to be mature if it meets two of the following requirements:

- C/N ratio ≤ 25
- respiration activity after four days AT<sub>4</sub> is ≤10mg/O<sub>2</sub>/g dry matter or Dynamic Respiration Index is ≤1,000mgO<sub>2</sub>/kg VS/h; and
- germination of cress (*Lepidium sativum*) seeds and of radish (*Raphanus sativus*) seeds in compost must be greater than 90 percent of the germination rate of the control sample, and the growth rate of plants grown in a mixture of compost and soil must not differ more than 50 percent in comparison with the control sample.
- Elimination of the following test organisms (used to evaluate composting system efficiency in removing plant pathogens and weed seeds during the composting process): *Plasmodiophora brassicae*, tobacco-mosaic-virus (TMV) and tomato seeds.

Guidance on test may be obtained from the German document LAGA M10 '*Quality Criteria and Application Recommendations for Compost*'.

### 2. Foreign Matter

Compost must not contain any sharp foreign matter measuring over a 2 mm dimension that may cause damage or injury to humans, animals and plants during or resulting from its intended use.

Foreign matter content as a percentage of oven-dried mass	≤1.5%
Foreign matter, maximum dimensions, in mm	25 mm

### 3. Trace Elements

Maximum Trace Element Concentration Limits for Compost<sup>Note 1</sup>

Trace Elements	(mg/kg, dry mass)
Arsenic (As) <sup>Note 2</sup>	15
Cadmium (Cd)	1.5
Chromium (Cr)	100
Copper (Cu)	100
Mercury (Hg)	1
Molybdenum (Mo) <sup>Note 2</sup>	5
Nickel (Ni)	50
Lead (Pb)	150
Selenium (Se) <sup>Note 2</sup>	2
Zinc (Zn)	350

**Note 1:** The above alone should not be taken as an indication of suitability for addition to soil as the cumulative metal additions to soil should be first calculated.

**Note 2:** Monitoring of these parameters required if waste from an industrial source.

#### **4. Pathogens**

Pathogenic organism content must not exceed the following limits:

- Escherichia coli  $\leq 1,000$  CFU/g
- Salmonella species absent in 25 g sample.

#### **5. Monitoring (As per parts 2, 3 and 4 of this Schedule)**

The licensee shall submit to the Agency for its agreement, in advance, of commencement of compost operations, details of methods of analyses, methods of sampling and sample numbers.

The analyses shall be carried out:

- (i) every six months for plants producing more than 500 and up to 1 000 tonnes of treated biowaste per year;
- (ii) at intervals of at least every 1,000 tonnes of treated biowaste produced or every 3 months, whichever comes first, for plants producing more than 1,000 and up to 10,000 tonnes of treated biowaste per year;
- (iii) every month for plants producing more than 10,000 tonnes of treated biowaste per year.



## SCHEDULE F: Annual Environmental Report

### Annual Environmental Report Content<sup>Note 1</sup>

Statement of waste activities carried out at the facility in the reporting year.  
Emissions from the facility.  
Waste management record.  
Monitoring summary for compost, wastes and sludges as specified in the schedules.  
Resource consumption summary.  
Complaints summary.  
Schedule of Environmental Objectives and Targets.  
Environmental management programme – report for previous year.  
Environmental management programme – proposal for current year.  
Pollutant Release and Transfer Register – report for previous year.  
Pollutant Release and Transfer Register - proposal for current year.  
Noise monitoring report summary.  
Ambient monitoring summary.  
Tank and pipeline testing and inspection report.  
Reported incidents summary.  
Energy efficiency audit report summary.  
Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.  
Volume of trade effluent/leachate and/or contaminated stormwater produced and volume transported off-site.  
Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharge.  
Development / Infrastructural works summary (completed in previous year or prepared for current year).  
Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.  
Decommissioning Management Plan.  
Report on Duty & Standby capacities of waste processing plant at the facility.  
Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).  
Any other items specified by the Agency.

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

**Signed on behalf of the said Agency**  
on the 30th day of November, 2006

\_\_\_\_\_  
**Frank Clinton,**  
**Authorised Person**