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WASTE LICENCE

Licence Register No:	W0249-01
Licensee:	Acorn Recycling Limited
Location of Facility:	Ballybeg Composting Facility, Ballybeg, Littleton, County Tipperary



INTRODUCTION

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

This licence is for the construction and operation of an indoor composting facility which will be operated by Acorn Recycling Limited, Ballybeg, Littleton, County Tipperary. On completion of the facility the company proposes to accept non-hazardous biodegradable waste for the production of compost and bio-stabilised residual waste.

The quantity of waste to be accepted at the facility is limited to 45,000 tonnes per annum.

Wastes must only be received in fully covered vehicles and can only be unloaded inside the appropriate reception building. All waste will be composted in composting bays with forced aeration from underfloor aeration channels. Air will be extracted from the composting building by means of extraction fans and will be released to the atmosphere via a biofilter system.

The licensee must manage and operate the facility to ensure that the activities do not cause environmental pollution. The licensee is required to carry out regular environmental monitoring and submit all monitoring results, and a wide range of reports on the operation and management of the facility to the Agency.

The licence sets out in detail the conditions under which Acorn Recycling Limited will operate and manage this facility.



Table of Contents

	Page No
Glossary of Terms	1
Decision & Reasons for the Decision.....	6
Part I Schedule of Activities Licensed	6
Part II Conditions.....	7
Condition 1. Scope	7
Condition 2. Management of the Facility	8
Condition 3. Infrastructure and Operation.....	10
Condition 4. Interpretation	14
Condition 5. Emissions.....	15
Condition 6. Control and Monitoring	15
Condition 7. Resource Use and Energy Efficiency	19
Condition 8. Materials Handling	20
Condition 9. Accident Prevention and Emergency Response	21
Condition 10. Decommissioning and Aftercare	22
Condition 11. Notification, Records and Reports.....	23
Condition 12. Financial Charges and Provisions.....	25
Schedule A: Limitations	27
Schedule B: Emission Limits	27
Schedule C: Control & Monitoring	28
Schedule D: Specified Engineering Works	32
Schedule E: Standards for Compost Quality and Bio-stabilisation.....	32
Schedule F: Annual Environmental Report.....	34



Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Acts 1992 to 2007/Waste Management Acts 1996 to 2008, unless otherwise defined in the section.

Adequate lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Aerosol	A suspension of solid or liquid particles in a gaseous medium.
Agreement	Agreement in writing.
Annually	At approximately twelve-monthly intervals.
Application	The application by the licensee for this licence.
Appropriate Facility	A waste management facility, duly authorised under relevant law and technically suitable.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
BAT	Best Available Techniques.
Biannually	At approximately six – monthly intervals. All or part of a period of six consecutive months.
Bioaerosol	An aerosol of biological particles.
Biodegradable	Waste that is capable of undergoing anaerobic or aerobic decomposition
Biodegradable Municipal Waste (BMW)	The biodegradable component of municipal waste, and does not include bio-stabilised waste. Biodegradable municipal waste is typically composed of food and garden waste, wood, paper, cardboard and textiles.
Biological Treatment	Composting, anaerobic digestion, mechanical-biological treatment or any other biological treatment process for stabilising and sanitising biodegradable waste, including pre-treatment processes.
Bio-stabilised Residual Waste	Residual BMW that has been treated to achieve an EPA approved biodegradability stability standard (to be published) prior to landfilling or alternative use agreed. (Not a compost product standard as understood by EU 1774/2002).
Biowaste	Household, commercial or industrial waste of an organic or putrescible character.
BOD	5 day Biochemical Oxygen Demand (without nitrification suppression).
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
COD	Chemical Oxygen Demand.
Compost	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 compost quality standards outlined in <i>Schedule F: Standards for Compost Quality and Bio-Stabilisation</i> , of this licence.
Composting	The autothermic and thermophilic biological decomposition of separately collected biowaste in the presence of oxygen and under controlled conditions by the action of micro-organisms and macro-organisms in order to produce compost.
Containment boom	A boom that can contain spillages and prevent them from entering

	drains or watercourses or from further contaminating watercourses.
Daily	During all days of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement on any one day.
Day	Any 24 hour period.
Daytime	0800 hrs to 2200 hrs.
dB(A)	Decibels (A weighted).
DO	Dissolved oxygen.
Documentation	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
EMP	Environmental Management Programme.
Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> of this licence.
Emergency	Those occurrences defined in Condition 9.4.
Environmental damage	As defined in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
European Waste Catalogue (EWC)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
Facility	Any site or premises used for the purpose of the recovery or disposal of waste.
Forced aeration	The supply of air to a compost pile, by pumping (positive pressure) or by sucking air through the composting material (negative pressure).
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
GC/MS	Gas chromatography/mass spectroscopy.
Green Waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
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 facility is authorised to be operational.
Hours of waste acceptance	The hours during which the facility is authorised to accept waste.
ICP	Inductively coupled plasma spectroscopy.
Incident	The following shall constitute as incident for the purposes of this licence: <ul style="list-style-type: none">(i) an emergency;(ii) any emission which does not comply with the requirements of this licence;(iii) any exceedance of the daily duty capacity of the waste handling equipment;

	(iv) any trigger level specified in this licence which is attained or exceeded; and,
	(v) any indication that environmental pollution has, or may have, taken place.
Industrial waste	As defined in Section 5(1) of the Waste Management Acts 1996 to 2008.
Inert waste	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.
K	Kelvin.
KPa	Kilopascals.
L_{eq}	Equivalent continuous sound level.
Licensee	Acorn Recycling Limited, Archerstown Industrial Estate, Thurles, County Tipperary.
Liquid waste	Any waste in liquid form and containing less than 2% dry matter.
List I	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
List II	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
Local Authority	North Tipperary County Council.
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.
Mass flow limit	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.
Mass flow threshold	A mass flow rate above which a concentration limit applies.
Mechanical/Biological Treatment (MBT)	The treatment of residual municipal waste through a combination of manual & mechanical processing and biological stabilisation, in order to stabilise and reduce the volume of waste which requires disposal.
Municipal Solid Waste (MSW)	Household waste as well as commercial and other waste which, because of its nature or composition, is similar to household waste. It excludes municipal sludges and effluents.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
Night-time	2200 hrs to 0800 hrs.
Noise-sensitive location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
NMP	Nutrient Management Plan.
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).
PRTR	Pollutant Release and Transfer Register.

Quarterly	At approximately three – monthly intervals. All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Residual Waste	The fraction of collected waste remaining after a treatment or diversion step, which generally requires further treatment or disposal.
Regional Fisheries Board	Southern Regional Fisheries Board.
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 facility toilet, washroom and canteen facilities.
Separate Collection	The collection of biowaste separately from other kinds of waste in such a way as to avoid the different waste fractions or waste components from waste being mixed, combined or contaminated with other potentially polluting wastes, products or materials.
SOP	Standard operating procedure.
Sludge	The accumulation of solids resulting from chemical coagulation, flocculation and/or sedimentation after water or wastewater treatment, with greater than 2% dry matter.
Source segregated waste	Waste which is separated at source; meaning that the waste is sorted at the point of generation into a recyclable fraction(s) for separate collection (e.g., paper, metal, glass, plastic, bulk dry recyclables, biodegradables, etc.,) and a residual fraction. The expression 'separate at source' shall be construed accordingly.
Specified emissions	Those emissions listed in <i>Schedule B: Emission Limits</i> of this licence.
Stabilised Biowaste	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 and Bio-Stabilisation</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.
Storm water	Rain water run-off from roof and non-process areas.
The Agency	Environmental Protection Agency.
TOC	Total organic carbon.
Trade effluent	Trade effluent has the meaning given in the Water Services Act, 2007.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
2 Bin 3 Bin System & Black Bin	A source segregated collection system where dry recyclables and residual wastes are separately collected (2 bin), or where dry recyclables, organics and residuals are separately collected (3 bin). The reference to 'black bin' in this document is a reference to the residuals bin from a 2 or 3 bin system.
Water Services Authority	North Tipperary County Council.

15

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.
Windrow	An elongated pile of composting material that is periodically turned.
WWTP	Waste water treatment plant.

Decision & Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 40(4) of the Waste Management Acts 1996 to 2008.

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

No objection having been received to the Proposed Decision, the licence is granted in accordance with the terms of the Proposed Decision and the reasons therefor.

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2008, the Environmental Protection Agency (the Agency), under Section 40(1) of the said Acts hereby grants this Waste Licence to Acorn Recycling Limited, Archerstown Industrial Estate, Thurles, County Tipperary to carry on the waste activities listed below at Ballybeg Composting Facility, Ballybeg, Littleton, County Tipperary, 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 2008

Class 6.	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.
Class 13.	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.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2008

Class 2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).
Class 13.	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.

Part II Conditions

Condition 1. Scope

- 1.1. Waste Acceptance Hours
- 1.1.1 Waste shall be accepted at the facility only between the hours of 8.00 a.m. to 7.00 p.m. Monday to Friday and between of 8.00 a.m. to 2.00 p.m Saturday.
- 1.1.2 Waste shall not be accepted at the facility on Sundays or on Public Holidays.
- 1.2. Before commencing operations the licensee must satisfy the Agency that, where applicable, it has obtained consent, in accordance with the Animal By-Product Regulations, from the Department of Agriculture, Fisheries and Food.
- 1.3. No hazardous waste shall be accepted for composting at the facility.
- 1.4. Waste activities at this facility shall be restricted to those listed and described in *Part I Schedule of Activities Licensed*, and shall be as set out in the licence application or as modified under Condition 1.7 of this licence and subject to the conditions of this licence.
- 1.5. Activities at this facility shall be limited as set out in *Schedule A: Limitations* of this licence.
- 1.6. For the purposes of this licence, the facility authorised by this licence is the area of land outlined in red on Drawing No. LM-01 of the application. Any reference in this licence to facility shall mean the area thus outlined in red. The licensed activities shall be carried on only within the area outlined.
- 1.7. 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 agreement of, the Agency.
- 1.8. The facility 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.
- 1.9. This licence is for purposes of waste licensing under the Waste Management Acts 1996 to 2008 only and nothing in this licence shall be construed as negating the licensee's statutory obligations, or requirements under any other enactments or regulations.

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 suitable 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 FAS Certificate in Compost Facility Operation or equivalent agreed by the Agency.

2.2 Environmental Management System (EMS)

- 2.2.1 The licensee shall, prior to the commencement of the licensable activity, establish and 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 prepare and 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, and the prevention, reduction and minimisation of waste for disposal. 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, prior to the commencement of the licensable activity, submit to the Agency for agreement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be established and maintained by the licensee. It shall include:

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

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

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

seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.4 Documentation

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

2.2.2.6 Awareness and Training

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

2.2.2.9 Efficient Process Control

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

Reason:	<i>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>
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Condition 3. Infrastructure and Operation

3.1 The licensee shall establish and maintain, for each component of the facility, 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 application that relates to the environmental performance of the installation and is not specified in the licence, shall be installed in accordance with the schedule submitted in the application.

3.2 Facility Notice Board

3.2.1 The licensee shall, prior to the commencement of the licensed activity, provide an 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. The notice board shall be maintained thereafter.

3.2.2 The board shall clearly show:

- (i) the name and telephone number of the facility;
- (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 facility can be obtained.

3.3 Facility Security

3.3.1 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 and aftercare plan and to the agreement of the Agency, the requirement for such site security may be removed.

3.3.2 Gates shall be locked shut when the facility is unsupervised.

3.3.3 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.

3.4 Facility Roads and Site Surfaces

3.4.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.

3.4.2 The licensee shall provide, and maintain an impermeable concrete surface in the areas of the facility shown on Drawing No.WL-02 shall be concreted and constructed to British Standard 8110 or an alternative as agreed by the Agency.

3.4.3 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 is legible at all times. The plan shall be replaced as material changes to the facility are made.

3.5 Facility Office

3.5.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.

- 3.5.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.

3.6 Compost Facility

- 3.6.1 Appropriate infrastructure for the composting of waste shall be established and maintained at the facility in advance of any waste being composted. This infrastructure shall at a minimum comprise and provide for the following:
- (i) The licensee shall, before commencement of the licensed activity, provide a waste composting area and associated infrastructure at the location shown on Drawing No WL-03 of the application;
 - (ii) Waste acceptance/ inspection and storage areas;
 - (iii) Curing and storage areas;
 - (iv) A waste quarantine area
 - (v) Air handling/ odour abatement equipment, if applicable;
 - (vi) To provide for aerobic composting (indoor), the licensee shall provide the composting material with: a 5% minimum concentration of oxygen within the pore spaces, appropriate moisture levels, pH 6.0-9.0, appropriate C:N ratio; and
 - (vii) While awaiting collection, mature compost shall be stored in areas protected against uncontrolled run-off and nuisance formation.

3.7 Waste Inspection and Quarantine Areas

- 3.7.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.
- 3.7.2 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 Waste handling, ventilation and processing plant

- 3.8.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility shall be provided on the following basis:-
- (i) 100% duty capacity;
 - (ii) 20% standby capacity available on a routine basis;
 - (iii) Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment; and
 - (iv) Biofilters - a minimum of 2 are required to ensure treatment of emissions during the replacement of bed media in one of the biofilters.
- 3.8.2 Within three months from the date of commencement of the licensed activity, 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: Limitations*, of this licence.
- 3.8.3 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.

- 3.8.4 If sludges/slurry are being accepted the licensee must ensure that an enclosed tank be provided for storage of sludge/slurry to ensure safe coupling system for loading/unloading from road tankers.
- 3.8.5 The licensee shall provide shut-off valves on any surface/wastewater discharge lines.
- 3.9 Weighbridge and Wheel Cleaning
- 3.9.1 The licensee shall provide and maintain a weighbridge and access to appropriate wheel cleaning equipment 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.
- 3.10 Leachate Management Infrastructure
- 3.10.1 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.
- 3.10.2 All structures for the storage and/or treatment of leachate shall be fully enclosed except for inlet and outlet piping.
- 3.11 Groundwater
- Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency's landfill manual "Landfill Monitoring".
- 3.12 Continuous Monitoring System
- Prior to commencement of the licensed activity 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 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.
- 3.14 Waste acceptance shall not commence at the facility without the prior agreement of the Agency.
- 3.15 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) shall be refrigerated immediately after collection and retained as required for EPA use.
- 3.16 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
- 3.17 Tank, Container and Drum Storage Areas
- 3.17.1 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).

- 3.17.2 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.
- 3.17.3 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.
- 3.17.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.17.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.18 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.
- 3.19 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: 2008 (separator systems for light liquids).
- 3.20 Fire-water Retention
- 3.20.1 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 of the date of commencement of the licensable activity.
- 3.20.2 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 of date of notification by the Agency.
- 3.20.3 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 3.20.1 and 3.20.2 above.
- 3.21 All pumps sumps, storage tanks, 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) prior to the commencement of the licensable activity.
- 3.22 The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2. of this licence for the reduction in fugitive emissions.
- 3.23 All wellheads, as shown on Drawing WL-05 of the licence application shall be adequately protected to prevent contamination or physical damage prior to the commencement of the licensable activity.

- 3.24 The licensee shall, prior to the commencement of the licensable activity, 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.
- 3.25 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.
- 3.26 The licensee shall provide and maintain chemical toilets at the facility for the treatment of sanitary effluent arising on-site. All waste arising from the chemical toilets must be disposed of in an environmentally sound manner.

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 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).
- 4.3 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).
- 4.4 Dust and Particulate Matter
- Dust and particulate matters 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 Emissions to Surface Water

Unless otherwise agreed by the Agency no leachate and/or contaminated storm water shall be discharged to surface water drains and water courses.

5.2 There shall be no emissions to groundwater.

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

5.4 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.

5.5 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.

5.6 The licensee shall ensure that all or any of the following:

- Vermin
- Birds
- Flies
- Mud
- Dust

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.

Reason: *To provide for the protection of the environment by way of control and limitation of emissions and to provide for the requirements of Section 52 of the Waste Management Acts 1996 to 2008.*

Condition 6. Control and Monitoring

6.1 Dust/Odour Control

6.1.1 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.

6.1.2 In advance, of the date of commencement of the licensed activity at the facility, the licensee shall install and provide adequate measures for the control of odours and dust emissions, including fugitive dust emissions from the facility. Such measures shall at a minimum include the following:-

- (i) Installation of an odour management system as outlined in Section 2 of the licence application.

6.2 Litter Control

- 6.2.1 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.
- 6.2.2 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.

6.3 Operational Controls

- 6.3.1 Gates shall be locked shut when the facility is unsupervised.
- 6.3.2 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 6.3.3 Fuels shall be stored only at appropriately bunded locations on the facility.
- 6.3.4 All waste handling/processing plant shall be cleared of all waste and washed down on a weekly basis.
- 6.3.5 All leachate from composting operations shall be collected and re-used in the composting process where possible. Leachate from the composting operations that is not re-used shall tankered off-site for treatment at a location to be agreed in advance by the Agency.
- 6.3.6 Any biowaste accepted at the facility for composting or biostabilisation (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.
- 6.3.7 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.
- 6.3.8 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.

- 6.4 Within three months prior to commencement licensable activity, the following information shall be submitted to the Agency for its agreement: the names, qualifications and a summary of relevant experience of all persons that will carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring. Any proposed changes to the above shall be submitted in writing to the Agency for its agreement.

- 6.5 All tanks and drums shall be labelled to clearly indicate their contents.

6.6 Nuisance Monitoring

The licensee shall, on a daily basis, inspect the facility and its immediate surrounds for nuisances caused by vermin, birds, flies, mud, dust and odours. The licensee shall maintain a record of all nuisance inspections.

6.7 Bioaerosol Monitoring

The licensee shall carry out the bioaerosol monitoring in accordance with *Schedule C: Control & Monitoring*, of this licence.

6.8 Monitoring Locations

Within six months of the date of commencement of licensed activities, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence including any noise sensitive locations and private wells to be monitored. The drawing shall include the eight-digit national grid reference of each monitoring point.

6.9 Meteorological Monitoring

The licensee shall provide and maintain suitable infrastructure at the facility for the automated monitoring and recording of wind speed, wind direction and rainfall.

6.10 Compost Quality

6.10.1 Compost quality monitoring shall be undertaken as set out in *Schedule E: Standards for Compost Quality and Bio-Stabilisation*, of this licence.

6.10.2 Any compost not meeting any standard as per *Schedule E: Standards for Compost Quality and Bio-Stabilisation*, of this licence may be reused in the process or handled as a waste and details recorded as per Waste Records condition.

6.10.3 The licensee shall have regard to any future guidance the Agency may issue in relation to compost and bio-stabilised waste standards.

6.11 Test Programme

6.11.1 The licensee shall prepare to the satisfaction of the Agency, a test programme for abatement equipment installed to abate emissions to atmosphere. This programme shall be submitted to the Agency in advance of implementation.

6.11.2 The programme, following agreement with the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.

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

6.11.4 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; and
- (ii) assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.

6.11.5 A report on the test programme shall be submitted to the Agency within one month of completion.

6.12 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.

6.12.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures.

6.12.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.

6.12.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.

6.12.4 Where any analysis is sub-contracted it shall be to a competent laboratory.

6.13 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 that will ensure the provision of data of an equivalent scientific quality shall apply.

- 6.14 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as agreed by the Agency.
- 6.15 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission/discharge (or ambient conditions where that is the monitoring objective).
- 6.16 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.
- 6.17 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.18 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.
- 6.19 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.20 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 prior to commencement of the licensable activity. This testing shall be carried out by the licensee at least once every three years thereafter 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.
- 6.21 The drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) and bunds, silt traps and oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected for safe disposal. The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times.
- 6.22 An inspection for leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be carried out weekly. A log of such inspections shall be maintained.
- 6.23 Storm Water
- A visual examination of the storm water discharges shall be carried out daily. A log of such inspections, shall be maintained.

6.24 Ground Water

The licensee shall, within twelve months of date of commencement of the licensable activity, arrange for the carrying out, by an appropriately qualified consultant/professional, of a hydrogeological assessment of the site. The scope, detail and programme, including report structure and reporting schedule, for this investigation must be agreed by the Agency prior to implementation. Any recommendations arising from a report or reports on this investigation must be implemented within such a period to be agreed by the Agency.

6.25 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.

6.26 Pollutant Release and Transfer Register (PRTR)

The licensee shall prepare and report a PRTR for the site. The substance and/or wastes to be included in the PRTR shall be as agreed by the Agency each year by reference to EC Regulations No. 166/2006 concerning the establishment of the European Pollutant Release and Transfer Register 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.

6.27 The licensee shall, prior to the commencement of the licensed activity, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the 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 and to provide for the requirement of Section 52 of the Waste Management Acts 1996 to 2008.*

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 commencement of the licensed activity. 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 Waste Acceptance and Characterisation Procedures

- 8.1.1 Prior to the commencement of the licensed activity the licensee shall establish and maintain detailed written procedures for the acceptance and handling of wastes. These procedures shall provide for the pre-clearance, maximum contamination rates and characterisation of sludges and other non-municipal waste types proposed to be accepted at the facility.
- 8.1.2 Waste shall be accepted at the facility from known customers or new customers subject to initial waste profiling and waste characterisation off-site. The written records of this off-site waste pre-clearance shall be retained by the licensee for all active customers and for a two year period following termination of licensee/customer agreements.
- 8.1.3 Waste arriving at the facility shall be, certified (as to source), weighed, documented and directed to the Waste Compost area. Each load of waste arriving at the Waste Compost facility shall be inspected upon tipping within this facility. Only after such inspections shall the waste be processed for recovery.
- 8.1.4 The licensee shall ensure that incoming waste (and intermediate compost) is stored in a manner to prevent nuisance from odour, dust vermin birds etc.
- 8.1.5 All waste processing shall occur inside an appropriate building, unless otherwise agreed by the Agency.
- 8.1.6 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.

8.2 Compost

- 8.2.1 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 and Bio-Stabilisation*, of this licence. Analysis of the compost shall be in accordance with the requirements of that *Schedule E*.
- 8.2.2 Compost not meeting the above standard will be regarded as waste and records shall be kept of such waste. Unless otherwise agreed by the Agency, all compost failing to meet the above standard, and bio-stabilised biowaste produced at the facility, must be disposed of by incineration or by landfilling.
- 8.2.3 No waste shall be deposited outside the biodegradable waste composting area without the prior permission of the Agency.

- 8.3 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.
- 8.4 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.5 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.

- 8.6 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.7 Waste shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste shall be clearly labelled and appropriately segregated.
- 8.8 No waste classified as green list waste in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended) shall be consigned for recovery without the agreement of the Agency.
- 8.9 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control & Monitoring* of this licence.

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

Condition 9. Accident Prevention and Emergency Response

- 9.1 Emergencies
- 9.1.1 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.
- 9.1.2 All significant spillages occurring at the facility shall be treated as an emergency situation and immediately cleaned up and dealt with so as to alleviate their effects.
- 9.1.3 No waste shall be burnt 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.
- 9.2 The licensee shall, in advance of the commencement of the licensed activity, 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.
- 9.3 The licensee shall, in advance of the date of commencement of the licensed activity, 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.
- 9.4 Incidents
- 9.4.1 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.

9.4.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency, to:

- (i) identify and put in place measures to avoid recurrence of the incident; and
- (ii) identify and put in place any other appropriate remedial actions.

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

Condition 10. Decommissioning and Aftercare

10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.

10.2 Decommissioning Management Plan (DMP)

10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement as part of the first AER following commencement of the licensed activity.

10.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.

10.2.3 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Condition 10.2.1 above.

10.3 The Decommissioning Management Plan shall include, as a minimum, the following:

- (i) a scope statement for the plan;
- (ii) the criteria that define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment;
- (iii) a programme to achieve the stated criteria;
- (iv) where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan; and
- (v) details of the costings for the plan and the financial provisions to underwrite those costs.

10.4 A final validation report to include a certificate of completion for the Decommissioning Management Plan, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

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

Condition 11. Notification, Records and Reports

- 11.1 The licensee shall notify the Agency in writing two months prior to the intended date of commencement of the licensed activity.
- 11.2 **Waste Recovery Reports**
- The licensee shall as part of the Annual Environmental Report for the site submit a report on the contribution by this facility to the achievement of the waste recovery objectives stated in Condition 2.2.2.2 and as otherwise may be stated in National and European Union waste policies and shall, as a minimum, include tonnages of the following:
- (i) the recovery/treatment of biowaste.
- 11.3 The following records shall be maintained by the licensee:-
- (i) all training undertaken by facility staff;
 - (ii) results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them;
 - (iii) details of all nuisance inspections; and
 - (iv) the names and qualifications of all persons who carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.
- 11.4 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.
- 11.5 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.
- 11.6 The licence shall notify the Agency by both telephone and facsimile, if available, to the Agency's headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:

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

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

- 11.7 In the case of any incident relating to discharges to water, the licensee shall notify the Local and Water Services Authority and the South Eastern Regional Fisheries Board as soon as practicable after such an incident.
- 11.8 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.
- 11.9 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.
- 11.10 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.
- 11.11 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
 - (viii) any elements of the licence application or EIS documentation referenced in this licence.

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

- 11.12 The licensee shall submit to the Agency, by the 31st March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule F: Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.13 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, EWC Code and concise description 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 waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;
 - (vi) details of any rejected consignments;
 - (vii) details of any approved waste mixing;
 - (viii) the results of any waste analyses required under *Schedule C: Control & Monitoring*, of this licence; and
 - (ix) the tonnage and EWC Code for the waste materials recovered/disposed on-site.
- 11.14 The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency.
- 11.15 All reports shall be certified accurate and representative by the facility 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 €7,594 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 2008. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31st day of December, and shall be paid to the Agency within one month from the date of commencement of the licensable activity. 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 2008, and all such payments shall be made within one month of the date upon which demanded by the Agency.
- 12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

12.2 Environmental Liabilities

- 12.2.1 The licensee shall as part of the AER, provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage,

and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with the carrying on of the activity.

- 12.2.2 The licensee shall arrange for the completion, by an independent and appropriate qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) to address the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the DMP. A report on this assessment shall be submitted to the Agency for agreement in advance of the commencement of the licensed activity. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. The results of the review shall be notified as part of the AER.
- 12.2.3 In advance of the commencement of the licensed activity, the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities identified in Condition 12.2.2. The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.2.1.
- 12.2.4 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Conditions 12.2.2 and 12.2.3 above.

<p>Reason: <i>To provide for adequate financing for monitoring and financial provisions for measures to protect the environment and to provide for the requirements of Section 52 of the Waste Management Acts 1996 to 2008.</i></p>

Schedule A: Limitations

A.1

The following waste related processes are authorised:

- Composting
- Mixing/blending of biodegradable wastes
- Storage of Class 1 Compost and Stabilised Biowaste
- Storage of waste-‘black’ bin fines prior to treatment

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

A.2 Waste Acceptance

The approved list of wastes in the following table is without prejudice to any restrictions placed on the activity by the Department of Agriculture, Fisheries and Food in relation to the processing of waste comprising/containing Animal By-Products.

TABLE A.1 WASTE CATEGORIES AND QUANTITIES

Waste Type ^{Note 1}	Maximum (Tonnes Per Annum)
Non-Hazardous Biodegradable waste, general wastewater sludge include sewage sludge, food and drink industry sludge, as well as source segregated food and garden waste. Additionally, municipal waste that has undergone mechanical treatment (MBT) may be biological treated to stabilise the product.	45,000

Note 1: Or other wastes to be agreed in advance by the Agency.

Schedule B: Emission Limits

Table B.1 Emissions to Air

Dust Deposition Limits: (Measured at the monitoring points indicated in Drawing WL-05).

Level (mg/m ² /day) ^{Note 1}
350

Note 1: 30 day composite sample with the results expressed as mg/m²/day.

Table B.2 Emission Limits Values for Biofilters

Emission Point reference no: All Biofilters on site

Parameter	Emission Limit Value
Ammonia	50 ppm(v/v)
Hydrogen sulphide	5 ppm (v/v)
Mercaptans	5 ppm (v/v)

Table B.3 Noise Emissions

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

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

Schedule C: Control & Monitoring

Monitoring locations are shown on Figure W1-05 Monitoring and Emissions points of the Waste Licence Application documentation.

Table C.1.1 Emissions to Air - Control

Emission Point Reference No.: Biofilters
Description of Treatment: Biofiltration

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Extraction	Continuous with alarm/call-out	Pressure gauge or equivalent approved Pumps/engines
Aeration	Continuous	Oxygen probe

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

Table C.1.2 Emissions to Air - Monitoring

Emission Point Reference No.: Biofilters

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust (mg/m ² /day)	Bi-Annually ^{Note 1}	Standard Method ^{Note 2}
Odour	Quarterly ^{Note 3}	See ^{Note 3}
Bacteria	Annually	Grab sample ^{Note 4}
Aspergillus fumigatus	Annually	Grab sample ^{Note 4}
PM ₁₀ (µg/m ³)	Bi-Annually	See ^{Note 5}

Note 1: Twice during the period May to September, or as otherwise specified in writing by the Agency.**Note 2:** Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute).**Note 3:** Odour measurements shall be by olfactometric measurement and analysis for mercaptans, hydrogen sulphide, ammonia, and amines.**Note 4:** Enumeration of colonies to be carried out as described in 'Standardised Protocol for the Sampling and Enumeration of Airborne Micro-organisms at composting Facilities' the Composting Association 1999.**Note 5:** As described in prEN12341 "Air Quality - field test procedure to demonstrate reference equivalence of sampling methods for PM₁₀ fraction of particulate matter" or an alternative agreed in writing by the Agency.**Table C.1.3 Air & Odour Monitoring**

Emission Point Reference No.: Biofilters

Parameter	Monitoring Frequency	Analysis Method/Technique ^{Note 1}
Bed Media		
Odour assessment ^{Note 2}	Daily	Subjective Inspection
Condition and depth of biofilter ^{Note 3}	Daily	Visual Inspection
Moisture content	Bi-annually	Standard method
pH	Bi-annually	pH probe
Ammonia	Bi-annually	Standard Method
Total viable counts	Bi-annually	Standard Method
Inlet and Outlet Gas		
Ammonia	Bi-annually	Standard Method
Hydrogen sulphide	Bi-annually	Standard Method
Mercaptans	Bi-annually	Standard Method
Amines	Bi-annually	Standard Method

The test method in the above schedule have been amended to include reference to Standard Method.

Note 1: Where appropriate all analyses shall be carried out by a competent laboratory using standard and internationally acceptable techniques. The testing laboratory and the testing technique shall be agreed by the Agency in advance.**Note 2:** This subjective assessment should be carried out by a staff member immediately upon arriving on-site.**Note 3:** The biofilter shall be examined to ensure that no channelling is evident, and that moisture content is adequate. Watering, turning, restructuring and the addition of supplementary bed materials, or total bed replacement shall be carried out, as required, subject to bed performance.

Table C.1.4 Monitoring of Composting Processes

Parameter	Monitoring Frequency	Monitoring equipment/method
<ul style="list-style-type: none"> • Composting process 		
Temperature	Continuous	Temperature probe/recorder
Oxygen Content	Daily	Oxygen Probe with recorder
Moisture	Daily	Subjective by operator.
<ul style="list-style-type: none"> • Composting process (curing) 		
Temperature	Continuous	Temperature probe
Moisture	Daily	Subjective by operator.

Table C.2.1 Monitoring of Emissions to Water

Emission Point Reference No.:

To be agreed by the Agency

Parameter	Monitoring Frequency	Analysis Method/Technique
Suspended Solids	Bi-annually	Standard Method
Ammonia (as N)	Bi-annually	Standard Method

The test method in the above schedule have been amended to include reference to Standard Method.

Table C.2.2 Noise Monitoring**Noise Monitoring Frequency and Technique**

Parameter	Monitoring Frequency	Analysis Method/Technique
L(A)_{EQ} [30 minutes]	Quarterly	Standard ^{Note 1}
L(A)₁₀ [30 minutes]	Quarterly	Standard ^{Note 1}
L(A)₉₀ [30 minutes]	Quarterly	Standard ^{Note 1}
Frequency Analysis(1/3 Octave band analysis)	Quarterly	Standard ^{Note 1}

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

Table C.2.3 Ambient Monitoring***Air Monitoring***

Location:

Drawing No. WL-05

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust deposition	Monthly	Bergerhoff

Groundwater Monitoring

Location:

Drawing No. WL-05

Parameter	Monitoring Frequency	Analysis Method/Techniques
pH	Annually	pH electrode/meter
Nitrate	Annually	Standard Method
Total Ammonia	Annually	Standard Method
Total Nitrogen	Annually	Standard Method
Conductivity	Annually	Standard Method
Chloride	Annually	Standard Method
Organic Compounds ^{Note 1}	Annually	Standard Method

Note 1: Screening for pollutant list substances (such as US EPA volatile and/or semi-volatile compounds).

Schedule D: Specified Engineering Works

Specified Engineering 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 drainage network including silt traps and oil interceptors etc.

Installation of Compost Area.

Any other works notified in writing by the Agency.

Schedule E: Standards for Compost Quality and Bio-stabilisation

Compost Quality

No sample shall exceed 1.2 times the quality limit values set.

[The following criteria (where they apply to compost) 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, $\text{NH}_4\text{-N}$, $\text{NO}_3\text{-N}$, pH and dry matter content should also be measured].

1. Maturity (Compost):

The state of the curing pile must be conducive to aerobic biological activity.

Compost shall be deemed to be mature if it meets two of the following groups of requirements or other maturity tests as may be agreed with the Agency:

1. Respiration activity after four days AT_4 is $\leq 10\text{mg O}_2/\text{g}$ dry matter or Dynamic Respiration Index is $\leq 1,000\text{mg O}_2/\text{kg VS/h}$.
2. 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.
3. Compost must be cured for at least 21 days; and
Compost will not reheat upon standing to greater than 20°C above ambient temperature.

Or

Compost must be cured for a six month period and offensive odours from the compost shall be minimal for the compost to be deemed mature.

2. Trace Elements (Compost) ^{Note 1, 2 & 3}

Maximum Trace Element Concentration Limits ^{Note 4}

Parameter (mg/kg, dry mass)	Compost Quality Standards ^{Note 5}		Stabilised Biowaste ^{Note 5}
	Class 1	Class 2	
Cadmium (Cd)	0.7	1.5	5
Chromium (Cr)	100	150	600
Copper (Cu)	100	150	600
Mercury (Hg)	0.5	1	5
Nickel (Ni)	50	75	150
Lead (Pb)	100	150	500
Zinc (Zn)	200	400	1500
Polychlorinated Biphenyls (PCB's)	-	-	0.4
Polycyclic Aromatic Hydrocarbons (PAH's)	-	-	3
Impurities >2mm ^{Note 6}	<0.5%	<0.5%	<3%
Gravel and Stones >5mm ^{Note 6}	<5%	<5%	-

Note 1: These limits apply to the compost just after the composting phase and prior to mixing with any other materials.

Note 2: Incoming sludges (other than sewage sludges) shall be monitored quarterly (on a client by client basis) for the parameters outlined in this table in addition to Selenium (Se) and Molybdenum (Mo).

Note 3: Monitoring of Arsenic (As) is required if waste timber is used in the composting process.

Note 4: 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 5: Normalised to 30% organic matter content.

Note 6: 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.

3. Pathogens (Compost)

Pathogenic organism content must not exceed the following limits:

<i>Salmonella spp.</i>	Absent in 50g	n=5
<i>Faecal Coliforms</i>	≤ 1000 Most Probable Number (MPN) in 1g	n=5

Where: n = Number of samples to be tested.

4. Monitoring (Compost)

The licensee shall submit to the Agency for its agreement, prior to commencement of the licensed activity, details of the sampling protocol, methods of analyses and sample numbers.

5. Bio-Stabilisation Quality:

Where bio-stabilised waste is to be deposited at landfill it must meet the following standard as defined below:

'stabilisation' means the reduction of the decomposition properties of biowaste to such an extent that offensive odours are minimised and that the Respiration Activity after four days (AT4) is <10 mg O₂/g DM (until 1-1-2016), and <7 mg O₂/g DM thereafter.

Schedule F: Annual Environmental Report**Annual Environmental Report Content** ^{Note 1}

Emissions from the facility.
Waste management record.
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.
Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharges.
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.
Review of decommissioning management plan/Closure, restoration & aftercare management Plan.
Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).
Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions).
Waste activities carried out at the facility.
Quantity and Composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used).
Waste recovery report.
Full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.
Review of Nuisance Controls.
Volume of trade effluent/leachate produced and transported off-site.
Any other items specified by the Agency.

Note 1 Content to be revised subject to the agreement of the Agency after cessation of waste acceptance at the facility.

Sealed by the seal of the Agency on this the 9th day of October 2009.

**PRESENT when the seal of the Agency
Was affixed hereto:**



Laura Burke, Director/Authorised Person

