

This licence was amended on 16th December 2015 under Section 76A(11) of the Waste Management Act 1996 as amended. The details of the Amendment must be read in conjunction with this licence.  
The amendment document is entitled "IED Amendment"

This licence was amended on 2nd July 2024 under Section 96(1)(c) of the Environmental Protection Agency Act 1992, as amended. The amendment document is entitled "Technical Amendment A." The details of Amendment A must be read in conjunction with this licence.

Headquarters  
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Ireland

## WASTE LICENCE

<b>Waste Licence</b>	198-1
<b>Register Number:</b>	
<b>Licensee:</b>	Bord na Móna Plc.
<b>Location of Facility:</b>	Kilberry, Athy, County Kildare

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# 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 a Composting Facility at Kilberry, Athy, Co. Kildare. The quantity of waste to be accepted is 50,000 tonnes in the first year rising to 96,000 tonnes by the 5<sup>th</sup> year. Non-hazardous biodegradable wastes (Shredded Green waste, Brewery By-Product, Sawdust, Bark and Cocoa Husk) will be accepted at this facility.

The process leading to the production of usable, composted material will require the completion of a series of stages as follows, acceptance procedures and tipping, mixing and formulation of windrows, turning / composting, screening of stabilised material and shredding and re-use of oversize material. The wastes are combined together to form windrows for composting. The average composting period will be 10 weeks during which time the piles will be turned mechanically approximately 20 times in order to supply oxygen for microbial growth which are essential for the composting process which will be used to stabilise a range of organic waste materials / by-products which will be incorporated into horticultural growing media produced on the adjoining site.

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 Bord na Móna Plc will operate and manage this facility.

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# ***DECISION & REASONS FOR THE DECISION***

## ***Reasons for the Decision***

On the basis of the information before it, the Environmental Protection Agency is satisfied that the waste activity, or activities, licensed hereunder in Part I will comply with the requirements of Section 40(4) of the Waste Management Acts 1996 to 2003.

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

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.

## **INTERPRETATION**

All terms in this licence should be interpreted in accordance with the definitions in the Waste Management Acts 1996 to 2003, (the Acts), 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>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 the waste licence application.
<b>Application</b>	The application by the licensee for this waste licence.
<b>Appropriate facility</b>	A waste management facility, duly authorised under relevant law and technically suitable.
<b>BAT</b>	Best Available Technique as defined in Waste Management Acts 1996 to 2003.
<b>Bioaerosol</b>	An aerosol of biological particles
<b>Bi-annually</b>	All or part of a period of six consecutive months.
<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>CEN</b>	Comité Européen De Normalisation – European Committee for Standardisation
<b>Condition</b>	A condition of this licence.
<b>Consignment Note</b>	All movements of hazardous waste within Ireland must be accompanied by a “C1” consignment note issued by a local authority under the Waste Management (Movement of Hazardous Waste) Regulations (SI No. 147 of 1998). Transfrontier shipment notification and movement/tracking form numbers are required for all exports of waste from, into or through the state under the Waste Management (Transfrontier Shipment of Waste) Regulations (SI No. 149 of 1998).
<b>Construction and Demolition Waste</b>	All wastes which arise from construction, renovation and demolition activities.
<b>Containment boom</b>	A boom which can contain spillages and prevent them from entering drains or

watercourses.

<b>Daytime</b>	8.00 a.m. to 10.00 p.m.
<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>Emergency</b>	Those occurrences defined in Condition 9.4.
<b>Emission Limits</b>	Those limits, including concentration limits and deposition levels established in <i>Schedule C: Emission Limits</i> , of this licence.
<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>Fortnightly</b>	A minimum of 26 times per year, at approximately two week intervals.
<b>Foul water</b>	Sewage and drainage from waste transfer building, wheelwash, truck wash, ramp, weighbridges vehicle cleaning and ejector trailer parking areas and run-off from hardstanding areas associated with waste processing.
<b>Green waste</b>	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
<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>Incident</b>	The following shall constitute an incident for the purposes of this licence: <ul style="list-style-type: none"><li>a) an emergency;</li><li>b) any emission which does not comply with the requirements of this licence;</li><li>c) any exceedence of the daily duty capacity of the waste handling equipment;</li><li>d) any trigger level specified in this licence which is attained or exceeded; and,</li><li>e) 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 Act.
<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>Landfill Directive</b>	Council Directive 1999/31/EC.
<b>Licence</b>	A Waste Licence issued in accordance with the Acts.
<b>Licensee</b>	Bord na Móna Plc., Kilberry, Athy, Co. Kildare.

<b>Liquid Waste</b>	Any waste in liquid form and containing less than 2% dry matter. Any waste tinkered to the facility.
<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>Mobile Plant</b>	Self-propelled machinery used for the emplacement of wastes or for the construction of specified engineering works.
<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 Act.
<b>Night-time</b>	10.00 p.m. to 8.00 a.m.
<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 draft European Standard prEN 858 (Installations for the separation of light liquids, e.g. oil and petrol).
<b>Recyclable Materials</b>	Those waste types, such as cardboard, batteries, gas cylinders, etc. which may be recycled.
<b>Quarterly</b>	At approximately three monthly intervals.
<b>Sanitary Authority</b>	Kildare County Council
<b>Sample(s)</b>	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
<b>SOP</b>	Standard Operating Procedure.
<b>Specified Emissions</b>	Those emissions listed in <i>Schedule C: Emission Limits</i> of this licence.
<b>Specified Engineering Works</b>	Those engineering works listed in <i>Schedule B: Specified Engineering Works</i> of this licence.
<b>TOC</b>	Total Organic Carbon.
<b>Trigger Level</b>	A parameter value specified in the licence, the achievement or exceedance of which requires certain actions to be taken by the licensee.
<b>Weekly</b>	During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with no more than one measurement in any one week.
<b>White Goods</b>	Refrigerators, cookers, ovens and other similar appliances.
<b>EPA Working Day</b>	Refers to the following hours; 9.00 a.m. to 5.30 p.m. Monday to Friday inclusive.

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

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2003, the Environmental Protection Agency (the Agency), under Section 40(1) of the said Act hereby grants this Waste Licence to Bord na Móna Plc., to carry on the waste activities listed below at Kilberry, Athy, County Kildare subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

### ***Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2003***

<b>Class 2.</b>	<b>Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).</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 OF THE LICENCE**

- 1.1. Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed and authorised by this licence.
- 1.2. For the purposes of this licence, the facility is the area of land outlined in red on Drawing No. B.2.a of the application. Any reference in this licence to “facility” shall mean the area thus outlined in red.
- 1.3. This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2003 only and nothing in this licence shall be construed as negating the licensee’s statutory obligations or requirements under any other enactments or regulations.
- 1.4. Only those waste categories and quantities listed in *Schedule A: Waste Acceptance* of this licence, shall be accepted at the facility.
- 1.5. No hazardous wastes or liquid wastes shall be accepted at the facility.
- 1.6. Waste Acceptance Hours
  - 1.6.1 Waste shall be accepted at the facility only between the hours of 8.00 a.m. to 6.00 p.m. Monday to Friday inclusive and 9.00 a.m. to 5.00 p.m. on Saturdays.
  - 1.6.2 Waste shall not be accepted at the facility on Sundays or on Bank Holidays.
- 1.7. Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any Condition of this licence shall include a proposed timescale for its implementation. The Agency may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this 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.
  - 2.1.2 Both the facility manager and deputy, and any replacement manager or deputy, shall successfully complete both the FAS waste management training programme (or equivalent agreed by the Agency) and associated on site assessment appraisal within twelve months of appointment.
  - 2.1.3 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence.
- 2.2 Management Structure
  - 2.2.1 Prior to the commencement of waste activities, the licensee shall submit written details of the management structure of the facility to the Agency. Any proposed replacement in the management structure shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information.



- a) the names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;
  - b) details of the responsibilities for each individual named under a) above; and
  - c) details of the relevant education, training and experience held by each of the persons nominated under a) above.
- 2.3 Environmental Management System (EMS)
- 2.3.1 The licensee shall establish and maintain an EMS. Within three months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a proposal for a documented Environmental Management System (EMS) for the facility. Following the agreement of the Agency, the licensee shall establish and maintain such a system. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement.
- 2.3.2 The EMS shall include as a minimum the following elements:
- 2.3.2.1 Schedule of Environmental Objectives and Targets
- The objectives should be specific and the targets measurable. The Schedule shall address a five-year period as a minimum. The Schedule shall include a time-scale for achieving the objectives and targets and shall comply with any other written guidance issued by the Agency.
- 2.3.2.2 Environmental Management Plan (EMP)
- The EMP shall include, as a minimum, the following:
- (i) methods by which the objectives and targets will be achieved in the coming year and the designation of responsibility for targets;
  - (ii) any other items required by written guidance issued by the Agency.
- 2.3.2.3 Corrective Action Procedures
- The Corrective Action Procedures shall detail the corrective actions to be taken should any of the procedures detailed in the EMS not be followed.
- 2.3.2.4 Awareness and Training Programme
- The Awareness and Training Programme shall identify training needs, for personnel who work in or have responsibility for the licensed facility.
- 2.4 Communications Programme
- 2.4.1 The licensee shall establish and maintain a 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. This shall be established within six months of the date of grant of this licence.

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

### **CONDITION 3 FACILITY INFRASTRUCTURE**

- 3.1 The licensee shall establish all infrastructure referred to in licence application and in this licence prior to 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 B: 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 include as appropriate the following information:-
- a) a description of the works;
  - b) as-built drawings of the works; and
  - c) 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:-
- a) the name and telephone number of the facility;
  - b) the name of the licence holder;
  - c) the normal hours of opening;
  - d) an emergency out of hours contact telephone number;
  - e) the licence reference number; and
  - f) where environmental information relating to the facility can be obtained.
- 3.4 Facility Security
- 3.4.1 Security and stockproof fencing and gates shall be installed and maintained as described in D.1-c of the application. The security fence and gates shall be at the locations shown on Drawing No. D.1-a of the application. The base of the fencing shall be set in the ground.
- 3.4.2 The licensee shall remedy any defect in the gates and/or fencing as follows:-
- a) a temporary repair shall be made by the end of the working day; and
  - b) a repair to the standard of the original gates and/or fencing shall be undertaken within three working days.
- 3.5 Facility Roads and Hardstanding
- 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 facility entrance area, and the Composting area shall be paved and maintained in accordance with D.1-e of the application.
- 3.5.3 The licensee shall provide, and maintain an impermeable hardstanding surface in the areas of the facility shown on D.1-e of the application. In addition, the floor of the buildings and hardstanding areas at the facility shall be concreted and constructed to British Standard 8110.
- 3.6 Facility Office
- 3.6.1 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.
- 3.6.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 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.
- 3.7.3 Drainage from these areas shall be directed to lagoons as shown in D.1-d of the application.
- 3.8 Weighbridge and Wheel Cleaning
- 3.8.1 The licensee shall provide and maintain a weighbridge and access to appropriate wheel cleaning equipment at the facility.
- 3.8.2 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 waste water interceptor.
- 3.9 Waste handling, ventilation and processing plant
- 3.9.1 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:-
- 100% duty capacity;
  - 20% standby capacity available on a routine basis; and
  - Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.
- 3.9.2 Within three months from 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: Waste Acceptance*, of this licence.
- 3.9.3 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 Tank and Drum Storage Areas
- 3.10.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
- 3.10.2 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:-
- 110% of the capacity of the largest tank or drum within the bunded area; or
  - 25% of the total volume of substance which could be stored within the bunded area.
- 3.10.3 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.10.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.10.5 The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency within 3 months of the date of grant of this licence.
- This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.
- 3.11 Drainage system, pipeline testing
- 3.11.1 Within three months from the date of grant of this licence, all foul sewer gullies, drainage grids and manhole covers shall be painted with red squares whilst all surface water discharge gullies, drainage grids and manhole covers shall be painted with blue triangles. These colour codes shall be maintained so as to be visible at all times during facility operation, and any identification designated in this licence (e.g. SW1) shall be inscribed on these manholes.
- 3.11.2 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. A written record shall be kept

of the inspections, desludging, cleaning, disposal of associated waste products, maintenance and performance of the interceptors, bunds and drains.

3.11.3 The integrity and water tightness of all underground pipes and tanks and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee and shall be reported to the Agency following their installation and prior to their use. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.

3.11.4 All foul water from composting operations shall drain to the lagoons to be re-used in the composting process.

3.12 Compost facility

3.12.1 Appropriate infrastructure for the composting of waste shall be established and maintained at the facility prior to any waste being composted. This infrastructure shall at a minimum comprise the following:

3.12.1.1 Green Waste Composting

(a) The licensee shall, before commencement of the activity, provide a green waste composting area and associated infrastructure at the location shown on Drawing No. D.1-a of the application; and

(b) All leachate generated from this activity shall be collected and where possible re-used in the composting process.

3.13 Monitoring Infrastructure

3.13.1 Groundwater

(i) Six month prior to commencement of this activity, the licensee shall maintain four monitoring points at MW-01, MW-02, MW-03 and MW-04 as per drawing J.1 to allow for the sampling and analyses of groundwater.

(ii) All wellheads, whose locations are shown in Drawing No. J.1 of the application shall be adequately sealed to prevent surface contamination within three months from the date of grant of this licence.

(iii) Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency's landfill manual "Landfill Monitoring".

13.13.2 Replacement of Infrastructure

(i) Monitoring infrastructure which is damaged or proves to be unsuitable for its purpose shall be replaced within three months of it being damaged or recognised as being unsuitable.

**REASON:** *To provide appropriate infrastructure for the protection of the environment.*

## CONDITION 4 RESTORATION AND AFTERCARE

4.1. Decommissioning and Aftercare of the facility shall be carried out as detailed in Attachment G.1 of the waste licence application. The licensee shall update these plans when required by the Agency.

**REASON:** *To provide for the restoration of the facility.*

## CONDITION 5 FACILITY OPERATIONS

- 5.1 Waste Acceptance and Characterisation Procedures
  - 5.1.1 Waste Acceptance Procedures shall be carried out in accordance with Attachment E 3 of the licence application.
  - 5.1.2 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 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.
  - 5.1.3 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.
  - 5.1.4 A record of all inspections of incoming waste loads shall be maintained.
  - 5.1.5 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 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.
- 5.2 Operational Controls
  - 5.2.1 Scavenging shall not be permitted at the facility.
  - 5.2.2 Gates shall be locked shut when the facility is unsupervised.
  - 5.2.3 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
  - 5.2.4 Fuels shall be stored only at appropriately bunded locations on the facility.
  - 5.2.5 All tanks and drums shall be labelled to clearly indicate their contents.
  - 5.2.6 The green waste shredder must not be operated between the hours of 1800 and 0800.
  - 5.2.7 There shall be no casual public access to the facility.
- 5.3 Compost
  - 5.3.1 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 F: Standards for Compost Quality*, of this licence. Analysis of the compost shall be in accordance with the requirements of that Schedule.
  - 5.3.2 No waste shall be deposited outside the biodegradable waste composting area.
- 5.4 Off-site Disposal and Recovery
  - 5.4.1 Waste sent off-site for recovery or disposal shall be conveyed only by a waste contractor agreed by the Agency.
  - 5.4.2 All waste transferred from the facility shall be transferred only to an appropriate facility agreed by the Agency.
  - 5.4.3 All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.
  - 5.4.4 Prior written agreement must be obtained from the Local Authority for disposal of any waste/foul water off site to the treatment plant.
- 5.5 Maintenance
  - 5.5.1 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or

- installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.
- 5.6 All lagoon structures on the facility shall be inspected and certified fit for purpose every three years by an independent and appropriately qualified chartered engineer.
- 5.6.1 The lagoons shall be fitted with high level alarms. The licensee shall maintain a minimum freeboard of 500 mm on all lagoons.
- 5.7 The licensee shall maintain and clearly label and name all sampling and monitoring locations.
- 5.8 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.
- 5.9 Landscaping
- 5.9.1 Landscaping of the facility as described in Section 3.10 of the EIS shall be carried out within three months of the date of grant of this licence.
- 5.9.2 The existing hedgerow network which forms the boundary of the facility shall be retained by the licensee as indicated in Section 3.10 of the EIS.
- 5.9.3 Within twelve months of the date of grant of this licence, the licensee shall implement a landscaping programme to include details on (but not limited to):-
- a) the time-frame for landscaping works in relation to facility development;
  - b) species and minimum age composition and the suitability of the hedge/tree mix for the area;
  - c) total area(s) to be planted;
  - d) tree protection; and
  - e) post planting management.
- 5.10 Resource use and energy efficiency
- 5.10.1 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 licensee shall carry out the audit in accordance with Agency guidance. The audit programme shall be submitted to the Agency in writing at least one month before the audit is to be carried out. A copy of the audit report shall be available on-site for inspection by authorised persons of the Agency and a summary of the audit findings shall be submitted as part of the Annual Environmental Report. The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 5.10.2 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.
- 5.10.3 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.
- 5.10.4 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 appropriate operation of the facility to ensure protection of the environment.***

## CONDITION 6 EMISSIONS

- 6.1. No specified emission from the facility shall exceed the emission limit values set out in *Schedule C: Emission Limits*, of this licence. There shall be no other emissions of environmental significance.
- 6.2. The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 6.3. Emission limits for emissions to atmosphere in this licence shall be interpreted in the following way.
  - 6.3.1. 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 all other parameters, no 30 minute mean value shall exceed the emission limit value.
    - (iii) For flow, no hourly or daily mean value shall exceed the emission limit value.
- 6.4. Emissions to Surface Water
  - 6.4.1. There shall be no unauthorised discharges of polluting matter to surface or groundwater.
  - 6.4.2. No substance shall be discharged in a manner, or at a concentration which, following initial dilution causes tainting of fish or shellfish.
- 6.5. 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 control emissions from the facility and provide for the protection of the environment.*

## CONDITION 7 NUISANCE CONTROL

- 7.1. The licensee shall ensure that vermin, birds, flies, mud, dust, and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.
- 7.2. The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.
- 7.3. Dust/Odour Control
  - 7.3.1. 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.
  - 7.3.2. Prior to the date of commencement of the waste activities 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:-
    - 7.3.2.1. Installation of an odour management system as outlined in F.6 of the licence application.
- 7.4. Prior to exiting the facility, all waste vehicles shall use the wheel cleaner.

**REASON:** *To provide for the control of nuisances.*

## CONDITION 8 MONITORING

- 8.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in *Schedule D: Monitoring* of this licence. Unless otherwise specified by this licence, all environmental monitoring shall commence no later than two months after the date of grant of this licence.
- 8.2. The licensee shall amend the frequency, locations, methods and scope of monitoring as required by this licence only upon the written instruction of the Agency and shall provide such information concerning such amendments as may be requested in writing by the Agency. Such alterations shall be carried out within any timescale nominated by the Agency.
- 8.3. Monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental parameter.
- 8.4. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 8.5. The licensee shall maintain all sampling and monitoring points, and clearly label and name all sampling and monitoring locations, so that they may be used for representative sampling and monitoring.
- 8.6. The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 8.7. Within three months of the date of grant of this licence, 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.
- 8.8. 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. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 8.9. Nuisance Monitoring
  - 8.9.1 The licensee shall, at a minimum of one week intervals, inspect the facility and its immediate surrounds for nuisances caused by vermin, birds, flies, mud, dust and odours.
- 8.10. Bioaerosol Monitoring
  - 8.10.1 Prior to the commencement of the activity, the licensee shall submit for approval by the Agency, a baseline bioaerosol monitoring study for the site.

**REASON:** *To ensure compliance with the conditions of this licence by provision of a satisfactory system of monitoring of emissions.*



## CONDITION 9 CONTINGENCY ARRANGEMENTS

- 9.1. In the event of an incident the licensee shall immediately:-
- a) identify the date, time and place of the incident;
  - b) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - c) isolate the source of any such emission;
  - d) evaluate the environmental pollution, if any, caused by the incident;
  - e) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
  - f) provide a proposal to the Agency for its agreement within one month of the incident occurring 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.
- 9.2. The licensee shall, prior to commencement or within six months of the date of grant of this licence, submit a written Emergency Response Procedure (ERP) to the Agency for its agreement. The ERP shall address any emergency situations which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment. This shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment.
- 9.3. 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.
- 9.4. Emergencies
- 9.4.1. 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.
- 9.4.2. 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.
- 9.4.3. In the event that monitoring of local wells indicates that the facility is having a significant adverse effect on the quantity or the quality of the water supply this shall be treated as an emergency and the licensee shall provide an alternative supply of water to those affected.

**REASON:** *To ensure compliance with the conditions of this licence by provision of a satisfactory system of monitoring of emissions.*

## CONDITION 10 RECORDS

- 10.1 The licensee shall keep the following documents at the facility office:-
- a) the current waste licence relating to the facility;
  - b) the current EMS for the facility;
  - c) the previous year's AER for the facility; and
  - d) all written procedures produced by the licensee which relate to the licensed activities.
- 10.2 The licensee shall maintain a record for each load of waste arriving at and departing from the facility. The licensee shall record the following:-
- a) the date;
  - b) the name of the carrier (including if appropriate, the waste carrier registration details);

- c) the vehicle registration number;
  - d) the name of the producer(s)/collector(s) of the waste as appropriate;
  - e) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
  - f) a description of the waste including the associated EWC codes;
  - g) the quantity of the waste, recorded in tonnes;
  - h) the name of the person checking the load;
  - i) where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed; and
  - j) where applicable a consignment note number (including transfrontier shipment notification and movement/tracking form numbers, as appropriate).
- 10.3 The following records shall be maintained by the licensee:-
- a) the types and quantities of waste recovered at the facility each year. These records shall include the relevant EWC Codes;
  - b) all training undertaken by facility staff;
  - c) results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them;
  - d) details of all nuisance inspections; and
  - e) 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.
- 10.4 The licensee shall maintain a record of all complaints relating to the operation of the activity. Each such record shall give details of the following:-
- a) date and time of the complaint;
  - b) the name of the complainant;
  - c) details of the nature of the complaint;
  - d) actions taken on foot of the complaint and the results of such actions; and,
  - e) the response made to each complainant.
- 10.5 A record shall be kept of each consignment of foul water removed from the facility. The record shall include the following:-
- a) the name of the carrier;
  - b) the date and time of removal of foul water from the facility;
  - c) the volume of foul water, in cubic metres, removed from the facility on each occasion;
  - d) the name and address of the Waste Water Treatment Plant to which the foul water was transported; and
  - e) any incidents or spillages of foul water during its removal or transportation.
- 10.6 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:-
- a) the date and time during which spraying of insecticide is carried out;
  - b) contractor details;
  - c) contractor logs and site inspection reports;
  - d) details of the rodenticide(s) and insecticide(s) used;
  - e) operator training details;
  - f) details of any infestations;
  - g) mode, frequency, location and quantity of application; and,
  - h) measures to contain sprays within the facility boundary.

**REASON:** *To provide for the keeping of proper records of the operation of the facility.*

## CONDITION 11 REPORTS AND NOTIFICATIONS

11.1 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in:

(a) 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; or
- The fuels, raw materials, products or wastes to be generated or accepted, or

b) Any changes in:

- The site management and control with adverse environmental significance,

shall be carried out or commenced without prior notice to, and without the prior written agreement of, the Agency.

11.2 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:-

- a) be sent to the Office of Environmental Enforcement, PO Box 3000, Johnstown Castle Estate, Wexford;
- b) comprise one original and two copies unless additional copies are required;
- c) be formatted in accordance with any written instruction or guidance issued by the Agency;
- d) include whatever information as is specified in writing by the Agency;
- e) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
- f) be submitted in accordance to the relevant reporting frequencies specified by this licence, such as in *Schedule E: Recording and Reporting to the Agency*, of this licence;
- g) be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and
- h) be transferred electronically to the Agency's computer system if required by the Agency.

11.3 In the event of an incident occurring on the facility, the licensee shall:-

- a) notify the Agency as soon as practicable and in any case not later than 10.00 a.m. the following working day after the occurrence of any incident;
- b) submit a written record of the incident, including all aspects described in Condition 9.1(a-e), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident;
- c) in the event of any incident which relates to discharges to surface/sewer water, notify Kildare Co. Council as soon as practicable and in any case not later than 10.00 a.m. on the following working day after such an incident; and
- d) Should any further actions be taken as a result of an incident occurring, the licensee shall forward a written report of those actions to the Agency as soon as practicable and no later than ten days after the initiation of those actions.

11.4 Waste Recovery Reports

The licensee shall as part of the AER submit a report on the contribution by this facility to the achievement of the recovery targets stated in national and European Union waste policies and shall include the following:-

11.4.1 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;

11.4.2 Composting of biodegradable or green waste at the facility having regard to good practice and sustainability.

- 11.5 Vermin and Flies
- 11.5.1 Within three months of the date of this licence, the licensee shall prepare and implement a proposal for the control and eradication of vermin and fly infestations at the facility. This proposal should include as a minimum, operator training, details on the rodenticide(s) and insecticide(s) to be used, mode and frequency of application and measures to contain sprays within the facility boundary.
- 11.6 Monitoring Locations
- 11.6.1 Within three months of the date of grant of this licence, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence. The drawing(s) shall include the reference code of each monitoring point.
- 11.7 Annual Environmental Report
- 11.7.1 The licensee shall submit to the Agency for its agreement, by the 31<sup>st</sup> of March each year an Annual Environmental Report (AER).
- 11.7.2 The AER shall include as a minimum the information specified in *Schedule G: Content of Annual Environmental Report*, of this licence and shall be prepared in accordance with any relevant written guidance issued by the Agency.

**REASON:** *To provide for proper reporting and notification of the Agency.*

## **CONDITION 12 CHARGES AND FINANCIAL PROVISIONS**

- 12.1 Agency Charges
- 12.1.1 The licensee shall pay to the Agency an annual contribution of €11,037, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Environmental Protection Agency Act, 1992 and 2003/ Waste Management Acts 1996 to 2003. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31<sup>st</sup> 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 Environmental Protection Agency Act, 1992 and 2003/Waste Management Acts 1996 to 2003, and all such payments shall be made within one month of the date upon which demanded by the Agency.
- 12.2 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.
- 12.3 Financial Provision for Closure
- 12.3.1 Prior to the commencement of the activity, the licensee shall make a Proposal for Financial Provision to the Agency for its agreement to cover any liabilities incurred by the licensee in carrying on the activities to which this licence relates. Such provision shall be maintained by the licensee unless otherwise agreed by the Agency.

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

## SCHEDULE A : Waste Acceptance

### A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

WASTE TYPE <sup>note 1</sup>	MAXIMUM (TONNES PER ANNUM)
Non-hazardous biodegradables (shredded green waste, brewery by-product, sawdust, bark, cocoa husk )	
TOTAL	96,000tpa

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

## SCHEDULE B : Specified Engineering Works

Specified Engineering Works
Installation of surface water infrastructure. Installation of Compost Area. Any other works notified in writing by the Agency.

## SCHEDULE C : Emission Limits

C.1 **Noise Emissions:** (Measured at the monitoring points indicated in Drawing J.1.).

Day dB(A) $L_{eq}$ (30 minutes)	Night dB(A) $L_{eq}$ (30 minutes)
55	45

C.2 **Dust Deposition Limits:** (Measured at the monitoring points indicated in Drawing J.1.).

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

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

### C.3 Emission Limit Values from Biodegradable Waste Composting

Compliance Point: to be agreed in advance of waste acceptance

Parameter	Emission Limit Value
Total Particulates	50 mg/m <sup>3</sup>
Ammonia	50 (ppm v/v)
Amines	5 (ppm v/v)
Hydrogen Sulphide & Mercaptans	5 (ppm v/v)

## SCHEDULE D : Monitoring

Monitoring to be carried out as specified below.

### D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table D.1.1 and Drawing J.1. of the application.

**Table D.1.1 Noise, surface water and groundwater Monitoring Locations**

NOISE	SURFACE WATER	Groundwater
STATIONS	STATIONS	STATIONS
NSL1	SW1	MW-01
NB1	SW2	MW-02
NB2	SW3	MW-03
NB3	SW4	MW-04
NB4	SW5	

**Table D.1.2 Emissions to Atmosphere Monitoring Locations**

DUST	MICRO-ORGANISMS Applicable to composting
STATIONS	STATIONS
AM-01	AM-01
AM-02	AM-02
AM-03	AM-03
AM-04	AM-04

## D.2 Noise

**Table D.2.1 Noise Monitoring Frequency and Technique**

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."

## D.3 Surface Water Monitoring

**Table D.3.1 Surface water Monitoring Frequency and Techniques**

Parameter	Monitoring Frequency	Analysis Method/Technique
Freeboard	Daily	Visual
PH	Quarterly	Electrometry
Biological Oxygen Demand	Bi-annually	Standard Methods <sup>Note 1</sup>
Suspended Solids	Quarterly	Standard Methods <sup>Note 1</sup>
Mineral Oils	Quarterly	Standard Methods <sup>Note 1</sup>

**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.

## D.4 Groundwater Monitoring

**Table D.4.1 Ground water Monitoring Frequency and Techniques**

Parameter <sup>Note 1</sup>	Monitoring Frequency
Groundwater Level (wells)	Quarterly
Ammoniacal Nitrogen	Quarterly
Chloride	Quarterly
PH	Quarterly
Sulphate (SO <sub>4</sub> )	Quarterly
Metals / non metals <sup>Note 3</sup>	Annually
List I/II organic substances (Screen) <sup>Note 4</sup>	Annually
Mercury	Annually
Nitrate	Annually
Total P/orthophosphate	Annually
Faecal Coliforms	Annually
Total Coliforms	Annually

**Note 1:** All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.

**Note 2:** Where there is evident gross contamination, additional samples should be analysed and the full suite of parameters shown tested.

- Note 3:** Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.
- Note 4:** Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).

## D.5 Emissions from Biodegradable Waste Composting Unit & Air Quality Monitoring

**Table D.5.1 Dust, Odour and Micro-organisms Monitoring Frequency and Technique**

Parameter <sup>Note 1</sup>	Monitoring Frequency	Analysis Method/Technique
Dust (mg/m <sup>2</sup> /day)	Quarterly <sup>Note 2</sup>	Standard Method <sup>Note 3</sup>
Odour	Quarterly <sup>Note 4</sup>	See <sup>Note 4</sup>
Bacteria	Bi-annually	Grab sample <sup>Note 5</sup>
Aspergillus fumigatus	Bi-annually	Grab sample <sup>Note 5</sup>

**Note 1:** Meteorological monitoring to be carried out concurrently with all above monitoring.

**Note 2:** Twice during the period May to September, or as otherwise specified in writing by the Agency.

**Note 3:** Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute).

**Note 4:** Odour measurements shall be by olfactometric measurement and analysis for mercaptans, hydrogen sulphide, ammonia, amines as set out in Table F.4.3.

**Note 5:** Enumeration of colonies to be carried out as described in 'Standardised Protocol for the Sampling and Enumeration of Airborn Micro-organisms at composting Facilities' the Composting Association 1999.

## SCHEDULE E : Recording and Reporting to the Agency

### Recurring Reports

Report	Reporting Frequency <sup>Note 1</sup>	Report Submission Date
Environmental Management System Updates	Annually	As part of the AER.
Annual Environment Report (AER)	Annually	By 31 <sup>st</sup> March of each year.
Record of incidents	As they occur	Within five days of the incident.
Bund, tank and container integrity assessment	Every three years	Six months from the date of grant of licence and thereafter as part of the AER.
Specified Engineering Works reports	As they arise	Prior to the works commencing.
Monitoring of Surface Water Quality	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Groundwater Quality	Quarterly	Ten days after end of the quarter being reported on.
Dust Monitoring	Three times a year	As part of the AER.
Noise Monitoring	Annually	As part of the AER.
Any other monitoring	As they occur	Within ten days of obtaining results.

**Note 1:** Unless altered at the request of the Agency.



# SCHEDULE F : 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
- oxygen uptake rate ≤ 150 mg O<sub>2</sub>/kg volatile solids per hour; 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

## 3. Trace Elements

Maximum Trace Element Concentration Limits for Compost<sup>Note 2</sup>

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

**Note 1:** Monitoring of these parameters required if waste from an industrial source.

**Note 2:** 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.

#### **4. Pathogens**

Pathogenic organism content must not exceed the following limits:

- the quantity of faecal coliforms must be < 1,000 Most Probable Number (MPN)/g of total solids calculated on a dry weight basis; and
- there can be no salmonellae present (< 3 MPN/4g total solids).

#### **5. Monitoring**

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

The analyses shall be carried out:

- (a) every six months for plants producing more than 500 and up to 1 000 tonnes of treated biowaste per year;
- (b) 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;
- (c) every month for plants producing more than 10 000 tonnes of treated biowaste per year.

# **SCHEDULE G : Content of the Annual Environmental Report**

## **Annual Environmental Report Content**

Reporting Period.

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).

Summary report on emissions.

Waste recovery report.

Summary of results and interpretations of environmental monitoring, including a location plan of all monitoring locations.

Resource and energy consumption summary.

Development / Infrastructural works in place and planned, to process waste quantities projected for the following year (including plant operating capacity, provision of adequate standby capacity and provision of contingency, backup and spares in the case of breakdown).

Schedule of Environmental Objectives and Targets for the forthcoming year.

Report on the progress towards achievement of the Environmental Objectives and Targets contained in previous year's report.

Full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.

Tank, drum, pipeline and bund testing and inspection report.

Reported Incidents and Complaints summaries.

Review of Nuisance Controls.

Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.

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 16th day of December, 2004**

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

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**Padraic Larkin, Authorised Person**