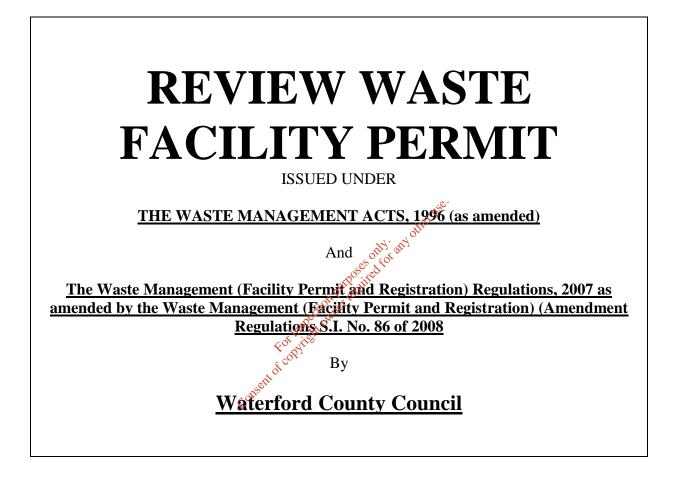


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# **Biodegradable & Organic Waste Composting**

Waste Permit Register Number:	WFP-WD-10-0003-02
Applicant:	Ormonde Organics Ltd.
Location of Facility:	Killowen, Portlaw, Co Waterford.
Date of Issue of Permit:	14 <sup>th</sup> June 2011
Valid Until:	14 <sup>th</sup> June 2016

# **Glossary of Terms**

All terms in this permit should be interpreted in accordance with the definitions in the Waste Management Acts 1996 (as amended), unless otherwise defined in this 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 Permit Holder for this permit.		
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.		
Attachment	Any reference to Attachments in this permit refers to attachments submitted as part of this permit application.		
BAT	All or part of a period of size eonsecutive months.		
<b>Bi-annually</b>	All or part of a period of six consecutive months.		
Biennially	Once every two years to the		
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.		
Biosolid	Is the organic by-product of wastewater treatment which, by being treated to an approved standard, can be used beneficially as a fertiliser / soil conditioner in agriculture.		
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 177412002).		
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: Compost Quality and Bio-Stabilisation</i> , of this permit.		
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 macroorganisms in order to produce compost.		
Containment boom	A boom which can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.		
<b>County Council</b>	Waterford County Council.		
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. Any 24 hour period. 08:00 hrs to 22:00 hrs. Decibels (A weighted): interpretation of other Dissolved Oxygen private Any report, result, data, drawing, proposal, interpretation or other		
Day	Any 24 hour period.		
Daytime	08:00 hrs to 22:00 hrs.		
dB(A)	Decibels (A weighted)		
DO	Dissolved Oxygen river		
Documentation	Any report, record, result, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this permit.		
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this permit.		
EMP	Environmental Management Programme.		
Emission Limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule D: Emission Limits</i> of this permit.		
Environmental Damage	Has the meaning given it 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 purposes 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 EPA 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	<ul> <li>The following shall constitute an incident for the purposes of this permit:</li> <li>(i) an emergency;</li> <li>(ii) any emission which does not comply with the requirements of this permit;</li> <li>(iii) any exceedence of the daily duty capacity of the waste handling equipment;</li> <li>(iv) any trigger level specified in this permit which is attained or exceeded; and;</li> <li>(v) any indication that environmental pollution has, or may have, taken place.</li> </ul>		
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.		
Κ	Kelvin.		
kPa	Kilopascals.		
Landfill Directive	Council Directive 1999/31/EC.		
$\mathbf{L}_{\mathbf{eq}}$	Equivalent continuous sound level.		
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.		

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Local Authority	Waterford County Council.		
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately 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.		
6	The treatment of residual municipal waste through a combination of manual		
& Treatment (MBT)	mechanical processing and biological stabilisation, in order to stabilise and reduce the volume of waste which requires disposal.		
Mobile Plant	Self-propelled machinery used for the emplacement of wastes or for the construction of specified engineering works.		
Monthly	A minimum of 12 times per year, at approximately monthly intervals.		
Municipal Solid Wast (MSW)	e 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.		
Night-time	sludges and effluents. 2200 hrs to 0800 hrs. Any dwelling house, hotel or <b>boste</b> l, health building, educational		
Noise Sensitive			
Location (NSL)	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 systems for light liquids, (e.g. oil and petrol)-Part 2: Selection of nominal size, installation, operation and maintenance.		
Permit	A Waste Facility Permit issued in accordance with the Waste Management Acts 1996 to 2008 and associated Waste Management (Facility Permit and Registration) Regulations, 2007, as amended.		
Permit Holder	Ormonde Organics, Killowen, Portlaw, Co. Waterford.		
Ррт	Parts per million.		
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.		
Regional Fisheries Board	Southern Regional Fisheries Board.		
Residual Waste	The fraction of collected waste remaining after a treatment or diversion step, which generally requires further treatment or disposal.		
Sample(s)	Unless the context of this permit indicates to the contrary, samples shall include measurements by electronic instruments.		

Sanitary Authority	Waterford County Council.		
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.		
Sludge	The accumulation of solids resulting from chemical coagulation, flocculation and/or sedimentation after water or wastewater treatment, with greater than 2% dry matter.		
SOP	Standard Operating Procedure.		
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. And the expression 'separate at source' shall be construed accordingly.		
Specified Emissions	Those emissions listed in Schedule D: Emission Limits of this permit.		
Specified Engineering works	Engineering works listed in <i>Schedule C: Specified Engineering Works</i> of this permit.		
Stabilised Biowaste	Waste resulting from the mechanicalhiological treatment of unsorted waste or residual municipal waste including treated biowaste which does not comply with the environmental quality classes outlined in <i>Schedule F: Compost Quality and Bio-Stabilisation</i> , of this permit.		
Standard Method	A National, European or internationally recognised procedure (eg, I.S. EN, ISO, CEN, BS or equivalent), as an in-house documented procedure based on the above references, a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or, an alternative method as may be agreed by the Local Authority.		
Storm Water	Rain water run-off from roof and non-process areas.		
The Agency	Environmental Protection Agency.		
тос	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 Permit Holder.		
2 Bin 3 Bin System & wastes	A source segregated collection system where <i>dry</i> recyclables and residual		
Black Bin	are separately collected (2 bin), or where <i>dry</i> 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.		

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.

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# INTRODUCTION

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

This waste facility permit is for acceptance, recovery and storage of Household biodegradable kitchen and canteen waste, Industrial biodegradable & sludge waste and also for garden and park waste. This waste facility permit relates to the indoor composting of biowaste & biosolids by Ormonde Organics Ltd at Killowen, Portlaw, Co Waterford.

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 permit holder 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 Waterford County Council.

The permit sets out in detail the conditions under which *Ormonde Organics Ltd* of, *Killowen, Portlaw, Co. Waterford*, is required to operate and manage this facility.

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## Decision & Reasons for the Decision

Waterford County Council is satisfied that, on the basis of the information available, that the waste activity, or activities, listed hereunder will comply with the requirements of Article 18 (4) of the Waste Management (Facility Permit and Registration) Regulations, 2007 as amended by the Waste Management (Facility Permit and Registration) Regulations S.I No. 86 of 2008.

In reaching this decision, Waterford County Council has considered the application and supporting documentation received from the applicant, all submissions received from other parties and the report/assessment of its Engineer.

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#### **ACTIVITIES PERMITTED**

In pursuance of the powers conferred on it by the Waste Management Act, 1996 to 2008 and the Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007 as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations S.I. No. 86 of 2008, Waterford County Council grants this waste facility permit to;

Ormonde Organics, Killowen, Portlaw, Co. Waterford.

Operating the waste facility at; Killowen, Portlaw, Co. Waterford.

subject to the conditions attached in this permit.

Waterford County Council may review, and subsequently amend the conditions under Article 30 of the Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007 as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations S.I. No. 86 of 2008. Waterford County Council will give notice in writing of such intention to the permit holder. Otherwise an application for a review of this permit shall be made at least 60 working days prior to the expiry date of this permit to Waterford County Council at the Environment Section, Civic Offices, Davitt's Quay, Dungarvan, Co. Waterford. This permit may be revoked under Article 36 of the Waste Management (Facility Permit and Registration) Regulations, SI No. 821 of 2007 as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations, SI. No. 86 of 2008.

#### Permitted Waste Activity in accordance with the Third Schedule, Part 1 of the Waste Management (Facility Permit and Registration) Regulations 2007 as amended.

Class	Activity
Class 8	The reception, storage and biological treatment of biowaste at a facility where— (a) the maximum amount of compost, biowaste and digestate held at the facility does not exceed 6,000 cubic metres at any time, and (b) the annual intake shall not exceed 10,000 tonnes. (Principal Activity)

# Permitted Waste Recovery Activity in accordance with the Fourth Schedule, of the Waste Management Acts 1996 (as amended)

Class	Activity
R 3	Recycling or reclamation of organic substance which are not used as solvents (including composting and other biological transformation processes).

It is the responsibility of Permit holder to ensure that the permitted waste activities are carried on in accordance with the General Conditions specified in the Regulations and quoted below, and the Schedule of Conditions attached herein.

The General Conditions specified in the Regulations are as follows:

- (a) The activity concerned, carried on in accordance with such conditions as are attached to the waste facility permit, will not cause, environmental pollution.
- (b) Any emissions from the activity concerned will not result in the contravention of any relevant standard, including any standard for an environmental medium, or any relevant emission limit value, prescribed under any enactment.
- (c) The best available techniques will be used to prevent or eliminate or, where that is not practicable, to limit, abate or reduce an emission from the activity concerned.
- (d) The facility is compliant with planning or is exempt from planning permission under Section 5 of the Planning and Development Act 2000, and
- (e) The applicant is a fit and proper persons  $(10^{10} \text{ m})^{10}$

Signed: \_\_\_\_

Date of Issue

NOTE: the granting of this permit, and any condition imposed by it, does not exempt the holder of the permit from the need to comply with the statutory obligations of any other legislation, including The Local Government (Water Pollution) Acts 1977 - 1990, Air Pollution Act 1987, Litter Pollution Act 1997, Planning and Development Acts 2000 - 2006.

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#### Condition 1: SCOPE:

- 1.1 This Waste Permit is issued under the Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007 as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations S.I. No. 86 of 2008 to Ormonde Organics, Killowen, Portlaw, Co. Waterford for lands at Killowen, Portlaw, Co. Waterford.
- 1.2 This waste facility permit is for the purpose of waste activity authorisation under the Waste Management (Facility Permit & Registration) Regulations S.I No 821 of 2007 as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations S.I No.86 of 2008 only and nothing in this permit shall be construed as negating the permit holders statutory obligations, or requirements under any other enactments or regulations, including the Water Pollution Acts, the Air Pollution Acts, the Waste Management Act, the Litter Pollution Act, or the Planning And Development Acts.
- 1.3 This waste facility permit is granted for a period not exceeding **5 years** from the date of issue.
- 1.4 For the purpose of these conditions the site is defined as the area highlighted **outlined** in **Red** on the site survey drawing submitted on the 18<sup>th</sup> April 2011.
- 1.5 Activities licensed in accordance with the 4<sup>th</sup> Schedule of the Waste Management Act 1996 (as amended):

-)R3. Recycling or reclamation of organic substance which are not used as solvents (including composting and other biological transformation processes).

1.6 This Permit is issued for the recovery of the material detailed in table 1.1. The acceptance limits for each material shall be those given in table 1.1.

Material	Acceptance Limit (TONNES)
1.House biodegradable Kitchen & Canteen Waste (E.W.C 20 01 08)	
2. Other biodegradable waste (garden & park waste) (E.W.C 20 02 01)	
3. Sludges from on-site effluent treatment (E.W.C 02 05 02)	Total Acceptance of identified Wastes shall not exceed 8,000 tonnes annually (40,000 tonnes over the life
4. Waste from washing, cleaning and mechanical reduction of raw materials (E.W.C 02 07 01)	of the permit).

 Table 1.1 Acceptance Limit

5. Sludges from on-site effluent	
treatment	
(E.W.C 02 07 05)	
6. Materials unsuitable for consumption and processing	
(E.W.C 02 07 04)	
7. Sludges from on-site effluent treatment other than those mentioned in 07 05 11. (E.W.C 07 05 12)	
8. Edible Oil & Fat (E.W.C 20 01 25)	

- 1.7 The site shall be adequately secured so as to avoid "fly-tipping". Any such "fly-tipping" which occurs on site, the Permit holder of the site shall remove loads of waste immediately to an appropriate facility.
- 1.8 The composting of biowaste and biosolids that may be recovered and or disposed of at the facility shall be subject to the maximum quantities and other constraints listed in *Schedule A: Waste Acceptance* of this permit.
- 1.9 Where it is proposed to treat a biodegradable waste, which is not included in *Schedule A: Waste Acceptance* of this permit, the prior agreement of Waterford County Council must be obtained by the Permit Holder before the waste is treated at the facility.
  1.10 The Permit Holder shall ensure that any proposed change in the activity shall be
- 1.10 The Permit Holder shall ensure that any proposed change in the activity shall be submitted in writing to Waterford County Council for agreement prior to that change taking effect. Should the submission identify a material or significant change in:
  - (i) the nature, focus or extent of the waste related activities; or
  - (ii) the nature or extent of any emission concerned,

a waste facility permit review application may be required before the proposed change can be assessed.

- 1.11 Where Waterford County Council considers that a non-compliance with any condition of this permit has occurred, it may serve a notice on the Permit Holder specifying:
  - 1.11.1. That only those wastes as specified, if any, in the notice are to be accepted at the facility after the date set down in the notice;
  - 1.11.2. That the Permit Holder shall undertake the works stipulated in the notice, and/or otherwise comply with the requirements of the notice as set down therein, within the time-scale contained in the notice; and
  - 1.11.3. That the Permit Holder shall carry out any other requirement specified in the notice.

When the notice has been complied with, the Permit Holder shall provide written confirmation to the Local Authority that the requirements of the notice have been carried out. No waste, other than that which is stipulated in the notice, shall be accepted at the facility until written permission is received from Waterford County Council.

1.12 The Permit Holder shall comply at all times with the provisions of the Community Acts, insofar as such provisions are relevant to the waste related activity of this waste

facility permit, including those specified in the Second Schedule of the Waste Management (Facility Permit and Registration) Regulations 2007, as amended, and are listed in *SCHEDULE B: Provisions of the Community Acts*.

- 1.13 Without prejudice to its obligations under this permit, the Permit Holder shall at all times ensure that it carries on its waste related activities in a manner that is consistent with the objectives of the Joint Waste Management Plan for the South East Region 2006 (as may be varied or replaced from time to time), and, with the objectives of the current National Hazardous Waste Management Plan.
- 1.14 The Permit Holder shall ensure that where waste that has been source segregated by the waste producer, it shall not be sent for disposal or collected, transported, mixed or handled so as to make it unsuitable for recycling or recovery by the Permit Holder.
- 1.15 The maximum permitted annual intake of waste materials (EWC 02 05 02, 02 07 01, 02 07 05, 02 07 04, 07 05 12, 20 01 25, 20 01 08 & 20 02 01) at the facility **shall not** exceed **8,000 tonnes.**
- 1.16 Waste Acceptance Hours and Hours of Operation
  - 1.16.A The facility shall be operated only during the hours of 7.00 a.m. and 8.00 p.m. on Monday to Saturday inclusive, unless otherwise pre-agreed in writing with Waterford County Council.
  - 1.16.B The facility shall not be operated on Sundays of on Public Holidays, unless the prior agreement is obtained from Waterford County Council. No waste materials shall be accepted on Sundays of Bank Holidays.
- 1.17 Before commencing acceptance of any waste containing Animal By-Products the Permit Holder shall satisfy Waterford County Council in writing that, where applicable, it has obtained full consent, in accordance with the Animal By-product Regulations, from the Department of Agriculture, Fisheries and Food.
- 1.18 No hazardous waste shall be accepted for composting at the facility.
- 1.19 The Permit Holder shall document and submit Nutrient Management Plans to the satisfaction of Waterford County Council that, where applicable, it has used sludge in agriculture in accordance with the Department of the Environment and Local Government Publication 'Code of good practice for the use of Biosolids in Agriculture Guidelines for Farmers', and, the Permit Holders statutory obligations, or, requirements under any other enactments or regulations.

REASON:	To clarify the scope of this permit.

#### **Condition 2: MANAGEMENT OF THE ACTIVITY**

- 2.1 Facility Management
  - 2.1.1 The Permit Holder 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 the FAS waste management training programme

(or equivalent agreed with Waterford County Council) within twelve months of appointment.

- 2.1.3 The Permit Holder 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 permit.
- 2.1.4 The Permit Holder shall issue a copy of this permit to all relevant personnel whose duties relate to any condition of this permit.
- 2.1.5 A copy of this permit shall be kept on the facility at all times.
- 2.1.6 The Permit Holder shall ensure that there is no unauthorised access to the site and shall make provisions to control access to the facility.
- 2.1.7 The Permit Holder shall ensure adequate steps are taken to prevent unauthorised fly-tipping at the facility.
- 2.1.8 Within six months of the date of grant of this Waste Facility Permit, the Permit Holder shall develop procedures for the following:
  - a) waste inspection procedures;
  - b) waste acceptance and handling procedures;
  - c) waste sampling, analysis and characterisation procedures;
  - d) requirements for the pre-treatment of wastes;
  - e) waste quarantine procedures:
  - f) waste rejection and notification procedures;
  - g) emergency response procedures, to address emergency situation which may originate at the facility,
  - h) other appropriate procedures and arrangements relating to the acceptance of waste.
- 2.1.9 The Permit Holder shall ensure that authorised staff of the Local Authority shall have unrestricted access to the site at all reasonable times, on production of identification if requested, for the purpose of their functions under the Waste Management Act 1996, as amended, including such inspections, monitoring and investigations as are deemed necessary by the Local Authority.
- 2.2 Environmental Management System (EMS)
  - 2.2.1 The Permit Holder shall establish and maintain an Environmental Management System (EMS) within three months of the date of grant of this permit. 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.

The management and reporting structure shall include, as a minimum, the following information:

- a) the names of all persons who are to provide the management and supervision of the waste activities authorised by the waste facility permit, 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.
- 2.2.2.2 Schedule of Environmental Objectives and Targets:

The Permit Holder 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 one year period as a minimum. In relation to waste recovery the schedule shall include an initial waste recovery target of waste throughput, as well as time frames for achieving higher recovery targets. The schedule shall be reviewed annually and amendments thereto notified to Waterford County Council for agreement as part of the Annual Environmental Report (AER) (see **Condition 8.4**).

#### 2.2.2.3 Environmental Management Programme (EMP)

The Permit Holder shall, not later than three months from the date of grant of this permit, submit to Waterford County Council 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 Permit Holder. It shall include:

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

The EMP shall be reviewed annually and amendments thereto notified to Waterford County Council 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 Waterford County Council 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 Waterford County Council.

#### 2.2.2.4 Documentation

The Permit Holder shall establish and maintain an environmental management documentation system, which shall be to the satisfaction of Waterford County Council.

2.2.2.5 Corrective Action

The Permit Holder shall establish procedures to ensure that corrective action is taken should the specified requirements of this permit not be complied with. The responsibility and authority for initiating further investigation and corrective action in the event of a reported nonconformity with this permit shall be defined.

#### 2.2.2.6 Awareness and Training

The Permit Holder 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 Permit Holder 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 Permit Holder 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 Permit Holder shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel.

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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. Specified Engineering Works

- 3.1.1. The Permit Holder shall submit proposals for all Specified Engineering Works, as defined in *Schedule C: Specified Engineering Works* of this Waste facility permit, to Waterford County Council 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 Waterford County Council.
- 3.1.2. 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. Facility Notice Board
  - 3.2.1. The Permit Holder 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.
  - 3.2.2. The Facility Notice Board shall clearly show:
    - a) the name and telephone number of the facility;
    - b) the normal hours of opening;
    - c) the name of the Waste Facility Permit Holder;
    - d) the Waste Facility Permit reference number;
    - e) an emergency out of hours contact telephone number; and
    - f) where environmental information relating to the facility can be obtained.

- 3.3. Facility Office
  - 3.3.1. The Permit Holder 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.
  - 3.3.2. The Permit Holder shall provide and maintain a working telephone and a method for the electronic transfer of information at the facility.
- 3.4. Facility Security
  - 3.4.1. Secure entrance gates and stock-proof fencing / hedgerows shall be installed and maintained at the entrance and around the perimeter of the facility.
  - 3.4.2. Entrance gates shall be locked shut when the facility is unsupervised.
  - 3.4.3. The Permit Holder shall remedy any defect in the gates, fencing and / or hedgerows 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, fencing and / or hedgerows shall be undertaken within three working days.
- 3.5. Facility Roads and Site Surfaces
  - 3.5.1. Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
  - 3.5.2. The facility entrance and hardstanding areas shall be appropriately paved and maintained in a fit and clean condition.
  - 3.5.3. The Permit Holder shall provide, and maintain an impermeable concrete surface in appropriate areas (e.g. oil storage, vehicle parking, quarantine area's) of the facility, the surfaces of the site shall be concreted and constructed to British Standard 8110 or an alternative as agreed by Waterford County Council.
- 3.6. Waste Inspection Area and Quarantine Area
  - 3.6.1. Designated Waste Inspection and Waste Quarantine shall be provided within the building and maintained at the facility. This area shall include a skip / receptacle for the storage of rejected waste.
  - 3.6.2. 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 of waste, as required.
  - 3.6.3. The designated Waste Inspection and Waste Quarantine Area's shall be clearly identified and segregated from each other.
  - 3.6.4. Drainage from the designated Waste Inspection Area and Waste Quarantine Area shall be treated as hazardous waste unless it can be demonstrated to be otherwise, and shall be diverted for collection and safe disposal.
- 3.7. Spill Collection

- 3.7.1. The Permit Holder shall have in storage an adequate supply of containment booms and/or suitable absorbent material including decanters and cleanser degreasers to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 3.8. Tank and Drum Storage Areas
  - 3.8.1. All tank and drum storage areas shall be rendered impervious to the materials stored therein. Bunds should be designed having regard to the Environmental Protection Agency guidelines: 'Storage and Transfer of Materials for Scheduled Activities' (2004).
  - 3.8.2. All tank and drum storage areas (including the waste oil storage area) shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
    - a) 110% of the capacity of the largest tank or drum within the bunded area; or
    - b) 25% of the total volume of substance, which could be stored within the bunded area.
  - 3.8.3. 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.
  - 3.8.4. All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
  - 3.8.5. All tanks, containers and drams shall be labelled to clearly indicate their contents.
- 3.9. Weighbridge and Wheel Cleaning
  - 3.9.1. The Permit Holder shall provide and maintain a weighbridge at the facility and all vehicles leaving the facility shall have their wheels cleaned, as required, to ensure that no process water or waste is carried off-site.
  - 3.9.2. The wheel cleaning shall take place within the facility, 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 cleaning area and disposed of appropriately.
- 3.10. Surface water management infrastructure shall be provided and maintained at the facility. A detailed drawing of this infrastructure shall be submitted to Waterford County Council within 3 months of date of issue of this permit. As a minimum, the infrastructure shall consist of the following:
  - 3.10.1. a separate rainwater collection and drainage system for all buildings on-site which shall include the diversion of all roof water and run-off from all non-contaminated impervious areas of the site;
  - 3.10.2. the system shall be designed so as no contaminated water may enter the surface water drainage system;
  - 3.10.3. the installation and maintenance of silt traps at the facility to ensure that all storm water discharges from the facility pass through a silt trap in advance, of

discharge;

- 3.10.4. the system may be designed so as rainwater may be diverted to the on-site water storage tanks for use in the process;
- 3.11. Compost Facility:

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:

- 3.11.1. Two waste composting areas (Sewage Sludge area & Biodegradable waste & Industrial Sludge area) and associated infrastructure at the location shown on the "Process Plan" received on 18<sup>th</sup> April 2011;
- 3.11.2. Waste acceptance / inspection and storage areas;
- 3.11.3. Curing and storage areas;
- 3.11.4. A waste quarantine area;
- 3.11.5. Air handling/ odour abatement equipment;
- 3.11.6. To provide for aerobic composting (indoor), the Permit Holder 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
- 3.11.7. While awaiting collection, mature compost shall be stored in areas protected against uncontrolled run-off and nuisance formation.
- 3.12. Process Water Management:

Effective Process Water Management infrastructure shall be provided and maintained at the facility in accordance with the Site Survey" drawing received on 18<sup>th</sup> April 2011. As a minimum, the infrastructure shall be capable of the following:

- 3.12.1. the collection of all process water and any contaminated water that may arise at the facility and drainage to enclosed on-site storage tanks/sumps;
- 3.12.2. the screening of all process water prior to entering any enclosed drain/pipe;
- 3.12.3. the maintenance of a freeboard of at least 0.5m on all process water storage tanks; and
- 3.12.4. facilitating the re-use of all process water within the composting process.
- 3.13. Groundwater Water
  - 3.13.1. The Permit Holder shall provide and maintain at least one groundwater monitoring point to allow for the sampling and analyses of groundwater as set out in *Schedule E: Control and Monitoring*.
  - 3.13.2. Groundwater monitoring well shall be constructed having regard to the guidance given in the Environmental Protection Agency's landfill manual "Landfill Monitoring".
  - 3.13.3. All wellheads, as shown on the "Monitoring Locations Portlaw" plan received on the 06<sup>th</sup> December 2010 with previous Waste Facility Permit Application WFP-WD-0003-01, shall be adequately protected to prevent contamination or physical damage.

3.14. Odour Control Infrastructure

Prior to the commencement of the waste activities at the facility, the Permit Holder shall provide and maintain the odour abatement system as outlined in attachments submitted with the waste facility permit application. The following additional measures shall be included

- 3.14.1. A system for the maintenance of integrity of the negative pressure system and biofiltration system shall be installed and maintained throughout the biowaste and biosolid reception and compost processing building(s) to ensure no significant escape of odours. A report which confirms the integrity of the negative pressure within the facility building(s) shall be submitted to the Council for its agreement within three months of the date of grant of this waste facility permit.
- 3.15. Continuous Monitoring System

Prior to commencement of the permitted activities 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: (a) temperature and oxygen content of the compost at all stages during its production.

- 3.16. Replacement Infrastructure: Monitoring infrastructure, which is damaged or proves to be unsuitable for its purpose shall be replaced as soon as possible but in any event within three months of it being damaged or recognised as being unsuitable.
- 3.17. The Permit Holder 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 Waterford County Council. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.18. The Permit Holder shall clearly label and provide safe and permanent access to all onsite sampling and monitoring points and to off-site points as required by Waterford County Council.
- 3.19. No alterations to the drainage system at the facility shall be undertaken without prior agreement of the Local Authority.
- 3.20. The Permit Holder shall provide adequate lighting to the facility.

REASON: To provide for appropriate infrastructure at the facility for the protection of the Environment.

## **Condition 4: MATERIALS ACCEPTANCE AND HANDLING:**

4.1. Recovery of waste on-site shall only take place in accordance with the conditions of this permit and in accordance with the appropriate National and European legislation and protocols.

- 4.2. Wastes to be accepted at the facility shall be confined to waste which is included in *Schedule A: Waste Acceptance* of this permit, or, wastes permitted in accordance with Condition 1.6 & 1.9 of this permit, as the case may be. The Permit Holder shall ensure that adequate steps are taken to prevent acceptance of any other waste types.
- 4.3. All waste arriving at the facility shall be subjected to the procedures developed in accordance with **Condition 2.1.8** of this permit. Materials other than those permitted shall be removed immediately to a dedicated waste quarantine area, which shall be separate from the other waste storage areas. Suspect waste not complying with the permit shall be recovered or disposed of at an alternative authorised facility.
- 4.4. All Biodegradable Wastes & Industrial Sludge shall be accepted & processed in a separate section of Compost Building to the Sewage Sludge waste material. Biodegradable waste material shall only be composted & stored in Bays 10, 11 & 12 of the Compost Building as outlined in the waste acceptance procedures submitted on the 18<sup>th</sup> April 2011.
- 4.5. Waste Acceptance and Characterisation Procedures
  - 4.5.1. The Permit Holder shall only accept and handle wastes as indicated in the detailed written procedures submitted on the 18<sup>th</sup> April 2011with this waste facility permit application. These procedures shall also provide for the preclearance, maximum contamination rates and characterisation of sludges and other non-municipal waste types proposed to be accepted at the facility. These procedures shall be updated on a regular basis.
  - 4.5.2. 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 Permit Holder for all active customers and for a two year period following termination of permit / customer agreements.
  - 4.5.3. Waste arriving at the facility shall be, certified (as to source), weighed, documented and directed to the waste processing building(s) area. Each load of waste arriving at the facility shall be inspected upon tipping within the designated waste inspection area at this facility. Only after such inspections shall the waste be processed for recovery.
  - 4.5.4. The Permit Holder shall ensure that incoming waste (and intermediate compost) is stored in a manner to prevent nuisance from odour, dust, vermin, flies, birds, etc.
  - 4.5.5. All waste processing shall occur inside an appropriate building, unless otherwise agreed with Waterford County Council.
  - 4.5.6. Any waste deemed unsuitable for processing at the facility and / or in contravention of this permit 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 or flies, and, any other nuisance or objectionable condition.

- 4.6. The loading and unloading of waste material shall be carried out in designated areas protected against spillage and leachate run-off. Any quarantined waste, while awaiting transfer off-site, shall be stored in designated waste quarantine areas, which shall be protected against spillage and leachate run-off.
- 4.7. Off-site Disposal and Recovery
  - 4.7.1. Waste transferred off-site for recycling, recovery or disposal shall only be conveyed by a waste collector appropriately authorised, as the case may be, in accordance with:
    - the Waste Management Act, 1996, as amended; and
    - the Waste Management (Collection Permit) Regulations, 2001, as amended; or
    - the Waste Management (Collection Permit) Regulations, 2007, as amended; or
    - the exemptions available from the requirement to hold a waste collection permit.
  - 4.7.2. All waste transferred off-site for recycling, recovery or disposal shall only be transferred to a facility with an appropriate Waste License, or, Waste Facility Permit, or, Certificate of Registration authorising the acceptance of such waste by an authorised collector.
  - 4.7.3. All wastes transferred off-site for recycling, recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment, and in accordance with the appropriate National and European legislation and protocols.
- 4.8. Operational Controls
  - 4.8.1. Gates shall be locked shut when the facility is unsupervised.
  - 4.8.2. The Permit Holder shall provide and use adequate lighting during the operation of the facility in hours of darkness or failing light.
  - 4.8.3. Fuel shall be stored only at appropriately bunded locations within the facility.
  - 4.8.4. The Permit Holder shall assign and clearly label each storage receptacle / area at the facility to indicate its contents.
  - 4.8.5. All waste handling / processing plant shall be cleared of all waste and washed down on a weekly basis.
  - 4.8.6. 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 with Waterford County Council.
  - 4.8.7. Any biowaste accepted at the facility for composting or biostabilisation (other than bulking agents, e.g. uncontaminated woodchip) shall be processed and put into the aerated composting area within twelve hours of its arrival at the facility.

- 4.8.8. The Permit Holder 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.
- 4.8.9. The Permit Holder 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 with Waterford County Council.
- 4.8.10. Any loose litter accumulated within the site and its environs shall be removed daily and appropriately disposed of.
- 4.8.11. The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility.
- 4.8.12. All biowaste shall be transported into and out of the facility in closed containers.
- 4.9. Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including inter alia waste loading vehicles) shall be provided on the following basis:-
  - 4.9.1. 100% duty capacity;
  - 4.9.2. 20% standby capacity available on a routine basis;
  - 4.9.3. Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipments.
  - 4.9.4. 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.
  - 4.9.5. Where biowaste is to be stored at the facility the Permit Holder shall ensure that an enclosed tank is provided for storage of biowaste.
- 4.10. Any waste placed on or in the vicinity of the facility other than in accordance with the requirements of the permit shall be removed by the Permit Holder immediately such waste is discovered.
- 4.11. The Permit Holder shall take adequate steps to ensure that no material can fall or be blown from vehicles entering and exiting the site and shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered. Any such material or debris deposited onto the road network in the vicinity of the facility shall be removed without delay.
- 4.12. Compost
  - 4.12.1. In order not to be considered a waste, the compost produced by the facility shall, unless otherwise agreed with Waterford County Council, comply with the quality standards established in *Schedule F: Standards for Compost Quality and Bio-Stabilisation*, of this permit. Analysis of the compost shall be in accordance with the requirements of that *Schedule F*.

- 4.12.2. Compost not meeting the above standard will be regarded as waste and records shall be kept of such waste. Unless otherwise agreed with Waterford County Council, 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.
- 4.12.3. No waste shall be deposited outside the biodegradable waste composting area without the prior agreement of Waterford County Council.
- 4.12.4. If requested by Waterford County Council, the Permit Holder shall perform the appropriate testing on the compost end product.

REASON: To provide for the acceptance and management of wastes authorised under this permit and to ensure the protection of the environment

#### **Condition 5: EMISSIONS:**

- 5.1 No specified emission from the facility shall exceed the emission limit values set out in *Schedule D: Emission Limits* of this Waste Facility Permit. There shall be no other emissions of environmental significance.
- 5.2 The Permit Holder shall ensure that the activities shall be carried out in a manner such that emissions, including odours, do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 5.3 Unless otherwise agreed in writing with Waterford County Council no trade effluent, leachate and / or contaminated storm water shall be discharged to groundwater, surface water drains or surface water courses.
- 5.4 The Permit Holder shall ensure that all or any of the following: Vermin; Odours; Birds, Flies; Noise; Dust; Grit; and, Litter 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 Permit Holder to control or prevent any such impairment / interference shall not cause environmental pollution.
- 5.5 There shall be no direct emission of polluting matter to atmosphere or to groundwater.
- 5.6 Noise from the facility shall not give rise to sound pressure levels (Leq, T) measured at noise sensitive locations, which exceed the limit values.
- 5.7 Dust from the activity shall not give rise to deposition levels at the facility boundary which exceed the limit value.
- 5.8 Emissions to Surface Water
  - 5.8.1 The trigger levels (the achievement or exceedance of a parameter level which requires certain actions to be taken by the Permit Holder) for surface water discharges from the facility measured at monitoring point SW-1 are:(a) BOD 25mg/l (b) Suspended Solids 35 mg/l.
  - 5.8.2 No process water or contaminated surface water shall be discharged to surface waters.

- 5.8.3 Following the completion of the surface water management infrastructure there shall only be one surface water discharge from the facility, i.e. SW-1.
- 5.9 Emission limit values for emissions to atmosphere in this permit shall be interpreted in the following way:-
  - 5.9.1 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.
  - 5.9.2 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.

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

## Condition 6: NUISANCES, EMISSIONS AND ENVIRONMENTAL CONTROL and MONITORING:

- 6.1 The Permit Holder shall carry out such monitoring (including sampling, analyses, measurements, examinations, maintenance, etc) and at such locations and frequencies as set out in *Schedule Ese Control and Monitoring* of this Waste Facility Permit. Unless otherwise specified by this Waste Facility Permit, all environmental monitoring shall commence no later than three months after the date of grant of this Waste Facility Permit.
- 6.2 The Permit Holder shall ensure that the recovery activities at the facility shall be carried on in such a manner as not to have an adverse affect on the general environment or human health.
- 6.3 The Permit Holder shall take adequate precautions to prevent undue noise, odour, dust, grit, untidiness and other nuisances during the course of the activities on site, which would result in a significant impairment of or interference with, amenities or the environment beyond the business premises boundary. If unacceptable levels occur, as defined by the relevant standards, the Permit Holder shall abide by Waterford County Council's abatement requirements, which may include immediate cessation of operations.
- 6.4 Nuisance Monitoring.
  - 6.4.1 The Permit Holder shall, at weekly intervals, inspect the facility and its perimeter for nuisance caused by vermin, birds, flies, mud, dust or odour.

- 6.5 Bioaerosol Monitoring
  - 6.5.1 The Permit Holder shall carry out the bioaerosol monitoring in accordance with *Schedule E: Control & Monitoring at the outlined locations A1, A2, A3 & A4*, of this permit.
  - 6.5.2 The Permit Holder shall submit a detailed drawing identifying air monitoring locations A1, A2, A3 & A4 to Waterford County Council within three months of date of issue of this waste facility permit.
- 6.6 Monitoring Locations
  - 6.6.1 Within six months of the date of issue of the permitted activities, the Permit Holder shall submit to Waterford County Council a Site Layout Plan drawing to a scale of not less than 1:500 showing all the monitoring locations that are stipulated in this permit 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.
- 6.7 Compost Quality
  - 6.7.1 Compost quality monitoring shall be undertaken as set out in *Schedule F: Compost Quality and Bio-Stabilisation,* of this permit.
  - 6.7.2 Any compost not meeting any standard as per *Schedule F: Compost Quality and Bio-Stabilisation,* of this permit may be reused in the process or handled as a waste and the details shall be recorded as per *Condition 7.5 Recovery Records* condition.
  - 6.7.3 The Permit Holder shall have regard to any future guidance Waterford County Council may issue in relation to compost and bio-stabilised waste standards.
- 6.8 All building structures, tanks, pipelines and containers shall be maintained impervious to the materials processed, carried by or stored therein. The integrity and water tightness of all building structures, tanks, pipelines and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the Permit Holder at least once every three years and the results reported to the Local Authority on each occasion. This testing shall be carried out in accordance with any guidance published by the Environmental Protection Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the Permit Holder.
- 6.9 Authorised staff of Waterford County Council shall have access to the site at all reasonable times, for the purpose of their functions under the Waste Management Act 1996, as amended, including such inspections, monitoring and investigations as are deemed necessary by the Council.
- 6.10 If so requested by Waterford County Council, the Permit Holder shall, at his own expense, carry out such further investigations and monitoring of the facility as required by the Council. The scope, detail, and programme, including report structure and reporting schedule, for any such investigations and monitoring shall be in accordance with any written instructions issued by the Council.
- 6.11 In the event that any monitoring or observations indicate that an incident of pollution of waters in the vicinity of the site, or a discharge of waste or leachate onto adjoining

lands, has or may have taken place, acceptance of waste onto the facility shall cease, and remedial measures shall be carried out immediately as directed by the Council.

- 6.12 Sampling and analysis of all pollutants as well as reference measurement methods to calibrate automated measurement systems shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards which will ensure the provision of data of an equivalent scientific quality shall apply.
- 6.13 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.
- 6.14 The Permit Holder shall ensure that groundwater monitoring well sampling equipment is available / installed on-site and is fit for purpose at all times.
- 6.15 All treatment / abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer, supplier or installer.
- 6.16 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this permit, may be amended with the agreement of Waterford County Council following evaluation of test results.
- 6.17 The drainage system (i.e., gullies, manholes any visible drainage conduits and such other aspects as may be agreed) and bunds sitt traps, etc 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, etc shall be properly maintained at all times. of copying
- 6.18 Noise Control
  - There shall be no carly audible tonal component or impulsive component in 6.18.1 the noise emission from the activities at any noise sensitive location in the immediate vicinity of the facility.
  - The Permit Holder shall carry out a noise survey of the site operations 6.18.2 annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Environmental Protection Agency.
- 6.19 Dust Control
  - In dry weather, site roads and any other areas used by vehicles shall be 6.19.1 sprayed with water as and when required to minimise airborne dust nuisance.
- 6.20 Odour Control
  - 6.20.1 The Permit Holder shall provide and maintain adequate measures for the control of odour emissions. Such measures shall at a minimum include the installation and maintenance of an odour management system.
  - The Permit Holder shall perform and maintain weekly odour monitoring 6.20.2 surveys at the facility and also at odour sensitive locations outside the facility boundary in close proximity. A map of these odour sensitive locations shall be

submitted to Waterford County Council within 3 months of date of issue of this permit. The Environment Protection Agency's Odour Assessment Field Record Sheet shall be used on all site surveys. A record of these odour monitoring surveys shall be maintained on-site for inspection by Waterford County Council at any time.

**REASON**: To provide for the control of nuisances and emissions from the facility, and to provide for the protection of the environment

#### **Condition 7: RECORD KEEPING**

- 7.1 The Permit Holder shall keep the following documents at the facility office:
  - the current waste facility permit relating to the facility, including any a) amendments thereto;
  - the current EMS for the facility; b)
  - the previous year's AER for the facility; c)
  - all written procedures produced by the Permit Holder which relate to the d) permitted activities, including those set down in Condition 2.1.8 of this permit,
  - a copy of the site layout plan, to a scale of not less than 1:500, clearly e) indicating:
    - (i) the boundary of the facility;
    - (ii) ordnance survey sheet reference number(s);

    - (iv) orientation of north point; and x<sup>2</sup>
      (v) the location of ....
    - (v) the location of all emission, monitoring and sampling points pertaining to the facility,

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- up to date Standard Operational Procedures for all processes, plant and f) equipment necessary to give effect to this permit or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment. C<sup>o</sup>
- 7.2 General Written Records

The Permit Holder shall maintain a record of the following:

- all training undertaken by facility staff; a)
- results from all integrity tests of bunds and other structures and any b) maintenance or remedial work arising from them;
- details of all nuisance inspections; c)
- the names and qualifications of all persons who carry out all sampling and d) monitoring as required by this permit and who carry out the interpretation of the results of such sampling and monitoring; and
- e) persons / personnel in receipt of a copy of this permit whose duties relate to any condition of this permit.
- 7.3 **Complaint Records**

The Permit Holder shall maintain a written record and register of all complaints relating to the operation of the waste activity at the facility. Each such record shall give details of the following:

- date and time of the complaint; a)
- the name of the complainant; b)
- c) details of the nature of the complaint;

- actions taken on foot of the complaint and the results of such actions; and, d)
- the response made to each complainant. e)

#### Waste Records 7.4

A written record shall be kept for each load of waste arriving at and / or departing from the facility. The following shall be recorded:

- the time and date of arrival / departure; a)
- b) the name of the waste carrier;
- the carriers vehicle registration number(s); c)
- the carriers waste collection permit number(s): d)
- the source of origin of the waste received; e)
- details of any rejected consignments; f)
- details of any approved mixing of waste; g)
- h) the destination of the waste streams departing the site (facility name and waste licence/waste facility permit/certificate of registration number, as appropriate);
- the quantity and composition of waste accepted / dispatched; i)
- a description of the waste including European Waste Catalogue code(s) and i) description(s) (if recovered or rejected waste, the specific nature of the waste, details of the date of occurrence and the facility to which they were removed); and
- k) the name and signature of the person checking the waste arriving at and/or waste departing from the facility.

The records of waste departing the site include an consignment of trade effluent, Purposes 21 required leachate and / or contaminated storm water removed from the facility.

**Recovery Records** 7.5

> The Permit Holder shall as part of the Annual Environmental Report for the facility 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 receivery / treatment of biowaste, and, (ii) the biosolids arising from the facility that are subsequently used in agriculture.

7.6 Record of infestations at the facility

> 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) details of any infestations;
- the date and time during which baiting with rodenticide or spraying of (ii) insecticide is carried out:
- details of the rodenticide(s) and insecticide(s) used; (ii)
- mode, frequency, location and quantity of application; (iii)
- measures to contain sprays within the facility boundary, and, (iv)
- rodenticide / insecticide contractor details, logs, and, site inspection reports; (vii)
- The Permit Holder shall record all sampling, analyses, measurements, examinations, 7.7 calibrations and maintenance carried out in accordance with the requirements of this permit and all other such monitoring which relates to the environmental performance of the facility.
- 7.8 The Permit Holder shall compile and maintain specified records in a specified format

agreed with the Local Authority for a period of not less than 7 years in relation to the activity to which the waste facility permit relates of:

- a) the types and quantities of waste dealt with in the course of business (including European Waste Catalogue Code(s) and description(s) pursuant to Commission Decision 2001/118/EC of 16th January 2001 or subsequent amendments); and
- b) the treatment, recovery or disposal activities to which the waste is subject, including the compilation of commercial documentation for all collected waste deposited at the facility.
- 7.9 The Permit Holder shall make all records maintained at the facility available to staff of Waterford County Council at all reasonable times, and shall provide any relevant information when so requested by an authorised officer of the Council.
- 7.10 Where compost / digestate product contains sewage sludge the applicant shall retain the following records on site, in order to comply with the tonnage requirements of the planning permission & waste facility permit legislation:
  - 7.10.1 A copy of the notification to Waterford County Council as required under Article 8 (1) and Article 8 (3) of SI 148 of 1998, Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998.
  - 7.10.2 This shall include *inter alia*; sludge analysis, records of sludge quantities, sludge properties, treatment type and location name of the recipient of the sludge (sludge meaning compost / digestate containing treated sludge)

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

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## Condition 8: NOTIFICATION & REPORTS

- 8.1 Unless otherwise agreed by Waterford County Council, all written communication, reports and notifications submitted to Waterford County Council shall:
  - a) be sent to:

Environment Section Waterford County Council Civic Offices Davitt's Quay Dungarvan Co. Waterford Tel. 058 22000 Fax. 058 20889

- b) be formatted in accordance with any written instruction or guidance issued by Waterford County Council;
- c) include whatever information as is specified in writing by Waterford County Council;
- d) be identified by the Permit Holders name and unique waste facility permit register reference number, and, be correctly dated;
- e) be submitted in accordance to the relevant reporting frequencies specified by this Waste facility permit, such as in *Schedule G: Recording and Reporting*

to the County Council of this Waste facility permit;

- f) be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and
- g) be transferred electronically to Waterford County Council's computer system if required by Waterford County Council.
- 8.2 In the event of an incident occurring on the facility, the Permit Holder shall:
  - a) notify Waterford County Council as soon as practicable and in any case not later than 10.00am 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) to g) inclusive, to Waterford County Council as soon as practicable and in any case within five working days after the occurrence of any incident; and
  - c) in the event of any incident which relates to discharges to water, notify the Southern Regional Fisheries Board as soon as practicable and in any case not later than 10:00am 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 Permit Holder shall forward a written report of those actions to Waterford County Council as soon as practicable and no later than ten days after the initiation of those actions.
- 8.3 Every plan, programme or proposal submitted to Waterford County Council for its agreement pursuant to any Condition of this Waste Facility Permit shall include a proposed timescale for its implementation. Waterford County Council 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 Permit Holder in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by Waterford County Council but shall not be undertaken without the agreement of Waterford County Council. Every such plan, programme or proposal agreed by Waterford County Council shall be covered by the conditions of this waste facility permit.
- 8.4 Annual Environmental Report
  - 8.4.1 The Permit Holder shall submit to Waterford County Council an Annual Environmental Report (AER). The AER shall contain summary information in relation to waste activities in the preceding calendar year or part thereof, as the case may be.
  - 8.4.2 The report shall be furnished to Waterford County Council on or before the  $28^{\text{th}}$  February of each year.
  - 8.4.3 The AER, which shall be to the satisfaction of Waterford County Council, shall include as a minimum the information specified in *Schedule H: Content of Annual Environmental Report* of this Waste Facility Permit and shall be prepared in accordance with any relevant written guidance issued by Waterford County Council.
- 8.5 The Permit Holder shall immediately notify Waterford County Council by telephone or fax of any complaint received in relation to the facility, and, full details of the complaint shall be forwarded in writing to the Council within one working day of receipt of the complaint.

- 8.6 Within one month of waste activities ceasing on the site, the Permit Holder shall submit a report to Waterford County Council, which shall include the information contained in the registers described in this Permit, and details of any impositions or convictions imposed under the Waste management Act, 1996 as amended. In addition, the Permit Holder shall include in the report a written summery of compliance with all of the conditions attached to the permit.
- 8.7 The Permit Holder shall notify Waterford County Council within fifteen working days of the occurrence of the following matters except where such disclosure is prohibited by Stock Exchange rules:
  - a) Where the operator is a registered company:
    - (i) any change in the operator's trading name, registered name or registered office address
    - (ii) any change to particulars of the operator's ultimate holding company (including details of an ultimate holding company where an operator has become a subsidiary); and
    - (iii) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
  - (b) Where the operator is a corporate body other than a registered company:
    - (i) any change in the operator's name or address; and
    - (ii) any steps taken with a view to the dissolution of the operator
  - (c) In any other case:
    - (i) the death of any of the named operator(s) (where the operator consists of more than one named individual); and
    - (ii) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership
- 8.8 The Permit Holder shall notify Waterford County Council within five working days of:
  - a) the imposition of any requirement on the Permit Holder by order under the Waste Management Act 1996, as amended, or
  - b) any conviction of the Permit Holder for an offence prescribed under the Waste Management Act 1996, as amended.

REASON: To provide for the proper report and notification to Waterford County Council

#### Condition 9: CONTINGINCY ARRANGEMENTS

- 9.1. In the event of an incident the Permit Holder 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) identify and put in place measures to avoid recurrence of the incident; and
  - g) identify and put in place any other appropriate remedial action.

The Permit Holder shall make a record of any such incident in a register to be maintained at the facility.

- 9.2. The Permit Holder shall within six months of the date of grant of this Waste Facility Permit, submit a written Emergency Response Procedure (ERP) to Waterford County Council for 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. In preparing the ERP the Permit Holder shall consult the Fire Authority during this assessment.
- 9.3. The Permit Holder shall within 3 months of the date of grant of the Waste Facility Permit ensure that a documented Accident Prevention Policy is in place which will address the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. The Permit Holder shall ensure that this procedure shall be reviewed annually by a competent person and updated as necessary. The Permit Holder shall maintain written proof of all such reviews and shall make them available to the Local Authority on request.

#### 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. 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. The Permit Holder shall ensure that adequate fire extinguishers, absorbent material, and, emergency response equipment shall be maintained at the facility.

REASON: To provide for the protection of the environment by control of fire risk and chemical spills.

## Condition 10: **RESTORATION AND AFTERCARE**

- 10.1 In the event of this Waste Facility Permit being surrendered, revoked, or, a new or reviewed Permit not being issued on the expiration of this Permit, whether by way of the Permit Holder not applying for a new or reviewed Permit or the Council not granting a new or reviewed Permit, the Permit Holder shall immediately cease the recovery of waste at the facility.
- 10.2 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 permitted activity, the Permit Holder shall, to the satisfaction of Waterford County Council, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.3 A proposal for a Decommissioning and Aftercare Plan for the facility shall be submitted to the Council within twelve months of the date of issue of this waste facility permit. The plan shall include the following, as a minimum:
  - (i) 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; and
- (iv) where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan.

The Permit Holder shall update the plan when required by the Council.

10.4 The Permit Holder shall carry out such tests, investigation or submit certification, as requested by Waterford County Council, to confirm that there is no risk to the environment.

#### **REASON:** To provide for the restoration and aftercare of the facility

#### **Condition 11: FINANCIAL PROVISIONS:**

- 11.1 Appropriate levels of insurance shall be provided for the activity. A copy of the insurances shall be available on request. Both the Public Liability and the Employer's Liability insurance shall be in the name of the permit holder but extended to indemnify Waterford County Council.
  11.2 The permit holder shall pay such annual contributions to the Permitting Authority as
- 11.2 The permit holder shall pay such annual contributions to the Permitting Authority as it considers necessary to defray such costs as may be incurred by the Authority in inspecting, monitoring or otherwise, performing any functions in relation to the activity concerned, in accordance with A.18 (4)(c) of the Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007 as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations S.I. No. 86 of 2008.
- 11.3 Notwithstanding the above, the Permitting Authority may require such additional contributions as it considers necessary in accordance with A.44 (2) of the Waste Management (Facility Permit and Registration) Regulations, S.I. No. 821 of 2007 as amended by the Waste Management (Facility Permit and Registration) (Amendment) Regulations S.I. No. 86 of 2008 towards the costs of any additional investigations, inspections, analyses or sampling of waste carried out or caused to be carried out in excess of the annual fee.
- 11.4 An annual monitoring fee of €3,000 shall be made payable to Waterford County Council. This payment shall fall due on 1<sup>st</sup> January of each year subsequent to the date of issue of the permit unless written notification is given to and approved by Waterford County Council before 31<sup>st</sup> January each year that the permit will not be used during that calendar year. Please see payments required for the lifetime of the permit below:

Year	Annual Monitoring Fee (€)
2011	1,500
2012	3,000
2013	3,000

2014	3,000
2015	3,000
2016	1,500

# 11.5 The contribution in the current year shall be $\notin 1,500$ . (Calculated on Proportion of year remaining). This shall be payable within 1 month from the date of issue of the permit.

#### 11.6 Financial Provision

- 11.6.1 In operating the waste activity at the site which is the subject of this waste facility permit (including facility restoration and aftercare), the Permit Holder shall obtain and maintain a policy of insurance as follows:
  - a) Policy of insurance in the name of the Permit Holder in respect of any liability on the Permit Holders part to pay any damages or costs on account of injury to persons or property arising from the activities concerned and for remedial actions following anticipated events or accidents / incidents, as may be associated with the carrying on of the waste activity at the facility,
  - b) The policy of insurance shall be extended to indemnify Waterford County Council.
  - c) The Permit Holder must submit details of the above insurance to the Waterford County Council for approval, within 2 months of the date of issue of this permit.

A valid policy of insurance shall be submitted with the Annual Environmental Report (AER).

11.6.2 The Permit Holder, shall ensure that sufficient financial resources are available to cover unknown environmental liabilities that may occur during the operating life of the facility. The level of financial provision for unknown environmental liabilities shall be calculated using the Environmental Protection Agency guidance document on 'Environmental Liability Risk Assessment, Residuals Management Plans and Financial Provision', 2006.

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

# **SCHEDULE A: Waste Acceptance, Quantities and Processes**

#### A.1 Waste Acceptance

Only the biodegradable wastes listed in *Table A.1* are acceptable for composting / recovery at the facility, unless the prior agreement of Waterford County Council is obtained, or, if appropriate, a review of the permit by Waterford County Council is complete.

Table A.1: Waste Categories

The approved list of wastes in the above Table A.1 Waste Categories 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. Prior to the acceptance of any waste comprising /containing Animal By-Products the Permit Holder shall comply with Condition 1.16 of this permit.

#### A.2 Waste Quantities

Class 8 - The reception, storage and biological treatment of biowaste at a facility where

(a) The maximum amount of compost, biowaste and digestate held at the facility shall not exceed 6,000 cubic metres at any time, and,

(b) the annual intake shall not exceed 10,000 tonnes.

#### A.3 Waste Processes

The following waste related processes are authorised:

- Composting
- Mixing / blending of biodegradable wastes
- Storage of Class 1 Compost, Class 2 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 Waterford County Council.

## **SCHEDULE B: Provisions of the Community Acts**

Council Directive 75/439/EEC of 16 June 1975 (O.J. No. L 194/23 of 25 July 1975) on the disposal of waste oils, as amended by Council Directive 87/101/EEC of 22 December 1986 (O.J. No. L 42/43 of 12 February 1987).

Council Directive 75/442/EEC of 15 July 1975 on waste (O.J. No. L 194/39 of 25 July 1975), as amended by Council Directive 91/156/EEC of 18 March 1991 (O.J. No. L 78/32 of 26 March 1991) and consolidated under Directive 2006/12/EC of the European Parliament and the Council of 5 April 2006 on waste (O.J. No. L114/9 of 27 April 2006).

Directive 2006/11/EC of 15 February 2006 of the European Parliament and of the Council on pollution caused by certain dangerous substances discharged into the aquatic environment of the community (O.J. No. L64/52 of 4 March 2006)

Directive 2006/118/EC of 12 December 2006 of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration (O.J. No. L372/19 of 27 December 2006)

Council Directive 87/217/EEC of 19 March 1987 on the prevention and reduction of environmental pollution by asbestos (O.L. No. L85/40 of 28 March 1987)

Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (O.J. No. L 375/1 of 31 December 1991)

European Parliament and Council Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy (O.J. No. L 327/1 of 22 December 2000)

Council Directive 91/689/EEC of 12 December 1991 on hazardous waste (O.J. No. L 377/20 of 31 December 1991).

Directive 2002/96/EC of the European Parliament and of the Council of 27January 2003 on waste electrical and electronic equipment, (O.J.No.L37/24, 13 February 2003), as amended by Directive 2003/108/EC of the European Parliament and of the Council of 8 December 2003 (O.J. No. L 345/106, 31 December 2003).

Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste (O.J. No. L365/10 of 31 December 1994), as amended by Directive 2004/12/EC of the European Parliament and of the Council of 11 February 2004 on packaging and packaging waste (O.J. No. L47/26 of 18 February 2004)

Directive 2000/53/EC of the European Parliament and Council of 18 September 2000 on end of life vehicles (O.J. No.L269/34, 21 October 2000) as amended by Council Decision 2005/673/EC of 20 September 2005

Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (O.J. No. L182/1 16 July 1999).

Regulation (EC) No. 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer (O.J. No. L244/1 of 29 September 2000), as

amended by Council Regulations (EC) Nos. 2038/2000 (O.J. No. L244/25 of 29 September 2000), 2039/2000 (O.J. No. L244/26 of 29 September 2000), 1804/2003 (O.J. No. L265/1 of 16 October 2003), Commission Regulation (EC) No. 2077/2004 (O.J. No. L359/28 of 4 December 2004), Commission Regulation (EC) No. 29/2006 (O.J. No. L6/27 of 11 January 2006) and Commission Regulation (EC) No. 1784/2006 of 4 December 2006 (O.J. No. L337/3 of 5 December 2006)

Regulation (EC) No. 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases (O.J. No. L161/1 of 14 June 2006) Directive 2006/66/EC of 6 September 2006 of the European Parliament and the Council on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (O.J. No. L 266/49 of 26 September 2006)

Council Directive 91/157/EEC of 18 March 1991 on batteries and accumulators containing certain dangerous substances (O.J. No. L078/38 of 26 March 1991) as amended by Commission Directive 93/86/EEC of 4 October 1993 (O.J. No. L264/51 of 23 October 1993) and by Commission Directive 98/101/EC of 22 December 1998 (O.J. No. L1/1 of 5 January 1999)

Regulation (EC) No 2150/2002 of the European Parliament and of the Council of 25 November 2002 on waste statistics (O.J. No. L332/1 of 9 December 2002)

Regulation (EC) No 850/2004 of the European Parliament and the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC (O.J. No. L229/5 of 29 June 2004) as amended by Council Regulation (EC) No. 1195/2006 (O.J No. L55/1 of 23 January 2007) and Council Regulation (EC) No. 172/2007 O.J. No. L272/19, 27 December 2006 (O.J. No. L217/1, 8 August 2006)

Regulation (EC) No. 1774/2002 of the European Parkament and of the Council of 3 October 2002 laying down health rules concerning animal by products not intended for human consumption, as amended by Commission Regulation (EC) No. 808/2003 of 12 May 2003 (O.J. No. L117/1 of 13 May 2003)

Council Directive 79/409/EEC of 2 April 999 on the conservation of wild birds (O.J. No. L103/1 of 25 April 1979)

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (O.J. No. L 206/7 of 22 July 1992)

Council Directive 80/68/EEC of 7 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances

Directive 2006/118/EC of 12 December 2006 of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration

# **SCHEDULE C: Specified Engineering Works**

Installation of waste quarantine area

Any other works notified in writing by Waterford County Council.

# **SCHEDULE D: Emission Limits**

D.1 Noise Emission: (Measured at the monitoring points indicated in Table E.1.1).

Day dB(A) LAeq(30 minutes) <sup>Note 1</sup>	Night dB(A) LAeq(30 minutes) Note 1
55	45

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.

#### D.2 Dust Emission: (Measured at the monitoring point indicated in Table.E.1.1).

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

# **D.3 Emission Limit values for Biofilters:** (Measured at the monitoring point indicated in Table.E.1.1).

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

**D.4 Other Emissions:** There shall be no emission of environmental significance to air, surface-water or groundwater.

# **SCHEDULE E: Control and Monitoring**

E.1 Monitoring Locations Monitoring locations shall be those as set out in Table E.1.1

**Table E.1.1 Monitoring Locations** 

Parameter	Location
Noise	N 1, N 2, N3, N4 & NS 1
Dust	D 1, D 2, D 3 & D 4
Air / Odour	A 1,A 2, A3, A4 & OS 1, OS 2, OS 3
Surface Water	SW 1
Ground Water	GW 1

#### E.2 Noise Monitoring

# Table E.2.1 Noise Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method / Technique
L(A) <sub>EQ</sub> [30 minutes]	a to	
$L(A)_{10}$ [30 minutes] $F_{00}^{(1)}$	Appuelly	Standard Method
L(A) <sub>90</sub> [30 minutes]	Annually	Note 1
Frequency Analysis (1/3 Octave band analysis)		

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

#### E.3 Dust Monitoring

#### Table E.3.1 Dust Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method / Technique
Dust Deposition (mg/m²/day)	Annually	Standard Method

Note 1: "Bergerhoff Method (German Standard VDI Method 2119 Part 2:1972)."

#### E.4 Bioaerosol Monitoring

 Table E.4.1 Bioaerosol Monitoring Frequency and Technique at A3 & A4 (monitoring locations within the facility boundary)

Parameter	Monitoring Frequency	Analysis Method / Technique
Dust (mg/m <sup>2</sup> /day)	Annually Note 1	Standard Method Note1
Odour	Quarterly Note 3	See Note 3
Bacteria	Annually	Grab sample Note4
Aspergillus fumigatus	Annually	Grab sample Note 4
$PM_{10}(\mu g/m^3)$	Annually	See Note 5

**Note 1:** Twice during the period May to September, or as otherwise agreed in writing with Waterford County Council **Note 2**: "Bergerhoff Method (German Standard VDI Method 2119 Part 2:1972).".

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 UK 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 to be agreed with Waterford County Council.

#### E.5 Air & Odour Monitoring

Table E.5.1 Air & Odour Monitoring Frequency and Tech	mique at Biofilters A 1 & A 2
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Parameter	Monitoring S	<sup>ANA</sup> Analysis Method / Technique <sup>Note 1</sup>
Bed MediaOdour assessmentNote 2Condition and depth of biofilterMoisture contentpHAmmoniaTotal viable countsConsent of the ph	Daily Daily Annually Annually Annually Annually Annually	Subjective Inspection Visual Inspection Standard method pH probe Standard method Standard method
Inlet and Outlet Gas		
Ammonia	Annually	Standard method
Hydrogen Sulphide	Annually	Standard method
Mercaptans	Annually	Standard method
Amines	Annually	Standard method

**Note 1**: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 with the permitting authority 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.

#### **E.6 Composting Processes Monitoring**

Parameter	Monitoring Frequency	Monitoring equipment / method
Aerated static piles		
Temperature vs. time	Continuous	Temperature probe / recorder
Oxygen Content	Daily	Oxygen Probe with recorder
Moisture	Daily	Subjective by operator
Compost Maturation (curing)		
piles		
Temperature	Daily	Temperature probe
Moisture	Daily	Subjective by operator
Compost storage piles		
Temperature	Weekly	Temperature probe

#### Table E.6.1 Composting Processes Monitoring Parameter, Frequency and Method

#### **E.7 Surface Water Monitoring**

Parameter Note1	Monitoring	Analysis Method/Technique
	Frequency	at 1150
Visual	Weekly	Not Applicable
Ammonical Nitrogen	Annually M	SE / Colorimetry
BOD	Annuall	Electromentry / Titrimetry with
	Purpequit	nitrification inhibitor
Chloride	Annually	Colorimetry / Ion Chromatography
Electrical Conductivity	Annually	Electrometry
pH	🔨 Annually	Electrometry
Total Suspended Solids	§ Annually	Gravimetry
Coliforms (total, faecal)	Annually	Membrane filtration of MPN
Con		referenced procedures

**Note 1**: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 with the permitting authority in advance.

#### E.8 Ground Water Monitoring

#### Table E.4.1 Ground Water Monitoring Parameter, Frequency and Method

Parameter Note 1	Monitoring	Analysis Method/Technique
	Frequency	
Groundwater level	Annually	Not Applicable
Ammonical Nitrogen	Annually	ISE / Colorimetry
Chloride	Annually	Colorimetry / Ion Chromatography
Electrical Conductivity	Annually	Electrometry
pH	Annually	Electrometry
Coliforms (total, faecal)	Annually	Membrane filtration of MPN
		referenced procedures

**Note 1**: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 with the permitting authority in advance.

# **SCHEDULE F: Compost Quality and Bio-Stabilization**

Compost shall be deemed unsatisfactory if more than 25% of samples fail the criteria below. No sample shall exceed 1.2 times the quality limit values set.

#### 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 Waterford County Council:

- 1. Respiration activity after four days AT<sub>4</sub> is  $\leq 10$ mg O<sub>2</sub>/g dry matter or Dynamic Respiration Index is  $\leq 1,000$ mg O<sub>2</sub>/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 , eat , eat Compost will not reheat upon standing to greater than 20°C above ambient temperature.

OR

If no other determination of maturity is made, the 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
	Class 1	Class 2	Note 5
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
Polynuclear Aromatic Hydrocarbons (PAH's)	-	-	3
Impurities > 2mm <sup>Note 6</sup>	<0.5%	<0.5%	<3%
Gravel and Stones > 5mm <sup>Note 6</sup>	<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 shall not contain any sharp foreign matter measuring over 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:

Salmonella sp.	Absent in 25g	n=5
Faecal Coliforms	<u>         &lt; 1000 Colony Forming Units (cfu) in 1g         </u>	n=5

Where: n=Number of samples to be tested

#### 4. Monitoring (Compost)

The permit holder shall monitor the compost product quarterly. The permit holder shall submit to the Council for its agreement, prior to commencement of the composting operation, 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 O<sub>2</sub>/g DM (until 01/01/2016), and  $\leq 7$  mg O<sub>2</sub>/g DM thereafter.

# SCHEDULE G: Recording and Reporting to Waterford County Council

Report	Reporting Frequency	Report Submission Date	
Environmental Management System Updates	Annually	Annually as part of AER.	
Annual Environment Report (AER)	Annually	By 28 <sup>th</sup> February 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 Waste Facility Permit and one month after end of the three year period being reported on.	
Specified Engineering Works reports	As they arise	Prior to the works commencing.	
Air Monitoring (Biofilter)	Quarterly	Kept on file for inspection and submitted with the A.E.R.	
Surface-water Monitoring	As required	Within fifteen working days of the end of each monitoring period being reported on.	
Groundwater Monitoring	As required	Within fifteen working days of the end of each monitoring period being reported on.	
Noise Monitoring	As required	Within fifteen working days of the end of each monitoring period being reported on.	
Dust Monitoring	As required	Within fifteen working days of the end of each monitoring period being reported on.	
Bioaerosol Monitoring	Quarterly	Kept on file for inspection and submitted with the A.E.R.	
Compost Quality Monitoring	Quarterly	Kept on file for inspection and submitted with the A.E.R.	
Odour Monitoring	Weekly	Kept on file for inspection and register of same submitted with the A.E.R.	
Any other monitoring	As they occur	Within fifteen working days of the end of each monitoring period being reported on.	

Note 1: Unless altered at the request of Waterford County Council

# SCHEDULE H: Content of the Annual Environmental Report

Reports on management and staffing structure of the facility

Report on training of management and staff.

Reporting Period.

Any impositions or convictions imposed under the Waste Management Act 1996, as amended.

Waste activities carried out at the facility during the reporting year.

Quantity, type and composition of all waste (including EWC Codes) received, disposed of and recovered during the reporting period and each previous year.

The names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and the vehicle registration number), delivering waste to or collecting waste from the facility.

Summary of any loads rejected at the facility during the reporting year.

Summary report on emissions at the facility during the reporting year.

Summary of results and interpretation of environmental monitoring at the facility during the reporting year.

Summary of reportable incidents at the facility during the reporting year.

Summary of complaints received at the facility during the reporting year.

Resource and energy consumption summary.

Review of Nuisance Controls.

Report on development works undertaken during the reporting period, and a timescale for those proposed during the coming year.

Report on the progress towards achievement of the environmental objectives and targets contained in previous year's report. This shall include an annual topographical survey of the facility and an estimation of the remaining capacity of the facility in tonnes / cubic metres.

Schedule of Environmental Objectives and Targets for the forthcoming year.

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

Tank, pipeline and bund testing and inspection report.

Report on programme for public information.

Copy of Public Liability Insurance

Any other items specified by Waterford County Council