

**ENVIRONMENTAL PROTECTION AGENCY ACT 1992 AS
AMENDED**
**NOTIFICATION OF A PROPOSED DETERMINATION OF AN APPLICATION FOR AN
INDUSTRIAL EMISSIONS LICENCE IN ACCORDANCE WITH SECTION 87(2) OF THE
ENVIRONMENTAL PROTECTION AGENCY ACT 1992 AS AMENDED.**

In pursuance of the powers conferred on it by the above mentioned Act the Agency proposes to determine the application by: O'Toole Composting Limited, Ballintrane, Fenagh, County Carlow, CRO number 384574, (Licence Register No. W0284-01), under Section 83 (1) of the said Act in the following manner:

The applicant submitted the application, plans, documents and other particulars on 27 July 2012.

It is proposed, for the reasons hereinafter set out, to grant a licence to the above named applicant to carry on the following activities:

- Class 11.4
 - (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply):
 - (i) biological treatment;
 - (ii) pre-treatment of waste for incineration or co-incineration;
 - (iii) treatment of slags and ashes;
 - (iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.
- Class 11.1

The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.

at Ballintrane, Fenagh, County Carlow subject to twelve Conditions.

A copy of the proposed determination accompanies this notification.

OBJECTIONS/ORAL HEARING REQUESTS

The applicant and any other person may object to the proposed determination, in accordance with Section 87(5) of the EPA Act 1992 as amended. In accordance with Section 87(12) of the EPA Act 1992 as amended, objections must be received at any time no later than:

5.00 pm on 30th September 2015

Note: The form and content of an objection is set out in the attached extract from the Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013. S.I. 137 of 2013.

The fees for an objection and request for an oral hearing of the objection are as set out in the Environmental Protection Agency (Licensing Fees) Regulations 1994 to 2013.



A person making an objection may request an oral hearing of the objection, in accordance with Section 87(6) of the EPA Act 1992 as amended, at any time no later than the date specified above.

It is important to note that any objection to the proposed determination/request for an oral hearing of the objection must be made either on-line on the Agency's website at www.epa.ie or by sending it by prepaid post to the Headquarters of the Agency, or by leaving it with an employee of the Agency **at the Headquarters of the Agency in Wexford**, during office hours, i.e. 9.00am to 5.00pm Monday to Friday.

An objection against the proposed determination must include the grounds for the objection. An objection and a request for an oral hearing of an objection must **each** be accompanied by the appropriate fee, and be addressed to the Office of Climate, Licensing & Resource Use, EPA Headquarters, P.O. Box 3000, Johnstown Castle Estate, County Wexford.

A valid objection/request for an oral hearing of the objection must be received at the headquarters of the Agency **no later than 5.00 pm on the applicable date above**.

In order to be considered valid, an objection and a request, each must also comply with the other statutory requirements in relation to objections and requests for oral hearings as set out in the EPA Act 1992 as amended, the EPA (Industrial Emissions) (Licensing) Regulations 2013 and the EPA (Licensing Fees) Regulations 1994 to 2013. Extracts from the Acts and the Regulations accompany this notification.

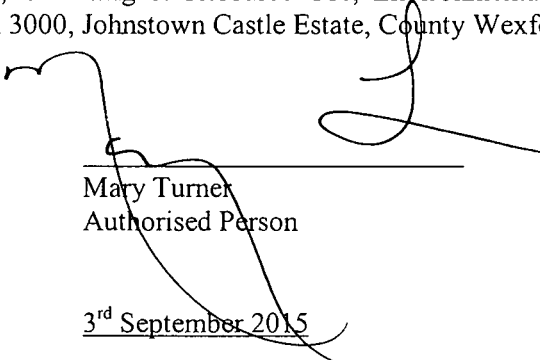
In the event that:

- (a) no objection is taken against the proposed determination or
- (b) an objection or objections is or are taken against the proposed determination and the objection or objections is or are withdrawn,

the Agency will make its decision in accordance with the proposed determination and grant the licence as soon as may be thereafter.

A copy of the proposed determination may be downloaded from the Agency's website www.epa.ie or obtained from the Office of Climate, Licensing & Resource Use, Environmental Licensing Programme, EPA Headquarters, P.O. Box 3000, Johnstown Castle Estate, County Wexford.

Signed on behalf of the said Agency:



Mary Turner
Authorised Person

Date of notification:

3rd September 2015

Regulation 25 of the Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013

Form and content of objection

- (1) An objection shall-
 - (a) be made in writing,
 - (b) state the name and address of the objector,
 - (c) state the reference number given under Regulation 38(2) to the application or the review in the register of licences and the subject matter of the objection,
 - (d) state the grounds for the objection and the reasons, considerations and arguments on which they are based, and
 - (e) be accompanied by a fee specified in accordance with Section 99A of the Act of 1992.
- (2) Without prejudice to Regulation 27, an objector shall not be entitled to elaborate in writing upon, or make further submissions in writing in relation to, the grounds for the objection stated in the objection, or to submit further grounds of objection and any such elaboration, submission or further grounds for the objection that is or are received by the Agency shall not be considered by it.
- (3)
 - (a) An objection shall be accompanied by such documents, particulars or other information relating to the objection as the objector considers necessary or appropriate.
 - (b) Without prejudice to Regulation 27, the Agency shall not consider any documents, particulars or other information submitted by an objector other than the documents, particulars or other information which accompanied the objection.
- (4) An objection shall be made -
 - (a) by sending the objection by prepaid post to the headquarters of the Agency, or
 - (b) by leaving the objection with an employee of the Agency at the headquarters of the Agency during office hours, or
 - (c) online via the website of the Agency where such facility is made available by the Agency.
- (5) The Agency shall as soon as may be after receipt of an objection acknowledge such receipt

**Sections 87(6) & (7) of the Environmental Protection Agency Act 1992,
as amended**

Section 87
Processing of
applications for
licences or reviews
of licences

- (6) (a) A person making an objection under subsection (5) may request an oral hearing of the objection.
- (b) (i) A request for an oral hearing of an objection shall be made in writing to the Agency and shall be accompanied by such fee (if any) as may be payable in respect of such request in accordance with regulations under Section 99A.
- (ii) A request for an oral hearing of an objection which is not accompanied by such fee (if any) as may be payable in respect of such request shall not be considered by the Agency.
- (c) A request for an oral hearing of an objection shall be made before the expiration of the appropriate period, and any request received by the Agency after the expiration of that period shall not be considered by it.
- (7) An objection, or a request for an oral hearing under subsection (6), shall be made-
- (a) by sending the objection or request by prepaid post to the headquarters of the Agency, or
- (b) by leaving the objection or request with an employee of the Agency, at the headquarters of the Agency, during office hours, or
- (c) by such other means as may be prescribed.

FEES FOR OBJECTIONS AND ORAL HEARINGS

Summary of Environmental Protection Agency (Licensing Fees) Regulations 1994 to 2013

The following is a summary of the provisions of the above referenced regulations. Please refer to the full regulations for exact provisions.

Fees for an objection

- (1) A fee shall be paid to the Agency in respect of an objection.
- (2) Subject to (3) below, the fee payable under (1) above shall be the amount indicated in column (3) of the table below opposite the appropriate mention of objection in column (2) of the table below.
- (3) Where an objection is made to the Agency by -
- (a) a local authority,
 - (b) a planning authority,
 - (c) a sanitary authority,
 - (d) the National Monuments Advisory Council,
 - (e) the Heritage Council
 - (f) Inland Fisheries Ireland,
 - (g) Failte Eireann
 - (h) in the case of an activity any part of which is situate within the functional area of the Shannon Free Airport Development Company Ltd., that Company, and
 - (h) An Taisce - The National Trust for Ireland,
- the fee payable in respect of the objection shall be the amount indicated in column (3) of the table below opposite the mention of a reduced fee for an objection in column (2) of the table below.

Fee for request for an oral hearing

- (1) Where a person making an objection under Section 87(5) of the Act of 1992, as amended, requests an oral hearing of the objection, a fee shall be paid to the Agency by that person. The fee payable in respect of a request for an oral hearing shall be the amount indicated in column (3) of the table below opposite the mention of the fee for an oral hearing in column (2) of the table below.

| Column (1) | Column (2) | Column (3) |
|-------------------------------------|--|------------|
| Objection Fees | Objection by the applicant or licensee | €253 |
| | Objection by any other person other than a person mentioned at 3 above | €126 |
| Reduced Objection fee (see 3 above) | Reduced fee for an objection | €63 |
| Oral Hearing Fee | Fee for request for an oral hearing | €100 |



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

**INDUSTRIAL EMISSIONS LICENCE
Proposed Determination**

| | |
|----------------------------------|---|
| Licence Register Number: | W0284-01 |
| Company Register Number: | 384574 |
| Applicant/Licensee: | O'Toole Composting Limited |
| Location of Installation: | Ballintrane, Fenagh, County Carlow |

INTRODUCTION

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

O'Toole Composting Limited has operated a waste installation at Ballinrane, Fenagh, County Carlow since 2004. The installation is located in an agricultural area and is adjacent to the N80 (Buncloody – Carlow) national primary road. The Tinnaclash Stream runs along the site's eastern boundary and merges with the Burren River approximately 100m downstream from the installation.

For the purposes of the EU Industrial Emissions Directive (2010/75/EU), this installation falls within the scope of the following Annex I category:

Category 5.3 (b): Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Directive 91/271/EEC:

- (i) biological treatment;
- (ii) pre-treatment of waste for incineration or co-incineration;
- (iii) treatment of slags and ashes;
- (iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.

When the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.

There are no process emissions to water or sewer from the installation. Surface water from the paved areas of the installation is discharged to the Tinnaclash Stream.

Waste activities at the installation have been regulated by Carlow County Council under waste facility permits issued by Carlow County Council (WFP-CW-10-003-01, WFP-CW-14-5). This licence authorises the licensee to accept 60,000 tonnes of waste including biowaste (and other biodegradable waste), sewage sludge, industrial non-hazardous sludges/solids, municipal solid waste and construction and demolition waste.

Waste activities authorised to take place at the installation include: waste treatment and transfer, composting of biodegradable waste, and aerobic biological treatment of waste.

Wastes may be received in fully covered vehicles and can only be unloaded inside the appropriate reception building. All waste processing and storage will occur indoors. Buildings containing putrescible waste will be maintained under negative air pressure. Extracted air will be treated before discharge to atmosphere.

The licensee is required to carry out regular environmental monitoring and to submit monitoring results, and a wide range of reports on the operation and management of the installation, to the Agency.

The licence sets out in detail the conditions under which O'Toole Composting Limited will operate and manage this installation.

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Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Act 1992 as amended / Waste Management Act 1996 as amended, unless otherwise defined in the section.

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| Adequate lighting | 20 lux measured at ground level. |
| AER | Annual Environmental Report. |
| Aerosol | A suspension of solid or liquid particles in a gaseous medium. |
| Agreement | Agreement in writing. |
| Annually | At approximately twelve-monthly intervals. |
| Application | The application by the licensee for this licence. |
| Appropriate facility | A waste management facility, duly authorised under relevant law and technically suitable. |
| Attachment | Any reference to Attachments in this licence refers to attachments submitted as part of this licence application. |
| Basic characterisation | A thorough determination, according to standardised analysis and behaviour testing methods, of the properties of the waste. |
| BAT | Best Available Techniques. |
| BAT conclusions | A document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures. |
| BAT reference document | A document drawn up by the Commission of the European Union in accordance with Article 13 of the Industrial Emissions Directive, resulting from the exchange of information in accordance with that Article of that Directive and describing, in particular, applied techniques, present emissions and consumption levels, techniques considered for the determination of best available techniques as well as BAT conclusions and any emerging techniques. |
| Biannually | At approximately six – monthly intervals. |
| Biennially | Once every two years. |
| Bioaerosol | An aerosol of biological particles. |

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| Biodegradable waste | Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard, including biowaste. |
| Biodrying | A biological treatment technique with the primary objective of reducing the moisture content of waste. |
| Biological treatment | Biological treatment involves composting, anaerobic digestion, mechanical-biological treatment or any other process for stabilising and sanitising biodegradable waste, including pre-treatment processes. |
| Bio-stabilised residual waste | Residual biodegradable municipal waste that has been treated to achieve an EPA approved biodegradability stability standard (as defined in this licence) prior to landfilling or alternative use agreed. |
| Biowaste | Biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants. |
| BOD | 5 day Biochemical Oxygen Demand (without nitrification suppression). |
| CEN | Comité Européen De Normalisation – European Committee for Standardisation. |
| COD | Chemical Oxygen Demand. |
| Commercial Waste | As defined in Section 5(1) of the Waste Management Acts 1996, as amended. |
| Compliance Testing | This constitutes periodical testing to determine whether a waste complies with waste acceptance criteria. The tests focus on key variables and behaviour identified by basic characterisation. |
| 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 E: Standards for Compost Quality</i> of this licence. |
| Compost facility | The facility at which biowaste and other biodegradable waste are composted and municipal solid waste, including organic fines, is subjected to aerobic biological treatment. |
| Composting | The autothermic and thermophilic biological decomposition of separately collected biowaste in the presence of oxygen and under controlled conditions by the action of micro-organisms and macro-organisms in order to produce compost. |
| Construction and demolition (C&D) waste | Wastes that arise from construction, renovation and demolition activities: Chapter 17 of the EWC or as otherwise may be agreed. |
| Containment boom | A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses. |
| CRO Number | Company Register Number. |
| Daily | During all days of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement on any one day. |

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| Day | Any 24 hour period. |
| Daytime | 0700 hrs to 1900 hrs. |
| dB(A) | Decibels (A weighted). |
| Digestate | The treated output, sanitised and free from offensive odours, from anaerobic digestion of biodegradable waste including, whether combined or separated, the solid/fibrous and liquid/liquor fractions. |
| Digestate liquor | Any liquid resulting from the anaerobic digestion process, whether drawn directly from the digestion chamber or resulting from post-digestion separation. |
| DO | Dissolved oxygen. |
| Documentation | Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence. |
| Drawing | Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence. |
| Emergency | Those occurrences defined in Condition 9.4. |
| Emission limits | Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , of this licence. |
| EMP | Environmental Management Programme. |
| Environmental damage | As defined in Directive 2004/35/EC. |
| EPA | Environmental Protection Agency. |
| European Waste Catalogue (EWC) | A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC, as amended by Commission decision 2014/955/EU and any subsequent amendment published in the Official Journal of the European Community. |
| Evening Time | 1900hrs to 2300hrs. |
| Facility | Any site or premises used for the purpose of the recovery or disposal of waste. |
| Forced aeration | The supply of air to a compost pile, by pumping (positive pressure) or by sucking air through the composting material (negative pressure). |
| Fortnightly | A minimum of 24 times per year, at approximately two week intervals. |

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| Gas Oil | Gas Oil as defined in Council Directive 1999/32/EC and meeting the requirements of S.I. No. 119 of 2008. |
| GC/MS | Gas chromatography/mass spectroscopy. |
| Green Waste | Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation. |
| ha | Hectare. |
| Heavy metals | This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3. |
| Hours of operation | The hours during which the installation is authorised to be operational. |
| Hours of waste acceptance | The hours during which the installation is authorised to accept waste. |
| Household hazardous waste | Hazardous waste produced within the curtilage of a building or self-contained part of a building used for the purposes of living accommodation as well as commercial and other waste which, because of its nature or composition, is similar to household hazardous waste. |
| IE | Industrial Emissions. |
| ICP | Inductively coupled plasma spectroscopy. |
| Incident | The following shall constitute as incident for the purposes of this licence: (i) an emergency; (ii) any emission which does not comply with the requirements of this licence; (iii) any exceedance of the daily duty capacity of the waste handling equipment; (iv) any trigger level specified in this licence which is attained or exceeded; and, (v) any indication that environmental pollution has, or may have, taken place. |
| Industrial Emissions Directive | Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast). |
| Industrial waste | As defined in Section 5(1) of the Waste Management Act 1996, as amended. |
| 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.

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| Installation | A stationary technical unit or plant where the activity concerned referred to in the First Schedule of EPA Act 1992 as amended is or will be carried on, and shall be deemed to include any directly associated activity, which has a technical connection with the activity and is carried out on the site of the activity. |
| Irish Water | Irish Water, Colvill House, 24/26 Talbot Street, Dublin 1. |
| $L_{Aeq,T}$ | This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T). |
| $L_{A,T}$ | The Rated Noise Level, equal to the L_{Aeq} during a specified time interval (T), plus specified adjustments for tonal character and/or impulsiveness of the sound. |
| Leachate | Any liquid percolating through and emitted from waste accepted or being processed at the installation. |
| Licensee | O'Toole Composting Limited, Ballinrane, Fenagh, County Carlow. CRO Number 384574. |
| Liquid waste | Any waste in liquid form and containing less than 2% dry matter. |
| List I | As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments. |
| List II | As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments. |
| Local Authority | Carlow County Council. |
| Maintain | Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately. |
| Mass flow limit | An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time. |
| Mass flow threshold | A mass flow rate above which a concentration limit applies. |
| Maturity | Characteristic of a composted material that makes the material fit for purpose and ready for use in a specific application. |
| Mechanical Biological Treatment | The treatment of residual municipal waste, unsorted waste or any other biowaste unfit for composting or anaerobic digestion in order to stabilise and reduce the volume of the waste. |
| Monthly | A minimum of 12 times per year, at intervals of approximately one month. |
| Municipal waste | As defined in Section 5(1) of the Waste Management Act 1996, as amended. |

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| Night-time | 2300 hrs to 0700 hrs. |
| Noise-sensitive location (NSL) | Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels. |
| Oil separator | Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of normal size, installation, operation and maintenance). |
| On-site verification of waste | Rapid check methods to confirm that a waste is the same as that which has been subjected to compliance testing and that which is described in any accompanying documents. It may merely consist of a visual inspection of a load of waste before and after unloading at the installation. |
| Organic Fines | The undersize fraction obtained from the mechanical treatment of waste, characterised by a high organic content. |
| PRTR | Pollutant Release and Transfer Register. |
| Quarterly | At approximately three – monthly intervals. |
| Recyclable materials | Waste types, such as cardboard, batteries, gas cylinders etc, may be recycled. |
| Residual Waste | The fraction of collected waste remaining after a treatment or diversion step, which generally requires further treatment or disposal, including mixed municipal waste. |
| Sample(s) | Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments. |
| Sanitary effluent | Wastewater from installation toilet, washroom and canteen facilities. |
| 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. |
| Solid Recovered Fuel | Fuel that has been produced in accordance with a technical standard from pre-treated non-hazardous municipal, commercial or industrial waste. |
| 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. The expression 'separate at source' shall be construed accordingly. |

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| Specified emissions | Those emissions listed in <i>Schedule B: Emission Limits</i> , of this licence. |
| Specified Engineering Works | Engineering works listed in <i>Schedule D: Specified Engineering Works</i> of this licence. |
| Standard method | A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency. |
| Storm water | Rain water run-off from roof and non-process areas. |
| Temporary storage | In relation to waste is a period of less than six months as defined in the Waste Management Act 1996, as amended. |
| The Agency | Environmental Protection Agency. |
| TOC | Total organic carbon. |
| Trade effluent | Trade effluent has the meaning given in the Water Services Act, 2007. |
| Trigger level | A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee. |
| Water Services Authority | Carlow County Council. |
| WEEE | As defined in the European Union (WEEE) Regulations, 2014 (S.I. No. 149 of 2014). |
| Weekly | During all weeks of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement in any one week. |
| Windrow | An elongated pile of composting material that is periodically turned. |
| WWTP | Waste water treatment plant. |

Decision & Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Act 1992 as amended.

In reaching this decision the Environmental Protection Agency has considered the documentation relating to the licence application (Register Number: W0284-01). This includes supporting documentation received from the applicant, all submissions received from other parties, the report of the Licensing Inspector and the Environmental Impact Assessment (EIA) report contained therein.

It is considered that the Environmental Impact Assessment Report (as included in the Inspectors Report, dated 13th August 2015) contains a fair and reasonable assessment of the likely significant effects of the licensed activity on the environment. The assessment as reported is adopted as the assessment of the Agency. Having regard to this assessment, it is considered that the proposed activity, if managed, operated and controlled in accordance with the licence will not result in the contravention of any relevant environmental quality standards or cause environmental pollution.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects, is likely to have a significant effect on a European Site(s). In this context, particular attention was paid to the European sites at Slaney River Valley SAC (site code 000781), River Barrow and River Nore SAC (site code 002162) and Blackstairs Mountains SAC (site code 000770). The Agency considered, for the reasons set out below, that the activity is not directly connected with or necessary to the management of the sites as European sites and that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects will have a significant effect on a European site, and accordingly the Agency determined that an Appropriate Assessment of the activity was not required.

The reasons for which the Agency determined that an Appropriate Assessment of the proposed activity is not required are as follows:

- The installation is not located within a European Site.
- The activity will not result in damage to, or loss of, habitat in a European Site.
- There will be no process discharge from the installation to the European Sites.
- Storm water is the only proposed discharge to surface water from the installation.

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act 1992 as amended, the Agency proposes to grant this Industrial Emissions licence to:

O'Toole Composting Limited, Ballinrane, Fenagh, County Carlow, CRO Number 384574.

under Section 83(1) of the said Act to carry on the following activities:

- Class 11.4
 - (b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply):
 - (i) biological treatment;
 - (ii) pre-treatment of waste for incineration or co-incineration;
 - (iii) treatment of slags and ashes;
 - (iv) treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of-life vehicles and their components.
- Class 11.1
 - The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.

at Ballinrane, Fenagh, County Carlow subject to the following 12 Conditions, with the reasons therefor and associated schedules attached thereto.

Part II Schedule of Activities Refused

None of the proposed activities as set out in the licence application have been refused.

Part III Conditions

Condition 1. Scope

- 1.1 Industrial Emissions Directive activities at this installation shall be restricted to those listed and described in *Part I Schedule of Activities Licensed*, and shall be as set out in the licence application or as modified under Condition 1.4 of this licence and subject to the conditions of this licence.
- 1.2 Activities at this installation shall be limited as set out in *Schedule A: Limitations*, of this licence.
- 1.3 For the purposes of this licence, the installation authorised by this licence is the area of land outlined in red on Drawing No. 002/D of the application. Any reference in this licence to "installation" shall mean the area thus outlined in red. The licensed activities shall be carried on only within the area outlined.
- 1.4 No alteration to, or reconstruction in respect of, the activity, or any part thereof, that would, or is likely to, result in
- (i) a material change or increase in:
- the nature or quantity of any emission;
 - the abatement/treatment or recovery systems;
 - the range of processes to be carried out;
 - the fuels, raw materials, intermediates, products or wastes generated, or
- (ii) any changes in:
- site management, infrastructure or control with adverse environmental significance;
- shall be carried out or commenced without prior notice to, and without the agreement of, the Agency.
- 1.5 The installation shall be controlled, operated and maintained, and emissions shall take place as set out in the licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6 This licence is for the purpose of IE licensing under the EPA Act 1992 as amended only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.7 The licensee shall satisfy the Agency that it has obtained the written consent of the Department of Agriculture, Food and the Marine to treat animal by-products at the installation. A copy of the consent shall be submitted to the Agency and a copy shall be made available for inspection by authorised persons of the Agency.
- 1.8 Waste Acceptance Hours and Hours of Operation
- 1.8.1 With the exception of emergencies or as may be agreed by the Agency, waste shall be accepted at or dispatched from the installation only between the hours of 0700 and 1900 Monday to Friday inclusive and 0800 to 1600 on Saturdays.
- 1.8.2 Except as authorised under Condition 1.8.4, or as may be necessary in an emergency or otherwise agreed by the Agency, the installation shall be operated only during the hours of 0800 and 1900 Monday to Friday inclusive and 0800 and 1600 on Saturdays.
- 1.8.3 The installation shall not operate or accept/dispatch waste on Sundays or on Public Holidays unless agreed by the Agency.

- 1.8.4 The biological treatment processes may be operated on a 24 hour basis, 7 days per week.

Reason: To clarify the scope of this licence.

Condition 2. Management of the Installation

2.1 Installation Management

2.1.1 The licensee shall employ a suitably qualified and experienced installation manager who shall be designated as the person in charge. The installation manager or a nominated, suitably qualified and experienced deputy shall be present on the installation at all times during its operation or as otherwise required by the Agency.

2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence.

2.2 Environmental Management System (EMS)

2.2.1 The licensee shall establish, maintain and implement an Environmental Management System (EMS), which shall incorporate energy efficiency management, in advance of the commencement of the activity. The EMS shall be reviewed for suitability, adequacy and effectiveness and updated on an annual basis.

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

2.2.2.1 An environmental policy defined for the installation.

2.2.2.2 Management and Reporting Structure.

2.2.2.3 Schedule of Environmental Objectives and Targets.

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

2.2.2.4 Environmental Management Programme (EMP)

The licensee shall prepare, maintain and implement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.3. The EMP shall include:

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

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

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

2.2.2.5 Documentation

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

2.2.2.6 Corrective and Preventative Action

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

2.2.2.6.2 Where a breach of one or more of the conditions of this licence occurs, the licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.

2.2.2.6.3 All corrective and preventative actions shall be documented

2.2.2.7 Internal and External Audits

The licensee shall establish and maintain and implement a programme for independent internal audits of the EMS. Such audits shall be carried out at least once every three years. The audit programme shall determine whether or not the EMS is being implemented and maintained properly, and in accordance with the requirements of the licence. Audit reports and records of the resultant corrective and preventative actions shall be maintained as part of the EMS in accordance with condition 2.2.2.5.

2.2.2.8 Awareness and Training

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

2.2.2.9 Communications Programme

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

2.2.2.10 Maintenance Programme

The licensee shall establish, maintain and implement a programme for maintenance, including preventative maintenance, of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the

planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above). The maintenance programme shall use appropriate techniques and measures to ensure the optimisation of energy efficiency in plant and equipment.

2.2.2.11 Efficient Process Control

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

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

Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish and maintain, for each component of the installation, all infrastructure referred to in this licence in advance of the commencement of the licensed activities in that component, or as required by the conditions of this licence. Infrastructure specified in the application that relates to the environmental performance of the installation and is not specified in the licence shall be installed in accordance with the schedule submitted in the application.
- 3.2 Specified Engineering Works
- 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule D: Specified Engineering Works* of this licence, to the Agency for its agreement at least two months in advance of the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency
- 3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
- 3.2.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall, as appropriate, include the following information:-
- (i) A description of the works;
 - (ii) As-built drawings of the works; and
 - (iii) Any other information requested in writing by the Agency.
- 3.3 Installation Notice Board
- 3.3.1 The licensee shall, within one month of the date of grant of this licence, provide an Installation Notice Board on the installation so that it is legible to persons outside the main entrance to the installation. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
- 3.3.2 The board shall clearly show:
- (i) the name and telephone number of the installation;

- (ii) the normal hours of operation;
 - (iii) the name of the licence holder;
 - (iv) an emergency out of hours contact telephone number;
 - (v) the licence reference number; and
 - (vi) where environmental information relating to the installation can be obtained.
- 3.3.3 A plan of the installation clearly identifying the location of each unloading, inspection, storage and treatment area shall be displayed as close as is possible to the entrance to the installation. The plan shall be displayed on a durable material such that is legible at all times. The plan shall be replaced as material changes to the installation are made.
- 3.4 Installation Security
 - 3.4.1 Security and stock-proof fencing and gates shall be maintained at the installation. Subject to the implementation of the Decommissioning Management Plan (as required by Condition 10.2 of this licence) the requirement for such installation security may be removed.
 - 3.4.2 The licensee shall maintain a CCTV monitoring system which records all waste vehicle movement into and out of the installation. The CCTV system shall be operated at all times with digital date stamping. Copies of recordings shall be kept on site and made available to the Agency on request.
 - 3.4.3 There shall be no unauthorised public access to the installation.
 - 3.4.4 Gates shall be locked shut when the installation is unsupervised.
 - 3.4.5 The licensee shall remedy any defect in the gates and/or fencing as follows:
 - (i) A temporary repair shall be made by the end of the working day; and
 - (ii) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.
- 3.5 Installation Roads and Hardstanding
 - 3.5.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the installation.
 - 3.5.2 The licensee shall provide and maintain an impermeable concrete surface in all areas of the installation used for the movement, holding, storage or processing of waste. The concrete surface shall be constructed to British Standard 8110 or an alternative as agreed by the Agency. The licensee shall remedy any defect in concrete surfaces within five working days.
- 3.6 Installation Office
 - 3.6.1 The licensee shall provide and maintain an office at the installation. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation
 - 3.6.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the installation.
- 3.7 Waste Inspection and Quarantine Areas
 - 3.7.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the installation.
 - 3.7.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
 - 3.7.3 Drainage from these areas shall be directed for collection and safe disposal.

- 3.8 Weighbridge and Wheel Cleaning
- 3.8.1 The licensee shall provide and maintain a weighbridge and wheel cleaner at the installation.
- 3.8.2 The wheel cleaner shall be used by all vehicles leaving the installation as required to ensure that no wastewater, waste or storm water is carried off-site. All water from the wheel cleaning area shall be directed to the on-site wastewater treatment plant.
- 3.8.3 The wheel-wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheel-wash and disposed of appropriately.
- 3.9 Waste Treatment Infrastructure
- 3.9.1 Waste treatment infrastructure shall at a minimum comprise the following:
- (i) Indoor waste acceptance, inspection, quarantine, storage and treatment/processing areas;
 - (ii) Separate storage areas for all waste treatment outputs including any screened fractions;
 - (iii) Leachate, digestate liquor and waste water management infrastructure; and
 - (iv) Air handling and odorous air treatment infrastructure.
- 3.9.2 In addition to Condition 3.9.1, the biological treatment facility shall include curing and storage areas.
- 3.9.3 Items of plant deemed critical to the efficient and adequate processing of waste at the installation (including inter alia waste loading vehicles and ejector trailers) shall be provided on the following basis:-
- (i) 100% duty capacity;
 - (ii) 20% standby capacity available on a routine basis; and
 - (iii) Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.
- 3.9.4 The odour control system shall be provided on the following basis:-
- (i) 100% duty capacity; and
 - (ii) 50% standby capacity.
- 3.9.5 The licensee shall prepare and maintain on site a record detailing the duty and standby capacity, in tonnes per day, of all waste handling and processing equipment to be used at the installation. These capacities shall be based on the licensed waste intake, as per *Schedule A: Limitations*, of this licence.
- 3.9.6 The quantity of waste to be accepted at the installation on a daily basis shall not exceed the duty capacity of the equipment at the installation. Any exceedance of this intake shall be treated as an incident.
- 3.9.7 If sludges/slurry are being accepted the licensee shall ensure that an enclosed tank is provided for storage of sludge/slurry to ensure safe coupling systems for loading/unloading from road tankers.
- 3.9.8 The licensee shall provide shut-off valves on any surface/wastewater discharge lines.
- 3.10 The licensee shall have regard to the following when choosing and/or designing any new plant/infrastructure: (i) energy efficiency; and, (ii) the environmental impact of eventual decommissioning.

3.11 Surface Water Management

Surface water management infrastructure shall be provided and maintained at the installation during construction works, operation, closure, restoration or aftercare of the installation. As a minimum, the infrastructure shall be capable of the following:-

- a) the prevention of discharge of contaminated water, process effluent and/or leachate into surface water drains and courses; and
- b) the collection/diversion of run-off arising from paved areas.

3.12 The licensee shall provide and use adequate lighting during the operation of the installation in hours of darkness.

3.13 Civic Amenity Facility

3.13.1 The licensee may provide and maintain a Civic Amenity Facility.

3.13.2 The licensee shall provide and maintain appropriate receptacles at the Civic Amenity Facility for the storage of various waste types.

3.13.3 All waste deposited in the Civic Amenity Facility shall be:

- (i) into a skip;
- (ii) into the hopper of the compactor for disposal;
- (iii) into a receptacle for recovery; or
- (iv) in the case where inspection is required, into a designated inspection area.

3.13.4 The licensee shall assign and clearly label each container/bay at the Civic Amenity Facility to indicate its contents.

3.13.5 At the end of the working day the floor of the Civic Amenity Facility, the hopper and the compactor shall be cleared of waste.

3.13.6 The licensee may accept:

- (i) household hazardous waste, and
- (ii) hazardous waste from business customers and other non-household sources including farms that, because of its nature or composition, is similar to household hazardous waste,

at the civic amenity site. The licensee shall have regard to any relevant guidance published by the Agency under the National Hazardous Waste Management Plan.

3.14 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.

3.15 In the case of composite sampling of aqueous emissions from the operation of the installation, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be retained as required for Agency use.

3.16 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.

3.17 Tank, Container and Drum Storage Areas

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

- 3.17.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
- (i) 110% of the capacity of the largest tank or drum within the bunded area; or
 - (ii) 25% of the total volume of substance that could be stored within the bunded area.
- 3.17.3 All drainage from bunded areas shall be treated as contaminated unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal, unless it can be deemed uncontaminated and does not exceed the trigger levels set for storm water emissions under condition 5.7.
- 3.17.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.17.5 All tanks, containers and drums shall be labelled with a unique identifier and to clearly indicate their contents and capacity.
- 3.17.6 Liquid waste inputs to and liquid residues from the biological treatment processes shall be stored in sealed tanks or vessels that are vented to the odour control system, or by other means agreeable to the Agency, in order to avoid the emission of odorous head gases.
- 3.18 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the installation. Once used, the absorbent material shall be disposed of at an appropriate facility.
- 3.19 Silt Traps and Oil Separators
- The licensee shall, within six months of the date of grant of this licence, install and maintain silt traps and oil separators at the installation:
- (i) Silt traps to ensure that all storm water discharges, other than from roofs, from the installation pass through a silt trap in advance of discharge;
 - (ii) An oil separator on the storm water discharge from yard areas. The separator shall be a Class I full retention separator.
- The silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).
- 3.20 Fire-water Retention
- 3.20.1 The licensee shall carry out a risk assessment to determine if the activity should have a fire-water retention facility. The licensee shall submit a report to the Agency on the arrangements for the retention of fire water within six months of the date of grant of this licence.
- 3.20.2 The licensee shall prepare and implement, with the agreement of the Agency and prior to commencement of waste acceptance at the installation, a suitable risk management programme for fire water retention.
- 3.20.3 In the event of a fire or a spillage to storm water, the site storm water shall be diverted for collection.
- 3.20.4 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities when implementing Conditions 3.20.2 and 3.20.3 above.
- 3.21 All pump sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate).

- 3.22 Pipework
- 3.22.1 The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2 of this licence for the reduction in fugitive emissions.
- 3.22.2 The licensee shall prior to the commencement of licensed activities at the installation label all pipework so as to differentiate between fuels, process flows and waste water. The labelling shall include the direction of flow.
- 3.22.3 All connections between vessels shall be capable of being closed by valves.
- 3.23 The licensee shall, within three months of the date of grant of this licence, install in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.24 The licensee shall operate a weather monitoring station on the site at a location agreed by the Agency, which records conditions of wind speed, wind direction, temperature and rainfall.
- 3.25 The licensee shall provide and maintain a wastewater treatment plant at the installation for the treatment of sanitary effluent arising on-site. Any waste water treatment system and percolation area shall satisfy the criteria set out in the *Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (p.e ≤ 10)*, published by the Environmental Protection Agency.
- 3.26 Groundwater
- 3.26.1 All groundwater monitoring boreholes shall be adequately protected to prevent contamination or physical damage.
- 3.26.2 Groundwater wells shall be labelled in situ with their respective identification number and casing elevation in meters above ordnance datum Malin Head (mAOD Malin Head).
- 3.26.3 Any new groundwater monitoring wells shall be constructed having regard to the guidance given in the Guidance Note Landfill Manual – Guidance Note on Landfill Monitoring, which was published by the Agency.

Reason: *To provide for appropriate operation of the installation to ensure protection of the environment.*

Condition 4. Interpretation

- 4.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:
- 4.1.1 Continuous Monitoring
- (i) No 24 hour mean value shall exceed the emission limit value.
- (ii) 97% of all 30 minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
- (iii) No 30 minute mean value shall exceed twice the emission limit value.
- 4.1.2 Non-Continuous Monitoring
- (i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.

- (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
 - (iii) For all other parameters, no 30 minute mean value shall exceed the emission limit value.
- 4.2 The concentration and volume flow limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of:
- 4.2.1 From non-combustion sources:
Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).
- 4.3 Compost Quality Test Results
- The compost quality standard set out in *Schedule E: Standards for Compost Quality* of this licence shall apply to compost after the composting phase and prior to mixing with other materials.
- 4.4 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.5 Noise
- Noise from the installation shall not give rise to sound pressure levels ($L_{Aeq, T}$) measured at the noise sensitive locations of the installation which exceed the limit value(s).
- 4.6 Dust and Particulate Matter
- Dust and particulate matters from the activity shall not give rise to deposition levels which exceed the limit value(s).

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

Condition 5. Emissions

- 5.1 No specified emission from the installation shall exceed the emission limit values set out in *Schedule B: Emission Limits*, of this licence. There shall be no other emissions of environmental significance.
 - 5.2 No emissions, including odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.
 - 5.3 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.
 - 5.4 No trade effluent, leachate and/or contaminated storm water shall be discharged to surface water courses.
 - 5.5 There shall be no direct emissions to ground or groundwater.
 - 5.6 There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.
 - 5.7 Storm Water Emissions to Surface Water
- Unless otherwise agreed by the Agency, the trigger levels for the surface water discharge from the installation to the Tinnaclash Stream at location S-1 are:-
- (i) Suspended Solids 35mg/l

- (ii) BOD 2.6 mg/l
- (iii) Total Ammonia (as N) 0.14 mg/l.

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

- Vermin
- Birds
- Flies
- Mud
- Dust
- Litter

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

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

Condition 6. Control and Monitoring

6.1 Test Programme

- 6.1.1 The licensee shall prepare to the satisfaction of the Agency, a test programme for abatement equipment installed to abate emissions to atmosphere. This programme shall be submitted to the Agency in advance of implementation.
- 6.1.2 The programme, following agreement with the Agency, shall be completed within three months of the commencement of operation of the abatement equipment.
- 6.1.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures.
- 6.1.4 The test programme shall as a minimum:
 - (i) establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence; and
 - (ii) assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.
- 6.1.5 A report on the test programme shall be submitted to the Agency within one month of completion.

6.2 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring*, of this licence.

- 6.2.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures.
- 6.2.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
- 6.2.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
- 6.2.4 Where any analysis is sub-contracted it shall be to a competent laboratory.

- 6.3 The licensee shall ensure that:
- (i) sampling and analysis for all parameters listed in the Schedules to this licence; and
 - (ii) any reference measurements for the calibration of automated measurement systems;
- shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards that will ensure the provision of data of an equivalent scientific quality shall apply.
- 6.4 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as agreed by the Agency.
- 6.5 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission/discharge (or ambient conditions where that is the monitoring objective).
- 6.6 The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
- 6.7 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.
- 6.8 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.
- 6.9 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.10 The integrity and water tightness of all pipes (including underground pipes), tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee prior to use. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.11 The stormwater drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) shall be inspected weekly, and desludged as necessary. Bunds, silt traps and oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected for safe disposal. The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times. The licensee shall maintain a drainage map on site. The drainage map shall be reviewed annually and updated as necessary.
- 6.12 All wastewater/leachate/contaminated storm water gullies, drainage grids and manhole covers shall be painted with red squares whilst all clean storm water discharge gullies, drainage grids and manhole covers shall be painted with blue triangles. These colour codes shall be maintained so as to be visible at all times during installation operation, and any identification designated in this licence (i.e. SE1 / SW1) shall be inscribed on these manholes.

- 6.13 An inspection system for the detection of leaks on all flanges and valves on pipes used to transport materials other than water shall be developed and maintained prior to the commencement of the activity.
- 6.14 Dust and Odour Control
 - 6.14.1 The road network in the vicinity of the installation shall be kept free from any debris caused by vehicles entering or leaving the installation. Any such debris or deposited materials shall be removed without delay.
 - 6.14.2 The licensee shall install and provide adequate measures for the control of odours and dust emissions, including fugitive dust emissions, from the installation.
 - 6.14.3 Dust curtains (or equivalent approved by the Agency) shall be maintained on the entry/exit points from the waste buildings. All other doors in this building shall be kept closed when not in use.
 - 6.14.4 All buildings for the storage, holding or treatment of residual, food and odour-forming waste shall be maintained at negative air pressure with ventilated gases being subject to treatment.
 - 6.14.5 The licensee shall maintain and implement a programme to demonstrate negative pressure and building envelope integrity throughout all buildings where residual, food or other odour-forming waste is deposited, held, stored or treated to ensure that there is no significant escape of odours. The programme shall also maintain all criteria for the operation and control of negative pressure. This programme shall be reviewed at least annually.
 - 6.14.6 The licensee shall undertake, at a frequency to be agreed or directed by the Agency, and in any case no less than once every three years, an odour impact assessment. The assessment shall identify and quantify all significant odour sources at the installation and shall include an assessment of the suitability and adequacy of the odour control system. Any recommendations arising from the odour impact assessment shall be implemented following agreement by the Agency.
 - 6.14.7 In dry weather, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
- 6.15 Storm Water
 - 6.15.1 A visual examination of the storm water discharges shall be carried out daily. A log of such inspections shall be maintained.
 - 6.15.2 The licensee shall, within three months of the date of grant of this licence, develop and maintain to the satisfaction of the Agency a response programme to address instances where the trigger level values, as set in Condition 5.7 of this licence, are achieved or exceeded. This response programme shall include actions designed to ensure that there will be no storm water emissions of environmental significance.
- 6.16 Litter Control
 - 6.16.1 All loose litter or other waste, placed on or in the vicinity of the installation, other than in accordance with the requirements of this licence, shall be removed, subject to the agreement of the landowners, immediately and in any event by 10.00am of the next working day after such waste is discovered.
 - 6.16.2 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the installation are appropriately covered.
- 6.17 Monitoring Locations

Within three months of the date of grant of this licence, the licensee shall submit to the Agency an appropriately scaled drawing showing all the monitoring locations that are stipulated in this licence including any noise sensitive locations and private wells to be

monitored. The drawing shall include the eight-digit national grid reference of each monitoring point.

6.18 Nuisance Monitoring

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

6.19 Noise

The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency.

6.20 Pollutant Release and Transfer Register (PRTR)

The licensee shall prepare and report a PRTR for the site. The substance and/or wastes to be included in the PRTR shall be determined by reference to EC Regulations No. 166/2006 concerning the establishment of the European Pollutant Release and Transfer Register. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.

6.21 The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.

6.22 Soil Monitoring

The licensee shall carry out soil monitoring at the site of the installation within ten years of date of grant of licence and at least once every ten years thereafter. The sampling and monitoring shall be carried out in accordance with any guidance or procedure as may be specified by the Agency.

Reason: *To provide for the protection of the environment by way of treatment and monitoring of emissions.*

Condition 7. Resource Use and Energy Efficiency

7.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.

7.2 The audit shall identify all practicable opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.

7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.

7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

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

Condition 8. Materials Handling

- 8.1 The licensee shall ensure that waste generated in the carrying on of the activity shall be prepared for re-use, recycled or recovered or, where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.
- 8.2 Disposal or recovery of waste on-site shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols.
- 8.3 Waste Acceptance and Characterisation Procedures
- 8.3.1 The licensee shall within three months of the date of grant of this licence develop and thereafter maintain and implement detailed written procedures and criteria for:
- (i) basic characterisation, compliance testing, acceptance, on-site verification and handling of all wastes arriving at the installation;
 - (ii) rejection of unacceptable incoming waste; and
 - (iii) ensuring adequate storage capacity exists in advance of waste acceptance.
- 8.3.2 Waste shall be accepted at the installation from known waste producers or new waste producers subject to initial waste profiling and basic characterisation off-site. The written records of this off-site waste profiling and characterisation shall be retained by the licensee for all active waste producers and for a two year period following termination of licensee/waste producer agreements.
- 8.3.3 Waste shall only be accepted at the installation from local authority waste collection or transport vehicles or holders of valid waste collection permits, unless exempted or excluded, issued under the Waste Management Act 1996 as amended. Copies of these waste collection permits shall be maintained at the installation.
- 8.3.4 No hazardous waste shall be accepted at the installation except as authorised under Condition 3.13.6 of this licence.
- 8.3.5 Waste accepted for biological treatment at the installation shall be conducive to biological treatment, shall facilitate the achievement of any relevant output quality standards and shall be compatible with the appropriate end-use for the biologically treated material.
- 8.3.6 Waste arriving at the installation shall be inspected and have its documentation checked at the point of entry to the installation and, subject to this verification, shall be weighed, documented and directed to an appropriate area within the waste building. Each load of waste arriving at the waste building shall be inspected upon tipping within the building or, to the extent possible, upon discharge into a storage vessel. Only after such inspections shall the waste be processed for disposal or recovery.
- 8.3.7 A record of all inspections of incoming waste loads shall be maintained.
- 8.3.8 Any waste deemed unsuitable for processing at the installation and/or in contravention of this licence shall be immediately separated and removed from the installation at the earliest possible time. Temporary storage of such wastes shall be in the designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid odour nuisance, the attraction of vermin and any other nuisance or objectionable condition.

8.4 Operational Controls

- 8.4.1 All waste treatment shall be carried out inside buildings or enclosed vessels.
- 8.4.2 All residual, food and other odour-forming waste accepted at the installation shall be treated within 48 hours of its arrival at the installation or removed from the installation.
- 8.4.3 The floor and surfaces of the waste reception area shall be cleaned from waste debris daily or when cleared of waste and in any event every 48 hours.
- 8.4.4 All waste treatment equipment shall be cleared of waste at an appropriate frequency.
- 8.4.5 Scavenging shall not be permitted at the installation.
- 8.4.6 There shall be no casual public access to the waste transfer or process buildings.
- 8.4.7 The biological treatment facility shall be dedicated to one biological treatment process at any one time i.e. composting or aerobic biological treatment of waste. Only waste conducive to the production of quality compost or waste which is being subjected to aerobic biological treatment shall be stored and treated in the biological treatment facility at any one time.
- 8.4.8 There shall be no mixing of:
- organic fines (and other feedstocks not conducive to the production of high quality compost suitable for direct land application), or
 - biostabilised residual waste,
- with
- separately collected biowaste (and other feedstocks intended to be used in the production of high quality compost suitable for direct land application), or
 - compost that complies with the quality standard set out in *Schedule E: Standards for Compost Quality*, of this licence or an alternative quality standard.
- 8.4.9 The biodrying of waste shall only be undertaken with the prior written agreement of the Agency.

8.5 Waste and Compost Storage

All waste and compost storage and holding areas shall be inside buildings or vessels protected as may be appropriate against spillage, leachate run-off and dust and odour emission, unless otherwise agreed by the Agency.

8.6 Waste Storage Plan

- 8.6.1 The licensee shall, within three months of the date of grant of this licence, develop and thereafter maintain and implement a Waste Storage Plan for all waste, other feedstocks, compost and waste water stored and held at the installation.
- 8.6.2 The Waste Storage Plan shall include:
- a limit on the volume of materials to be stored or held in designated storage areas or vessels;
 - maximum stockpile sizes in designated storage areas or maximum storage volume in vessels;
 - a limit on the maximum storage or holding period for materials in designated storage areas or vessels; and,

- any other requirements arising from recommendations of the fire risk assessment required by condition 9.5 of this licence.
- 8.6.3 Waste storage and holding practices at the installation shall comply at all times with the Waste Storage Plan.
- 8.6.4 Waste accepted or generated at the installation, including compost and waste water, shall be stored or held only in designated areas or vessels that have been identified in the Waste Storage Plan.
- 8.6.5 All designated areas or vessels for storage or holding of waste, compost and waste water shall be:
- clearly labelled;
 - appropriately segregated; and
 - visibly or physically delineated by walls, dividers, painted lines or marks on the ground or other methods acceptable to the Agency.
- 8.7 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.8 The licensee shall ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.9 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.10 No waste classified as green list waste in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended) shall be consigned for recovery without the agreement of the Agency.
- 8.11 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control & Monitoring*, of this licence.
- 8.12 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 8.13 Quality of Compost
- 8.13.1 Compost shall comply with the quality standard as set out in *Schedule E: Standards for Compost Quality* of this licence or an alternative quality standard.
- 8.13.2 An alternative quality standard for compost may be used, subject to the agreement of the Agency. The use of any agreed alternative quality standard for compost shall not cause direct or indirect adverse impacts on human animal or plant health and shall not cause environmental pollution.
- 8.13.3 Treated waste that fails to meet the quality standard for compost as set out in *Tables E.1 Maximum Respiration Activity, E.3 Pathogenic Organism Content Limits, E.4 Impurity Content Limits and E.5 Organic Matter Content Limit of Schedule E: Standards for Compost Quality*, of this licence may be reused in the process or treated as waste. Treated bio-waste that fails to meet the quality standard for compost as set out in *Table E.2 Maximum Metal Concentration Limits of Schedule E: Standards for Compost Quality*, of this licence shall be handled as waste and shall not be reused in the process. A record shall be kept on site of all batches that do not meet the relevant quality standard. Where handled as a waste details shall be recorded as per Condition 11 of the licence.

- 8.13.4 Compost shall be suitable for agricultural/horticultural improvement or ecological benefit without causing direct or indirect adverse impacts on human, animal or plant health and without causing environmental pollution.
- 8.13.5 Where an alternative compost quality standard is agreed by the Agency, in accordance with Condition 8.13.2 above, the compost monitoring programme associated with the agreed alternative compost quality standard may be employed in lieu of the compost quality monitoring requirements of this licence provided that details and results of the alternative monitoring programme are maintained on-site for inspection by the Agency and are reported to the Agency in accordance with the reporting requirements of this licence.
- 8.13.6 In the event of failure to achieve a quality standard parameter for compost as set out in *Schedule E: Standards for Compost Quality* of this licence:
- (i) The licensee shall evaluate any feedstock and/or process changes relevant to the sampled batch of material prior to the sampling date and specify the corrective actions taken including any re-sampling or reuse of the failed material back into the composting process.
 - (ii) Subsequent batches of treated biowaste shall be tested against all parameters in *Schedule E: Standards for Compost Quality* of this licence in order to re-validate the process. Only following the pass of three successive batches through the process can the process be deemed to be stable and the normal compliance monitoring programme re-instated. The licensee shall notify the Agency when the process has been re-validated and deemed to comply with the requirements of this condition.
 - (iii) A test failure shall be treated as an incident.
- 8.14 Compost Monitoring
- 8.14.1 Compost quality monitoring shall be undertaken to demonstrate compliance with the quality standard as set out in *Schedule E: Standards for Compost Quality* of this licence.
- 8.14.2 Compost analysis shall be carried out at the frequency specified below, unless otherwise agreed or instructed by the Agency.
- (a) Every six months where more than 500 and up to 1,000 tonnes of compost is produced per year.
 - (b) At intervals of at least every 1,000 tonnes of compost produced or every 3 months, whichever comes first, where more than 1,000 and up to 10,000 tonnes of compost is produced per year.
 - (c) Every month where more than 10,000 tonnes of compost is produced per year.
- 8.14.3 If the composition of the feedstock changes significantly or if significant modifications are made to the process, the process shall be re-validated by testing batches until three successive batches achieve the relevant standard.
- 8.15 Outputs, other than quality compost, of biological treatment
- 8.15.1 Treated waste resulting from the treatment of:
- organic fines,
 - municipal waste, or
 - other feedstocks not conducive to the production of high quality compost suitable for direct land application,
- shall be classified and handled as waste.
- 8.15.2 Organic fines shall only be used to make bio-stabilised residual waste.

- 8.15.3 Bio-stabilised residual waste shall be treated as waste and shall be dispatched only for recovery or disposal at a landfill facility unless otherwise agreed by the Agency.
- 8.15.4 In the case of bio-stabilised residual waste, stabilisation means the reduction of the decomposition properties of the waste to such an extent that offensive odours are minimised and the respiration activity after four days is <10mg O₂/g DM until 1 January 2016 and <7mg O₂/g DM thereafter. This test shall not be used to measure the biodegradable content or stability of biodried waste.
- 8.15.5 Bio-stabilised residual waste shall meet the requirements of Condition 8.15.4 of this licence or an alternative protocol as may be agreed by the Agency based on biological treatment process parameters (e.g. validated residence time and temperature parameters at the treatment installation).
- 8.16 Bio-stabilised Residual Waste Monitoring
- 8.16.1 Bio-stabilised residual waste analysis shall be carried out at the frequency specified below, unless otherwise agreed or instructed by the Agency.
- (a) Every 500 tonnes of biostabilised residual waste dispatched from the installation.
- 8.16.2 The frequency of monitoring may be reduced if agreed by the Agency on foot of an alternative protocol being in place that empirically correlates biological treatment process parameters (e.g. validated residence time and temperature parameters at the treatment facility) with respiration activity.
- 8.17 Unless agreed by the Agency the licensee shall not dispose of any waste that has been accepted at the installation for the purpose of a recovery activity. This condition shall not apply to non-recyclable waste that is separated for disposal by the licensee from the incoming waste.
- 8.18 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.
- 8.19 Only waste that has been subject to treatment may be dispatched for disposal at a landfill facility. Treatment shall reflect published EPA guidance as set out in *Municipal Solid Waste – Pre-treatment and Residuals Management*, EPA, 2009. With the agreement of the Agency, this condition shall not apply to:
- (i) Inert waste for which treatment is not technically feasible; and
- (ii) Other waste for which such treatment does not contribute to the objectives of the Landfill Directive as set out in Article 1 of the Directive by reducing the quality of the waste or the hazards to human health or the environment.
- 8.20 Each load of waste dispatched to landfill shall be accompanied by documentation verifying the type of treatment carried out on the waste and, in the case of bio-stabilised residual waste, biodried waste, municipal waste or treated municipal waste, its biodegradable content.

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

Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, in advance of the commencement of the activity, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall maintain a documented Emergency Response Procedure is in place that addresses any emergency situation which may originate on-site, including fire. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
- 9.3.1 In the event of an incident the licensee shall immediately:
- (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - (ii) isolate the source of any such emission;
 - (iii) evaluate the environmental pollution, if any, caused by the incident;
 - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
 - (v) identify the date, time and place of the incident;
 - (vi) notify the Agency and other relevant authorities.
- 9.3.2 Where an incident or accident that significantly affects the environment occurs, the licensee shall, without delay take measures to limit the environmental consequences of the incident or accident and to prevent further incident or accident.
- 9.4 Emergencies
- 9.4.1 In the event of a breakdown of equipment or any other occurrence which results in the closure of the installation for more than 48 hours, any waste arriving, or in the case of putrescible waste already accepted at the installation, shall be transferred directly to an alternative authorised facility until such time as the installation is returned to a fully operational status. The breakdown of equipment or any other occurrence which results in the closure of the installation, regardless of duration, shall be treated as an emergency and rectified as soon as possible.
- 9.4.2 All significant spillages occurring at the installation shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
- 9.4.3 No waste shall be burnt within the boundaries of the installation. A fire at the installation shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.
- 9.5 The licensee shall arrange, within six months of the date of grant of this licence and every three years thereafter, for the completion, by an independent and appropriate qualified consultant, of a fire risk assessment for the installation. The assessment shall examine all relevant factors on site that impinge on fire risk and prevention. The assessment shall have regard to the EPA Guidance Note: *Fire Safety at Non-Hazardous Waste Transfer Stations*, 2013. Any recommendations in the fire risk assessment shall be implemented by the licensee.

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

Condition 10. Closure, Restoration and Aftercare Management

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.2 Decommissioning Management Plan (DMP)
- 10.2.1 The licensee shall maintain, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof.
- 10.2.2 The plan provided with the licence application shall be reviewed within three months of the date of grant of this licence and the Agency's agreement to the revised plan obtained.
- 10.2.3 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.
- 10.2.4 The licensee shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) and, as appropriate, Guidance on Environmental Liability Risk Assessment, Residuals Management Plans, and Financial Provision (2006) and the baseline report, when implementing Condition 10.2.1 above.
- 10.3 The Decommissioning Management Plan shall include, as a minimum, the following:
- (i) a scope statement for the plan;
 - (ii) the criteria that define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment;
 - (iii) a programme to achieve the stated criteria;
 - (iv) where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan; and
 - (v) details of the costings for the plan and the financial provisions to underwrite those costs.
- 10.4 A final validation report to include a certificate of completion for the Decommissioning Management Plan, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

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

Condition 11. Notification, Records and Reports

- 11.1 The licensee shall notify the Agency, in a format as may be specified by the Agency, one month in advance of the intended date of commencement of the Scheduled Activities.
- 11.2 The licensee shall notify the Agency by both telephone and either email or webform, to the Agency's headquarters in Wexford, or to such other Agency office as may be

specified by the Agency, as soon as practicable after the occurrence of any of the following:

- (i) an incident or accident that significantly affects the environment;
- (ii) any release of environmental significance to atmosphere from any potential emissions point including bypasses;
- (iii) any breach of one or more of the conditions attached to this licence;
- (iv) any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control and Monitoring*, of this licence which is likely to lead to loss of control of the abatement system; and
- (v) any incident with the potential for environmental contamination of surface water or groundwater, or posing an environment threat to air or land, or requiring an emergency response by the Local Authority.

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

- 11.3 In the event of any incident which relates to discharges to sewer having taken place, the licensee shall notify the Local Authority and Irish Water as soon as practicable after such an incident.
- 11.4 In the event of any incident relating to discharges to water, the licensee shall notify the local authority, Irish Water and Inland Fisheries Ireland as soon as practicable after such an incident.
- 11.5 The licensee shall make a record of any notification made under Condition 11.2. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident or accident. The record shall include all corrective actions taken to manage the incident or accident, minimise wastes generated and the effect on the environment, and avoid recurrence. In the case of a breach of a condition, measures to restore compliance. The licensee shall, as soon as practicable following notification, submit to the Agency the record.
- 11.6 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.7 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation.
- 11.8 The licensee shall as a minimum ensure that the following documents are accessible at the site:
 - (i) the licences relating to the installation;
 - (ii) the current EMS for the installation including all associated procedures, reports, records and other documents;
 - (iii) the previous year's AER for the installation;
 - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation;
 - (v) relevant correspondence with the Agency;
 - (vi) up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;
 - (vii) up-to-date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that

standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment;

- (viii) any elements of the licence application or EIS documentation referenced in this licence.

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

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

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

- 11.10 The licensee shall submit to the Agency, by the 31st March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D: Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.

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

- (i) the name of the carrier;
- (ii) the date and time of removal of trade effluent, or other liquid waste and/or contaminated storm water from the installation;
- (iii) the volume of trade effluent or other liquid waste and/or contaminated storm water, in cubic metres, removed from the installation on each occasion;
- (iv) the name and address of the waste water treatment plant to which the trade effluent or other liquid waste and/or contaminated storm water was transported; and
- (v) any incidents or spillages of trade effluent, other liquid waste and/or contaminated storm water during its removal or transportation.

- 11.12 Waste Recovery Reports

The licensee shall as part of the AER submit a report on the contribution by this installation to the achievement of the recovery targets and strategy stated in national and European Union waste policies.

- 11.13 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this installation. This record shall be maintained on a monthly basis and shall as a minimum contain details of the following:

- (i) the tonnages and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery;
- (ii) the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);

- (iii) details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;
 - (iv) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
 - (v) details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;
 - (vi) details of any rejected consignments;
 - (vii) details of any approved waste mixing;
 - (viii) the results of any waste analyses required under *Schedule C: Control & Monitoring*, of this licence; and
 - (ix) the tonnage and EWC Code for the waste materials recovered/disposed on-site.
- 11.14 The licensee shall maintain a computer-based record for each load of waste arriving at and departing from the installation. The licensee shall record the following:
- (i) the date and time;
 - (ii) the name of the carrier (including if appropriate, the waste carrier registration details);
 - (iii) the vehicle registration number;
 - (iv) the trailer, skip or other container unique identification number (where relevant);
 - (v) the name of the producer(s)/collector(s) of the waste as appropriate;
 - (vi) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
 - (vii) a description of the waste including the associated EWC codes;
 - (viii) the quantity of the waste, recorded in tonnes;
 - (ix) details of the treatment(s) to which the waste has been subjected;
 - (x) the classification and coding of the waste, including whether MSW or otherwise;
 - (xi) whether the waste is for disposal or recovery and if recovery for what purpose;
 - (xii) the name of the person checking the load; and
 - (xiii) where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed.
- 11.15 Each load of waste dispatched to landfill shall be accompanied by documentation verifying the type of treatment carried out on the waste and, in the case of municipal waste or treated municipal waste, its biodegradable content.
- 11.16 The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency.
- 11.17 All reports shall be certified accurate and representative by the installation manager or a nominated, suitably qualified and experienced deputy.

Reason: *To provide for the collection and reporting of adequate information on the activity.*

Condition 12. Financial Charges and Provisions

12.1 Agency Charges

- 12.1.1 The licensee shall pay to the Agency an annual contribution of €9,477, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Environmental Protection Agency Act 1992 as amended. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Environmental Protection Agency Act 1992 as amended and all such payments shall be made within one month of the date upon which demanded by the Agency.
- 12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

12.2 Environmental Liabilities

- 12.2.1 The licensee shall as part of the AER, provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with the carrying on of the activity.
- 12.2.2 The licensee shall arrange for the completion, by an independent and appropriate qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) which addresses the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the DMP. A report on this assessment shall be submitted to the Agency for agreement within three months of date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. Review results are to be notified as part of the AER.
- 12.2.3 As part of the measures identified in Condition 12.2.1, the licensee shall, to the satisfaction of the Agency and within six months of date of grant of this licence, make financial provision to cover any liabilities associated with the operation (including closure). The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.2.1.
- 12.2.4 The licensee shall revise the cost of closure annually and any adjustments shall be reflected in the financial provision made under Condition 12.2.3.
- 12.2.5 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Residuals Management Plans and Financial Provision when implementing Conditions 12.2.2 and 12.2.3 above.

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

SCHEDULE A: Limitations

A.1 Authorised Processes

The following waste related processes are authorised:

- Reception, sorting, separation, bulking, shredding, screening, storage and transfer of waste; and
- Composting of bio-waste and biodegradable waste and associated processes including:
 - o waste pre-treatment and preparation for composting;
 - o storage of waste and compost; and
 - o processes for the management and mitigation of environmental emissions.
- Aerobic biological treatment of municipal waste, organic fines and other feedstocks not conducive to the production of quality compost and associated processes including:
 - o waste pre-treatment and preparation for biological treatment;
 - o storage of waste including the outputs of biological treatment; and
 - o processes for the management and mitigation of environmental emissions.
- Operation of a civic amenity facility.

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

A.2 Waste Acceptance

The list of waste in the following table is without prejudice to any restrictions placed on the activity by the Department of Agriculture, Food and the Marine in relation to the acceptance and processing of waste comprising or containing animal by-products.

A.2 Waste Accepted

| Non-hazardous waste type ^{Note 1,3} | | Maximum ^{Note 2} (Tonnes Per Annum) |
|--|--|---|
| Composting and aerobic biological treatment | Biowaste and other biodegradable waste | 40,000 |
| | Sewage Sludge | |
| | Industrial Non-Hazardous Sludges | |
| | Industrial Non-Hazardous Solids | |
| | Municipal solid waste | |
| Waste transfer | Construction & Demolition | 20,000 |
| | Commercial & Industrial | |
| | Municipal solid waste | |
| Total | | 60,000 |

Note 1: Any proposals to accept other compatible non-hazardous waste types must be agreed in advance by the Agency.

Note 2: The limitation on individual non-hazardous waste types may be varied with the agreement of the Agency subject to the total limit for non-hazardous waste staying the same.

Note 3: Non-hazardous waste only authorised, with the exception of up to 5 tonnes total of household hazardous waste and similar waste from other sources authorised for acceptance at the civic amenity site under condition 3.13.

SCHEDULE B: Emission Limits**B.1 Emissions to Air****B.1.1 Emission Limit Values for Biofilters**

Emission Point reference no: A-1 Biofilter Biological Treatment Facility (original biofilter).

Location: Biofilter unit (Biological Treatment Facility).

Minimum discharge height: 10m above ground.

Maximum flow volume: 60,000 Nm³/hr

| Parameter | Emission Limit Value |
|-------------------|--------------------------------------|
| Ammonia | 50 mg/m ³ |
| Hydrogen sulphide | 2.5 mg/m ³ |
| Mercaptans | 5 mg/m ³ |
| Amines | 5 mg/m ³ |
| Odour | 1000 Ou _E /m ³ |



Emission Point reference no: A-2 Biofilter Biological Treatment Facility (new biofilter)
Note 1

Location: Biofilter unit (Biological Treatment Facility).

Minimum stack dimensions: 1m in diameter.

Minimum discharge height: 10m above ground.

Maximum flow volume: 60,000 Nm³/hr.

| Parameter | Emission Limit Value |
|-------------------|--------------------------------------|
| Ammonia | 50 mg/m ³ |
| Hydrogen sulphide | 2.5 mg/m ³ |
| Mercaptans | 5 mg/m ³ |
| Amines | 5 mg/m ³ |
| Odour | 1000 Ou _E /m ³ |

Note 1: Once biofilter A-2 is operational biofilter A-1 shall be decommissioned unless otherwise agreed by the Agency.



Emission Point reference no: A-3 Biofilter Waste Transfer Building.
Location: Biofilter unit (Waste Transfer Building).
Minimum bed dimensions: 20.5 x 8.0m.
Minimum discharge height: 3m above ground.
Maximum flow volume: 10,000 m³/hr

| Parameter | Emission Limit Value |
|-------------------|------------------------|
| Ammonia | 50 mg/m ³ |
| Hydrogen sulphide | 0.9 mg/m ³ |
| Mercaptans | 5 mg/m ³ |
| Amines | 5 mg/m ³ |
| Odour | 800 Oue/m ³ |

B.1.2 Dust Deposition Limits

Monitoring Point Reference No.: D1, D2 and D3.
Location: Reference drawing number 002/D.

| Level (mg/m ² /day) ^{Note 1} |
|--|
| 350 |

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

B.2 Emissions to Water

There shall be no emissions to water of environmental significance.

B.3 Emissions to Sewer

There shall be no emissions to sewer.

B.4 Noise Emissions (measured at noise sensitive locations, NSLs)

Monitoring Point Reference No: N1, N1A, N2, N3, N4, N5 and N6
Location: A drawing of the monitoring locations is required in accordance with Condition 6.17.

| Daytime dB L _{Ar, T} (30 minutes) | Evening dB L _{Ar, T} (30 minutes) | Night-time dB L _{Aeq, T} (15-30 minutes) |
|---|---|--|
| 55 | 50 | 45 ^{Note 1} |

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

SCHEDULE C: Control & Monitoring**C.1.1. Control of Emissions to Air**

| | |
|-------------------------------------|---|
| Emission Point Reference No: | A-1 (Biofilter Biological Treatment Facility) A-2 (Biofilter Biological Treatment Facility) A-3 (Biofilter Waste Transfer Building) |
| Description of Treatment: | Acid scrubbing (where appropriate) Bio-filtration |

| Control Parameter | Monitoring | Key Equipment ^{Note 1} |
|---|-------------------------------------|--|
| Air Management and Treatment | | |
| Air extraction | Continuous with alarm/call-out | Pumps/ engines Pressure gauges |
| Acid scrubbing | Daily visual check of flow | Flow and level meters |
| | Daily visual check of pressure drop | Pressure gauges |
| Bio-filters | | |
| Ammonia | Monthly (at inlet and outlet) | Colorimetric indicator tubes ^{Note 2} |
| Hydrogen sulphide | Monthly (at inlet and outlet) | Colorimetric indicator tubes ^{Note 2} |
| Mercaptans | Monthly (at inlet and outlet) | Colorimetric indicator tubes ^{Note 2} |
| Amines | Monthly (at inlet and outlet) | Colorimetric indicator tubes ^{Note 2} |
| Bed Media ^{Note 3} | | |
| Odour assessment | Daily | Subjective impression |
| Condition and depth of bed media | Daily | Visual inspection |
| Moisture content | Monthly | Agreed method |
| pH | Bi-annually | Agreed method |
| Ammonia | Bi-annually | Agreed method |
| Total viable counts | Bi-annually | Agreed method |
| General | | |
| Fan | Daily visual check | System is operational |
| Negative pressure across biofilter | Monthly | Air current tubes |
| Operation of SCADA control system | Daily | SCADA control system |

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

Note 2: Or an alternative method agreed by the Agency.

Note 3: The biofilter shall be examined to ensure that no channelling is evident. Turning, restructuring and the addition of supplementary bed materials or total replacement of bed materials shall be carried out as required subject to bed performance.

C.1.2. Monitoring of Emissions to Air

Emission Point Reference No:

Biofilters: A-1, A-2 and A-3.

| Parameter | Monitoring Frequency | Analysis Method/Technique |
|-------------------|----------------------------------|--|
| Odour | Bi-annual | See Note 1 |
| Ammonia | Monthly (at outlet of Biofilter) | Colorimetric indicator tubes ^{Note 2} |
| Hydrogen sulphide | Monthly (at outlet of Biofilter) | Colorimetric indicator tubes ^{Note 2} |
| Mercaptans | Monthly (at outlet of Biofilter) | Colorimetric indicator tubes ^{Note 2} |
| Amines | Monthly (at outlet of Biofilter) | Colorimetric indicator tubes ^{Note 2} |

Note 1: Odour measurements shall be by olfactometric measurement and analysis shall be for mercaptans, hydrogen sulphide, ammonia, and amines.

Note 2: Or an alternative method agreed by the Agency.

C.2.1 Monitoring of Biological Treatment Processes

| Parameter | Monitoring Frequency | Monitoring equipment/method |
|---|----------------------|-----------------------------|
| • Composting process | | |
| Temperature | Continuous | Temperature probe/recorder |
| Oxygen Content | Daily | Oxygen Probe with recorder |
| Moisture | Daily | Subjective by operator. |
| • Composting process (curing) | | |
| Temperature | Continuous | Temperature probe |
| Moisture | Daily | Subjective by operator. |
| • General | | |
| Liquid level in leachate and liquor tanks | Continuous | Probe with recorder |

C.3.1. Control of Emissions to Water

There shall be no emissions to water of environmental significance.

C.3.2. Monitoring of Emissions to Water

There are no emissions to water of environmental significance.

C.4.1. Control of Storm Water Emissions

Emission Point Reference No:

S-1.

Emission Point Location:

As per drawing no. 'Page No. 002/D'.

| Control Parameter | Monitoring | Key Equipment ^{Note 1} |
|-------------------|--|---|
| Oil removal | Mineral oil concentration in water at discharge point | Class I full retention oil separators Shut-off valve |
| Suspended solids | Suspended solids concentration in water at discharge point | Silt trap |

C.4.2. Monitoring of Storm Water Emissions

Emission Point Reference No:

S-1.

| Parameter | Monitoring Frequency | Analysis Method/Technique ^{Note 1} |
|--------------------------|----------------------------------|---|
| pH | Weekly | Standard method |
| Temperature | Weekly | Standard method |
| COD | Monthly | Standard method |
| BOD | Monthly | Standard method |
| Suspended Solids | Monthly | Standard method |
| Total Ammonia (as N) | Monthly | Standard method |
| Total Nitrogen (as N) | Monthly | Standard method |
| Total Phosphate (as P) | Monthly | Standard method |
| Conductivity | Monthly | Standard method |
| Mineral Oil | Monthly | Standard method |
| Sulphate | Quarterly | Standard method |
| Visual Inspection | Daily | Sample and examine for colour and odour ^{Note 2} . |
| Metals ^{Note 3} | Annually | Standard method |
| Other ^{Note 4} | As may be required by the Agency | As may be agreed by the Agency |

Note 1: Analysis to be carried out by a competent laboratory, using standard and internationally accepted procedures.

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

Note 3: Iron, manganese, zinc, lead, copper, mercury, nickel, chromium and cadmium..

Note 4: Any parameters as may be required by the Agency.

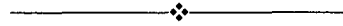
C.5.1. Control of Emissions to Sewer

There shall be no process effluent emissions to sewer.



C.5.2. Monitoring of Emissions to Sewer

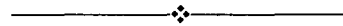
There shall be no process effluent emissions to Sewer.



C.6 Tankered Effluent and Waste Analysis

| Waste Class | Frequency | Parameter | Method |
|--|---|-------------|--|
| Municipal waste dispatched to landfill | As may be specified by the Agency or as required to generate a site specific BMW factor | BMW content | Waste characterisation or other methods as may be specified. |
| Other ^{Note 1} | | | |

Note 1: Analytical requirements to be determined on a case by case basis.



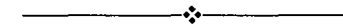
C.7 Noise Monitoring

Locations: N1, N1A, N2, N3, N4, N5 and N6.

| Period | Minimum Survey Duration ^{Note 1} |
|------------------------------|---|
| Daytime | 4 hour survey with a minimum of 3 sampling periods at each noise monitoring location. |
| Evening-time | 2 hour survey with a minimum of 1 sampling period at each noise monitoring location. |
| Night-time ^{Note 2} | 3 hour survey with a minimum of 2 sampling periods at each noise monitoring location. |

Note 1: Sampling period T shall be in accordance with *Schedule B: Noise Emissions*, of this licence. This applies to day, evening and night time periods.

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



C.8 Ambient Monitoring**Dust Deposition and Micro-Organisms**

Location: Dust - monitoring stations D1, D2, D3
 Micro-organisms - at upwind and downwind locations to be agreed by the Agency or at any other locations as may be required by the Agency

| Parameter | Monitoring Frequency | Analysis Method/Technique |
|-----------------------|-----------------------------|-------------------------------|
| Dust deposition | Quarterly ^{Note 1} | VDI 2119 (Bergerhoff method) |
| Bacteria | Quarterly | Grab sample ^{Note 2} |
| Aspergillus fumigatus | Quarterly | Grab sample ^{Note 2} |

Note 1: Twice during the period May to September concurrently with all of the above.

Note 2: Enumeration of colonies to be carried out as described in 'Standardised Protocol for the Sampling and Enumeration of Airborne Micro-organisms at Composting Facilities' - The Composting Association (1999) or alternative method and/or frequency as may be agreed by the Agency.

Groundwater Monitoring

Location: GW1 - the on-site well.

| Parameter | Monitoring Frequency | Analysis Method/Techniques |
|---------------------------------------|----------------------------------|--------------------------------|
| pH | Biannually | pH electrode/meter |
| COD | Biannually | Standard Method |
| Nitrate | Biannually | Standard Method |
| Total Ammonia | Biannually | Standard Method |
| Total Nitrogen | Biannually | Standard Method |
| Conductivity | Biannually | Standard Method |
| Chloride | Biannually | Standard Method |
| Fluoride | Biannually | Standard Method |
| Hazardous Compounds ^{Note 1} | Annually | Standard Method |
| Other ^{Note 2} | As may be required by the Agency | As may be agreed by the Agency |

Note 1: The relevant hazardous substances for monitoring in groundwater shall be identified by the licensee by undertaking a risk based assessment. The licensee shall have regard to the 'Classification of Hazardous and Non-Hazardous Substances in Groundwater' issued by the Agency.

Note 2: Any parameters as may be required by the Agency.

Receiving Water Monitoring

Monitoring Point Reference No.:

SW1 - upstream monitoring location.

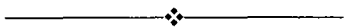
SW2 - downstream monitoring location.

Location:

At locations on the Tinnaclash Stream to be agreed by the Agency.

| Parameter | Monitoring Frequency ^{Note 1} | Analysis Method/Techniques |
|--------------------------------------|--|----------------------------|
| Biological Quality (Q) Rating/Q Link | Annually | To be agreed by the Agency |

Note 1: Monitoring period - June to September.



SCHEDULE D: Specified Engineering Works

| Specified Engineering Works |
|---|
| <p>Development of the installation including installation of waste-handling, processing, recycling/recovery infrastructure and installation of increased waste processing capacity as well as any abatement systems.</p> <p>Installation drainage network including silt traps and oil interceptors.</p> <p>Installation of dust/odour control systems.</p> <p>Installation of biofilters in the biological treatment facility and the waste transfer building.</p> <p>Any other works notified in writing by the Agency.</p> |

SCHEDULE E: Standards for Compost Quality

Compost Quality

The following criteria are deemed a quality standard for the use of compost as a soil improver if applied to land in accordance with statutory obligations and requirements under any other enactments or regulations. The following criteria should not be deemed as criteria for fertiliser. Composts for other end uses may require stricter and/or additional criteria to be achieved.

N, P, K, NH₄-N, NO₃-N, pH and dry matter content shall be measured and reported upon in compost quality reports in order to facilitate the end use of the compost.

The criteria apply to the compost just after the final composting/curing phase/treatment and prior to mixing with any other materials.

1. Stability

Table E.1- Maximum Respiration Activity

| Parameter | Quality Limit |
|-----------|---|
| Stability | Oxygen Uptake Rate (OUR), ≤ 13 mmol O ₂ /kg organic solids/hour |

2. Metals Note 1, 2 & 3

Table E.2 – Maximum Metal Concentration Limits

| Parameter (mg/kg, dry mass) | Compost/Digestate Limit (mg/kg dry matter) |
|-----------------------------|--|
| Cadmium (Cd) | 1.5 |
| Chromium (Cr) | 150 |
| Copper (Cu) | 150 |
| Mercury (Hg) | 1 |
| Nickel (Ni) | 75 |
| Lead (Pb) | 150 |
| Zinc (Zn) | 400 |

Note 1: These limits should not be taken as an indication of suitability for addition to soil as the cumulative metal additions to soil should be first calculated.

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

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

3. Pathogens

If this installation is regulated by the Department of Agriculture, Food and the Marine under the Animal By-products Regulation and the compost/digestate has been sanitised in accordance with that Department's requirements, there is no requirement for further testing, provided that records of the testing form part of the compost quality records maintained in accordance with this licence.

If the above does not apply the pathogenic organism content shall not exceed the limits for the following indicator species:

Table E.3 – Pathogenic Organism Content Limits

| Species | Limit | Sample Number (n) |
|------------------|-----------------------------------|-------------------|
| Salmonella spp. | Absent in 25g | n=5 |
| Escherichia coli | ≤ 1000 CFU per gram of fresh mass | n=5 |

Where n = Number of samples to be tested.

4. Impurities

Table E.4 – Impurity Content Limits

| Parameter | Compost/Digestate Limit |
|-------------------------------------|--|
| Impurities ^{Note 1} > 2 mm | < 0.5% |
| Gravel and Stones > 5 mm | < 5% |
| Sharps | Compost shall not any sharp impurity measuring over a 2 mm dimension that could cause damage or injury to humans, animals or plant during, or resulting from, its intended use |

Note 1: Impurities generally refer to macroscopic fragments of glass, metals, plastics or similar non-biodegradable materials.

5. Organic Matter

Table E.5 – Organic Matter Content Limit

| Parameter | Compost/Digestate Limit |
|----------------|-------------------------|
| Organic Matter | ≥ 20% |

6. Miscellaneous

Table E.6 – Maturity Test

| Parameter | Compost/Digestate Limit |
|-------------------|--------------------------------|
| Viable Weed Seeds | < 3 viable weed seed per litre |
| Other | As may be agreed by the Agency |

SCHEDULE F: Annual Environmental Report

| Annual Environmental Report Content <small>Note 1</small> |
|--|
| Reporting Period. |
| Waste activities carried out at the installation. |
| Quantity and Composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used). |
| Emissions from the installation. |
| Waste management record. |
| Waste recovery report. |
| Full title and a written summary of any procedures developed by the licensee in the year which relates to the installation operation. |
| Amount of compost and bio-stabilised residual waste produced per annum. |
| Review of Nuisance Controls. |
| Resource consumption summary. |
| Complaints summary. |
| Schedule of Environmental Objectives and Targets. |
| Environmental management programme – report for previous year. |
| Environmental management programme – proposal for current year. |
| Pollutant Release and Transfer Register – report for previous year. |
| Pollutant Release and transfer Register – proposal for current year. |
| Noise monitoring report summary. |
| Ambient monitoring summary. |
| Tank and pipeline testing and inspection report. |
| Reported incidents summary. |
| Energy efficiency audit report summary. |
| Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated. |
| Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharges. |
| Volume of trade effluent/leachate and/or contaminated storm water produced and volume transported off-site. |
| Development/Infrastructural works summary (completed in previous year or prepared for current year). |
| Reports on financial provision made under this licence, management and staffing structure of the installation, and a programme for public information. |
| Review of decommissioning management plan. |
| Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities). |
| Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions). |
| Destination and uses of compost produced. |
| Any other items specified by the Agency. |

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

Signed on behalf of the said Agency
On the 3rd day of September, 2015


Mary Turner, Authorised Person