

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

WASTE LICENCE

PROPOSED DECISION

Waste Licence Register Number: 106-2

Applicant: Brúscar Bhearna Teoranta

Location of Facility: Carrowbrowne, Headford Road, Galway

INTRODUCTION

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

This licence is for the continued operation and development of a non-hazardous waste transfer facility at Carrowbrowne, Headford Road, Galway. Brúscar Bhearna Teoranta (Barna Waste) will be permitted to accept non-hazardous municipal, industrial, commercial and industrial, construction and demolition and organic wastes at this facility.

The maximum quantity of waste to be accepted at this facility is limited to 166,000 tonnes per annum. The licence provides for the construction of a new building within which a composting unit and construction and demolition waste recovery area will be located. The composting unit can accept a maximum of 40,000 tonnes of biowaste per annum and all composting will take place in fully enclosed aisles with the air emissions from the composting process being treated prior to discharge to the atmosphere. The construction and demolition waste recovery area will also be provided within the new building. A civic waste facility shall also be provided at the facility.

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

The licence sets out in detail the conditions under which Brúscar Bhearna Teoranta will operate and manage this facility.

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DECISION & REASONS FOR THE DECISION

Reasons for the decision

The Environmental Protection Agency (The Agency) is satisfied, on the basis of the information available, that the waste activity, or activities, licensed hereunder will comply with the requirements of Section 40(4) of the Waste Management Act, 1996.

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

Part I Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Agency proposes, under Section 46(2) of the said Act to grant this Waste Licence to Brúscar Bhearna Toeranta to carry on the waste activities listed below at Carrowbrowne, Headford Road, Galway subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Act 1996

| Class 11. | Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule. |
|-----------|--|
| | This activity is limited to the bulking and mixing of waste for disposal |
| Class 12. | Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule. |
| | This activity is limited to the repackaging and bulking of waste for disposal |
| Class 13. | Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned was produced. |
| | This activity is limited to the storage of waste at the facility prior to disposal |

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Act 1996

| Class 2. | Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes): | |
|-----------|---|--|
| | This activity is limited to the composting of biodegradable waste at the facility and the recovery of other organic wastes (e.g. timber shredding) | |
| Class 3. | Recycling or reclamation of metals and metal compounds: | |
| | This activity is limited to the recovery of metals at the facility | |
| Class 4. | Recycling or reclamation of other inorganic materials: | |
| | This activity is limited to the recovery of construction and demolition waste at the facility | |
| Class 12. | Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule: | |
| | This activity is limited to the exchange of waste for recovery | |
| Class 13. | Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced: | |
| | This activity is limited to the storage of waste at the facility prior to removal off-site for recovery. | |

INTERPRETATION

All terms in this licence should be interpreted in accordance with the definitions in the Waste Management Act, (the Act), unless otherwise defined in this section.

Adequate lighting 20 lux measured at ground level.

Agreement Agreement in writing.

Annually At approximately twelve monthly intervals.

Application The application by the licensee for this waste licence.

Appropriate facility A waste management facility, duly authorised under relevant law and

technically suitable.

Bi-annually All or part of a period of six consecutive months.

Biodegradable Any waste that is capable of undergoin

waste

Any waste that is capable of undergoing anaerobic or aerobic decomposition,

such as food, garden waste, food sludge, paper and paperboard.

Condition A condition of this licence.

Consignment Note All movements of hazardous waste within Ireland must be accompanied by a

"C1" consignment note issued by a local authority under the Waste Management (Movement of Hazardous Waste) Regulations (SI No. 147 of 1998). Transfrontier shipment notification and movement/tracking form numbers are required for all exports of waste from, into or through the state under the Waste Management (Transfrontier Shipment of Waste)

Regulations (SI No. 149 of 1998).

Construction and Demolition Waste

All wastes which arise from construction, renovation and demolition

activities.

Containment boom A boom which can contain spillages and prevent them from entering drains

or watercourses.

Daytime 8.00 a.m. to 10.00 p.m.

Documentation Any report, record, result, 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 8.4.

Emission Limits Those limits, including concentration limits and deposition levels established

in Schedule C: Emission Limits, of this licence.

European Waste Catalogue (EWC)

A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 94/3/EC and any

subsequent amendment published in the Official Journal of the European

Community.

Wastewater Sewage and drainage from waste transfer building, wheelwash, truck wash,

ramp, weighbridges, vehicle cleaning and ejector trailer parking areas and

any areas used for the processing and/or storage of waste.

Waste wood (excluding timber), plant matter such as grass cuttings, and Green waste

other vegetation.

Hours of Operation The hours during which the facility is authorised to be operational. The

> hours of operation of a facility are usually longer than the hours of waste acceptance to facilitate preparatory and completion works, such as the removal and laying of daily cover. Different activities within the facility, such as the civic waste facility, may have different hours of waste acceptance.

Hours of Waste Acceptance

The hours during which the facility is authorised to accept waste. Different activities within the facility, such as the civic waste facility, may have

different hours of waste acceptance.

Industrial Waste As defined in Section 5(1) of the Act.

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.

Landfill Directive Council Directive 1999/31/EC.

Licence A Waste Licence issued in accordance with the Act.

Licensee Brúscar Bhearna Teoranta

Liquid Waste Any waste in liquid form and containing less than 2% dry matter. Any waste

tankered to the facility.

Maintain Keep in a fit state, including such regular inspection, servicing, calibration

and repair as may be necessary to adequately perform its function.

Mobile Plant Self-propelled machinery used for the emplacement of wastes or for the

construction of specified engineering works.

Monthly A minimum of 12 times per year, at approximately monthly intervals.

Municipal waste As defined in Section 5(1) of the Act.

10.00 p.m. to 8.00 a.m. Night-time

Noise Sensitive Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area Location (NSL)

of high amenity which for its proper enjoyment requires the absence of noise

at nuisance levels.

Device installed according to the draft European Standard prEN 858 Oil Separator/ Interceptor

(Installations for the separation of light liquids, e.g. oil and petrol).

Those waste types, such as cardboard, batteries, gas cylinders, etc, which Recyclable

Materials may be recycled.

Quarterly At approximately three monthly intervals.

Sludge The accumulation of solids resulting from chemical coagulation, flocculation

and/or sedimentation after water or wastewater treatment, with between 2%

and 25% dry matter.

Sanitary Authority Galway City Council

Sample(s) Unless the context of this licence indicates to the contrary, samples shall

include measurements by electronic instruments.

Specified Emissions Those emissions listed in *Schedule C: Emission Limits*, of this licence.

Specified

Those engineering works listed in *Schedule B: Specified Engineering Works*,

Engineering Works of this licence.

Trigger Level A parameter value specified in the licence, the achievement or exceedance of

which requires certain actions to be taken by the licensee.

Wastewater Run-off from the floor of the waste transfer & compost buildings, run-off

from hardstanding areas used for the processing/storage of waste and any water that has been used, for washing, flushing or in the composting process

at the facility.

Weekly During all weeks of plant operation, and in the case of emissions, when

emissions are taking place; with no more than one measurement in any one

week.

White Goods Refrigerators, cookers, ovens and other similar appliances.

EPA Working Day Refers to the following hours; 9.00 a.m. to 5.30 p.m. Monday to Friday

inclusive.

PART II CONDITIONS

CONDITION 1 SCOPE OF THE LICENCE

- 1.1. Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed and authorised by this licence.
- 1.2. For the purposes of this licence, the facility is the area of land outlined in red on Drawing No. 702140/9/17 (*Site Location map Showing Monitoring and Sampling Positions*) of the application. Any reference in this licence to "facility" shall mean the area thus outlined in red.
- 1.3. This licence is for the purposes of waste licensing under the Waste Management Act 1996 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.4. Only those waste categories and quantities listed in *Schedule A: Waste Acceptance*, of this licence, shall be accepted at the facility.
- 1.5. No hazardous wastes, liquid wastes or sewage sludge shall be accepted at the facility.
- 1.6. Waste Acceptance and Handling Hours
 - 1.6.1. Waste Transfer Station and Composting Unit
 - 1.6.1.1. Waste shall only be accepted at the facility between the hours of 7.30am and 7.00pm Monday to Saturday inclusive.
 - 1.6.1.2. Waste shall only be handled during the hours of 7.00am to 8.00pm Monday to Saturday.
 - 1.6.1.3. Waste shall not be accepted at the transfer station or the compost facility on Sundays or Bank Holidays.
 - 1.6.2. Civic Waste Facility
 - 1.6.2.1. Wastes may be accepted at the Civic Waste Facility between the hours of 9.00am and 5.00pm seven days a week including Bank Holidays.
- 1.7 The following shall constitute an incident for the purposes of this licence:
 - a) an emergency;
 - b) any emission which does not comply with the requirements of this licence;
 - c) any exceedance of the daily duty capacity of the waste handling equipment;
 - d) any trigger level specified in this licence which is attained or exceeded; and
 - e) any indication that environmental pollution has, or may have, taken place.
- 1.8. Where the Agency considers that a non-compliance with any condition of this licence has occurred, it may serve a notice on the licensee specifying.
 - 1.8.1. That only those wastes as specified, if any, in the notice are to be accepted at the facility after the date set down in the notice.

- 1.8.2. That the licensee shall undertake the works stipulated in the notice, and/or otherwise comply with the requirements of the notice as set down therein, within the time-scale contained in the notice.
- 1.8.3. That the licensee shall carry out any other requirement specified in the notice.

When the notice has been complied with, the licensee shall provide written confirmation that the requirements of the notice have been carried out. No waste, other than that which is stipulated in the notice, shall be accepted at the facility until written permission is received from the Agency.

- 1.9. Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any Condition of this licence shall include a proposed timescale for its implementation. The Agency may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this licence.
- 1.10 This licence is being granted in substitution for the waste licence granted to the licensee on 18th December 2000 and bearing Waste Licence Register No: 106-1. The previous waste licence (Register No: 106-1) is superseded by this licence.

REASON: To clarify the scope of this licence.

CONDITION 2 MANAGEMENT OF THE FACILITY

2.1 Facility Management

- 2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation.
- 2.1.2 Both the facility manager and deputy, and any replacement manager or deputy, shall successfully complete both the FAS waste management training programme (or equivalent agreed with the Agency) and associated on site assessment appraisal within twelve months of appointment.
- 2.1.3 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence.

2.2 Management Structure

- 2.2.1 Within three months from the date of grant of this licence, the licensee shall submit written details of the updated management structure of the facility to the Agency. Any proposed replacement in the management structure shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information.
 - a) the names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;

- b) details of the responsibilities for each individual named under a) above; and
- c) details of the relevant education, training and experience held by each of the persons nominated under a) above.
- 2.3 Environmental Management System (EMS)
 - 2.3.1 The licensee shall maintain the EMS at the facility. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement.
 - 2.3.2 The EMS shall include as a minimum the following elements:
 - 2.3.2.1 Schedule of Environmental Objectives and Targets

The objectives should be specific and the targets measurable. The Schedule shall address a five-year period as a minimum. The Schedule shall include a time-scale for achieving the objectives and targets and shall comply with any other written guidance issued by the Agency.

2.3.2.2 Environmental Management Plan (EMP)

The EMP shall include, as a minimum, the following:

- (i) methods by which the objectives and targets will be achieved in the coming year and the designation of responsibility for targets;
- (ii) any other items required by written guidance issued by the Agency.
- 2.3.2.3 Corrective Action Procedures

The Corrective Action Procedures shall detail the corrective actions to be taken should any of the procedures detailed in the EMS not be followed.

2.3.2.4 Awareness and Training Programme

The Awareness and Training Programme shall identify training needs, for personnel who work in or have responsibility for the licensed facility.

- 2.4 Communications Programme
 - 2.4.1 Within three months of the date of grant of this licence, the licensee shall establish and maintain a Communications Programme to inform and involve the local community and ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

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

CONDITION 3 FACILITY INFRASTRUCTURE

3.1 The licensee shall establish all infrastructure referred to in this licence as required by the conditions of this licence.

- 3.2 Specified Engineering Works
 - 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule B: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.
 - 3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
 - 3.2.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall include the following information:
 - a) a description of the works;
 - b) as-built drawings of the works;
 - c) records and results of all tests carried out (including failures);
 - d) drawings and sections showing the location of all samples and tests carried out;
 - e) daily record sheets/diary;
 - name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
 - g) name(s) of individual(s) responsible for supervision of works and for quality assurance validation of works;
 - h) records of any problems and the remedial works carried out to resolve those problems; and
 - i) any other information requested in writing by the Agency.

3.3 Facility Notice Board

- 3.3.1 The licensee shall maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.
- 3.3.2 The board shall clearly show:
 - a) the name and telephone number of the facility;
 - b) the normal hours of opening;
 - c) the name of the licence holder;
 - d) an emergency out of hours contact telephone number;
 - e) the licence reference number; and
 - f) where environmental information relating to the facility can be obtained.

3.4 Facility Security

- 3.4.1 Within six months of the date of grant of this licence, the licensee shall provide security and stockproof fencing/walls and gates along the facility boundary. The base of the fencing shall be set in the ground.
- 3.4.2 The licensee shall remedy any defect in the gates and/or fencing as follows:
 - a) a temporary repair shall be made by the end of the working day; and

b) a repair to the standard of the original gates and/or fencing shall be undertaken within three working days.

3.5 Facility Roads and Hardstanding

- 3.5.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 3.5.2 Within twelve months of the date of grant of this licence, all areas of the facility other than those used for landscaping shall be suitably paved. All areas where waste handling, processing or storage occurs shall be paved with an impermeable surface.
- 3.5.3 Prior to the commissioning of the Civic Waste Facility the licensee shall ensure that all areas to be used by members of the public are clearly designated and marked and that appropriate signage has been erected in the area to ensure the safe and efficient operation of the Civic Waste Facility.

3.6 Facility Office

- 3.6.1 The licensee shall maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.6.2 The licensee shall maintain a working telephone and a method for electronic transfer of information at the facility.

3.7 Waste Inspection and Quarantine Areas

- 3.7.1 A Waste Inspection Area(s) and a Waste Quarantine Area(s) shall be provided and maintained at each building at the facility where waste is accepted.
- 3.7.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
- 3.7.3 Drainage from these areas shall be directed to the on-site wastewater collection system.

3.8 Weighbridge

3.8.1 Unless otherwise agreed with the Agency, the licensee shall provide and maintain the weighbridges at the facility as proposed in Drawing No. 702140/9/18 of the waste licence application.

3.9 Waste handling, ventilation and processing plant

- 3.9.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including *inter alia* waste loading vehicles and ejector trailers) shall be provided on the following basis:
 - a) 100% duty capacity;
 - b) 50% standby capacity available on a routine basis; and
 - c) Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.

- 3.9.2 Prior to the treatment of biowaste at the facility, the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the licensed waste intake, as per *Schedule A: Waste Acceptance*, of this licence.
- 3.9.3 The quantity of waste to be accepted at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedance of this intake shall be treated as an incident.

3.10 Wastewater Collection System

3.10.1 The licensee shall provide and maintain a wastewater collection system at the facility for the collection of wastewater arising on-site. The wastewater system shall drain into the adjoining local authority sewer-line.

3.11 Surface Water Collection System

- 3.11.1 The licensee shall provide and maintain a surface water collection system at the facility for the collection of surface water arising at the facility. The surface water collection system shall discharge to the receiving water located to the north of the facility via discharge point SD-1.
- 3.11.2 The licensee shall ensure that all roof water is collected and reused where possible. In the case where roof water is not reused it shall be discharged to the receiving water located to the north of the facility at a location to be agreed with the Agency.
- 3.11.3 All surface water (excluding roof water) shall pass through a silt trap and Class I interceptor prior to discharge. All interceptors shall be Class I interceptors and shall be in accordance with European Standard prEN 858 (installations for the separation of light liquids).

3.12 Tank and Drum Storage Areas

- 3.12.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
- 3.12.2 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:
 - a) 110% of the capacity of the largest tank or drum within the bunded area; or
 - b) 25% of the total volume of substance which could be stored within the bunded area.
- 3.12.3 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.12.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.12.5 The integrity and water tightness of all the underground pipes and tanks and bunds, and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency following its installation and prior to its use as a storage area. This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.

3.13 Drainage system, pipeline testing

3.13.1 The licensee shall ensure that all wastewater, sewage and surface water gullies, drainage grids and manhole covers shall be clearly marked so as to indicate which drainage

- system they are part of. This marking system shall be maintained so as to be visible at all times during facility operation, and shall include any identification designated in this licence (e.g. SW1).
- 3.13.2 All drainage systems, bunds, silt traps and oil separators shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal. A written record shall be kept of the inspections, desludging, cleaning, disposal of associated waste products, maintenance and performance of the interceptors, bunds and drains.
- 3.14 Construction and Demolition Waste Recovery Area
 - 3.14.1 Prior to the acceptance of C&D waste, the licensee shall provide a construction and demolition area at a location to be agreed in advance with the Agency. This infrastructure shall as a minimum comprise:
 - a) A fully enclosed area consisting of an impermeable concrete slab which shall contain plant for the processing of construction and demolition wastes;
 - b) A localised system for the control of dust emissions from construction and demolition waste handling plant shall be installed;
 - c) Noise reduction measures such as acoustic barriers and acoustic insulation shall be installed so as to minimise noise emissions; and
 - d) Suitably sized waste storage bays and bays for the storage of recovered materials shall be provided.

3.15 Civic Waste Facility

- 3.15.1 The licensee may establish and maintain a Civic Waste Facility at the facility.
- 3.15.2 In the case where the licensee provides a Civic Waste Facility the layout of the facility shall be as shown in Drawing No. 702140/9/18 unless otherwise agreed with the Agency.

3.16 Compost facility

- 3.16.1 Appropriate infrastructure (based on the plans submitted in the waste licence review application/EIS) for the composting of waste shall be established and maintained at the facility prior to any waste being composted.
- 3.16.2 The composting process shall as a minimum include/provide for the following:
 - (a) Designated areas for the acceptance, temporary storage and pre-treatment of biodegradable waste, composting aisles and also designated areas for the storage of processed compost;
 - (b) Suitably sized storage tanks for the storage of any sludges prior to their acceptance for composting. The design and location of the sludge storage tanks shall be agreed with the Agency prior to construction;
 - (c) The collection and reuse of all wastewater generated where possible. In the case where the wastewater cannot be reused it shall be drained to the wastewater collection system;
 - (d) Adequate aeration of the process and the collection of air emissions and their subsequent treatment/abatement in an odour abatement system. The odour collection/abatement system shall comprise the following:-

- Installation and maintenance of integrity and negative pressure throughout the building to ensure no significant escape of odours or dust;
- ii) Provision of a biofilter for each composting aisle within the building;
- iii) Provision of a water scrubber and biofilter for treatment/abatement of collected air emissions prior to discharge to atmosphere; and
- iv) Provision of 100% duty capacity and 50% stand by capacity, back ups and spares must be provided for the air handling, ventilation and abatement plant.

3.17 Monitoring Infrastructure

3.17.1 Monitoring infrastructure that is damaged or proves to be unsuitable for its purpose shall be replaced within three months of it being damaged or recognised as being unsuitable.

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

CONDITION 4 FACILITY OPERATIONS

- 4.1 All waste processing shall be carried out inside the building(s) at the facility.
- 4.2 Waste Acceptance and Characterisation Procedures
 - 4.2.1 The licensee shall agree with the Agency the source and nature of any sludges to be accepted at the facility prior to the acceptance of such wastes.
 - 4.2.2 Waste arriving at the facility shall be weighed, documented and directed to the Waste Transfer/Composting Building(s) as appropriate. Each load of waste arriving at the Waste Transfer/Composting Building(s) shall be inspected upon tipping within this building. Only after such inspections shall the waste be processed for disposal or recovery.
 - 4.2.3 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time. Temporary storage of such wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
 - 4.2.4 A record of all inspections of incoming waste loads shall be maintained.
- 4.3 Operational Controls
 - 4.3.1 All composting shall take place within a fully enclosed building.
 - 4.3.2 The floor of the waste transfer building, the waste acceptance/pre-treatment area of the composting unit and all waste handling plant shall be washed down and cleared of all waste on a daily basis. The floor of the storage bays for recovered wastes and compost shall be washed down and cleaned on each occasion such bays are emptied.

- 4.3.3 Scavenging shall not be permitted at the facility and there shall be no casual public access to the facility.
- 4.3.4 Gates shall be locked shut when the facility is unsupervised.
- 4.3.5 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 4.3.6 Fuels shall only be stored at appropriately bunded locations on the facility.
- 4.3.7 All tanks and drums shall be labelled to clearly indicate their contents.

4.4 Compost

- 4.4.1 In order not to be considered a waste, compost produced by the facility shall comply with the quality standards established in *Schedule F: Standards for Compost Quality*, of this licence. Analysis of the compost shall be in accordance with the requirements of that Schedule.
- 4.4.2 The recovery or disposal of the treated material not achieving the Class 1 or Class 2 standards shall be recorded as required under Condition 9.2.

4.5 Process Control

- 4.5.1 The licensee shall on a daily basis, monitor and record the temperature and moisture content of the composting material at eight locations on each composting aisle.
- 4.5.2 The facility shall be designed so as the rate of aeration may be varied as required across the length of each composting aisle and a sprinkler system shall also be installed in each aisle to allow for the moistening of the composting material.
- 4.6 Off-site Disposal and Recovery
 - 4.6.1 Waste sent off-site for recovery or disposal shall only be conveyed by a waste carrier agreed in advance by the Agency. Any request for such agreement of a waste carrier shall include the following.
 - i) Copies of the waste carrier's permit(s) under the Waste Management (Collection Permit) Regulations 2001.
 - ii) Details of the waste types it is proposed the carrier will transfer from the facility.
 - 4.6.2 All waste transferred from the facility shall only be transferred to an appropriate facility agreed by the Agency. Any request for agreement of such a facility shall be forwarded to the Agency at least one month in advance of its proposed use and shall include the following.
 - i) A copy of the waste permit or waste licence where applicable;
 - ii) The proposed waste types and quantities; and
 - iii) Details of any limitations on waste types and quantities acceptable at the facility.
 - 4.6.3 All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.

4.7 Civic Waste Facility

- 4.7.1 The Civic Waste Facility shall only be used by private vehicles. The facility shall not be used as a transfer station for disposal of waste by commercial waste disposal contractors or local authority waste collection vehicles.
- 4.7.2 Only those wastes that have been agreed in advance with the Agency may be accepted at the Civic Waste Facility.
- 4.7.3 All waste deposited in the Civic Waste Facility shall be either:-
 - (a) into a skip;
 - (b) into the hopper of the compactor for disposal;
 - (c) into a receptacle for recovery; or
 - (d) in the case where inspection is required, into a designated inspection area.
- 4.7.4 The licensee shall assign and clearly label each container at the Civic Waste Facility to indicate their contents.
- 4.7.5 At the end of the working day the floor of the Civic Waste Facility, the hopper and the compactor shall be cleared of waste.
- 4.7.6 All waste accepted at the Civic Waste Facility for disposal shall be removed within 24 hours of its arrival on-site.
- 4.8 Construction and Demolition Waste Recovery Area
 - 4.8.1 Only Construction and Demolition waste shall be accepted at this Area. Wastes that are capable of being recovered shall be separated and shall be stored temporarily in this area prior to being subjected to other recovery activities at the facility or transport off the facility.
 - 4.8.2 All stockpiles shall be maintained so as to minimise dust generation.
- 4.9 Wastewater Management
 - 4.9.1 Unless reused on the facility, all wastewater generated on-site shall collected and discharged to the local authority sewer that runs adjacent to the facility.

4.10 Maintenance

- 4.10.1 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.
- 4.10.2 The licensee shall maintain and clearly label and name all sampling and monitoring locations.
- 4.10.3 The licensee shall maintain all waste handling plant and abatement equipment in accordance with the manufacturers instructions.
- 4.11 Landscaping

4.11.1 Landscaping of the facility as described on Drawing No. 702140/9/19 of the application shall be carried out within twelve months of the date of grant of this licence.

REASON: To provide for appropriate operation of the facility to ensure protection of the environment.

CONDITION 5 EMISSIONS

- 5.1. No specified emission from the facility shall exceed the emission limit values set out in *Schedule C: Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 5.2. The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 5.3. Emission limits for emissions to atmosphere in this licence shall be interpreted in the following way.
 - 5.3.1. Non-Continuous Monitoring
 - (i) For any parameter where, due to sampling/analytical limitations, a 30 minute samples is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
 - (ii) For all other parameters, no 30 minute mean value shall exceed the emission limit value.
 - (iii) For flow, no hourly or daily mean value shall exceed the emission limit value.
- 5.4 Emissions to Surface Water
 - 5.4.1 The trigger levels for surface water discharges from the facility measured at monitoring point(s) are:
 - a) BOD 25mg/l
 - b) Suspended Solids 35mg/l
 - 5.4.2 No substance shall be discharged in a manner, or at a concentration which, following initial dilution causes tainting of fish or shellfish.
- 5.5 There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.
- 5.6 No Wastewater shall be discharged to surface water.
- 5.7 Wastewater Emissions to Sewer
 - 5.7.1 Unless otherwise agreed in advance with the Agency and the Sanitary Authority, the following shall apply for the discharge of wastewater, which shall be via the wastewater discharge line indicated on Drawing No. 702140/9/20 of the application. There shall be no other discharge or emission to sewer of environmental significance.
 - 5.7.2 No substance shall be present in emissions to sewer in such concentrations as would constitute a danger to sewer maintenance personnel working in the sewerage system, or

- as would be damaging to the fabric of the sewer, or as would interfere with the biological functioning of a downstream wastewater treatment works.
- 5.7.3 The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus installed, in connection with the discharge or emission, and to take samples of the discharge or emission.
- 5.7.4 No discharge or emission to sewer shall take place which might give rise to any reaction within the sewer or to the liberation of by-products which may be of environmental significance.
- 5.7.5 The licensee shall ensure that the discharge shall not contain dissolved methane, petroleum spirits or organic solvents (including chlorinated organic solvents), at concentrations which would give rise to flammable or explosive vapours in the sewer.
- 5.7.6 Non-trade effluent wastewater (e.g. firewater, accidental spillage) which occurs on-site shall not be discharged to the sewer without the prior authorisation of the Sanitary Authority.
- 5.7.7 The licensee shall provide and maintain an inspection chamber in a suitable position in connection with each pipe through which a discharge or emission is being made. Each such inspection chamber or manhole shall be constructed and maintained by the licensee so as to permit the taking of samples of the discharge.
- 5.7.8 The licensee shall submit monitoring results to the Sanitary Authority on a quarterly basis.
- 5.8 Emission limit values for wastewater emissions to sewer in this licence shall be interpreted in the following way:
 - a) Continuous monitoring.

No flow value shall exceed the specified limit.

b) Non-Continuous monitoring.

Eight out of ten consecutive results, calculated as daily mean concentration or mass emission values on the basis of flow proportional composite sampling shall exceed 1.2 times the emission limit value.

c) No grab sample shall exceed 1.2 times the emission limit value.

REASON: To control emissions from the facility and provide for the protection of the environment.

CONDITION 6 NUISANCE CONTROL

- 6.1 The licensee shall ensure that vermin, birds, flies, mud, dust, litter and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.
- 6.2 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.
- 6.3 Litter Control

- 6.3.1 All loose litter or other waste, placed on or in the vicinity of the facility, other than in accordance with the requirements of this licences, 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.
- 6.3.2 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.

6.4 Dust/Odour Control

- 6.4.1 All waste for disposal stored overnight at the facility, shall be stored in suitably covered and enclosed containers within the Waste Transfer Building, and shall be removed from the facility within forty eight hours of its arrival at the facility.
- 6.4.2 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.
- 6.4.3 Within nine months of the date of grant of this licence, the licensee shall provide dust control measures at the waste transfer building to minimise dust emissions from the facility.

REASON: To provide for the control of nuisances.

CONDITION 7 MONITORING

- 7.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in *Schedule D: Monitoring*, of this licence. Unless otherwise specified by this licence, all environmental monitoring shall commence no later than two months after the date of grant of this licence.
- 7.2. The licensee shall amend the frequency, locations, methods and scope of monitoring as required by this licence only upon the written instruction of the Agency and shall provide such information concerning such amendments as may be requested in writing by the Agency. Such alterations shall be carried out within any timescale nominated by the Agency.
- 7.3. Monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental parameter.
- 7.4. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 7.5. The licensee shall maintain all sampling and monitoring points, and clearly label and name all sampling and monitoring locations, so that they may be used for representative sampling and monitoring.
- 7.6. All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on, unless alternative sampling or monitoring has been agreed, in writing, by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 7.7. Nuisance Monitoring

7.7.1 The licensee shall, on a daily basis, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours.

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

CONDITION 8 CONTINGENCY ARRANGEMENTS

- 8.1 In the event of an incident the licensee shall immediately:
 - a) identify the date, time and place of the incident;
 - b) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - c) isolate the source of any such emission;
 - d) evaluate the environmental pollution, if any, caused by the incident;
 - e) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
 - f) provide a proposal to the Agency for its agreement within one month of the incident occurring to:
 - i) identify and put in place measures to avoid reoccurrence of the incident; and
 - ii) identify and put in place any other appropriate remedial action.
- 8.2 The licensee shall, prior to commencement or within six months of the date of grant of this licence, submit a written Emergency Response Procedure (ERP) to the Agency for its agreement. The ERP shall address any emergency situations which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment. This shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment.
- 8.3. The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 8.4. Emergencies
 - 8.4.1 In the event of a complete breakdown of equipment or any other occurrence which results in the closure of the transfer station building, any waste arriving at or already collected at the facility shall be transferred directly to appropriate landfill sites or any other appropriate facility until such time as the transfer station building is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.
 - 8.4.2 All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
 - 8.4.3 No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.

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

CONDITION 9 RECORDS

- 9.1 The licensee shall keep the following documents at the facility office:
 - a) the current waste licence relating to the facility;
 - b) the current EMS for the facility;
 - c) the previous year's AER for the facility; and
 - d) all written procedures produced by the licensee which relate to the licensed activities.
- 9.2 The licensee shall maintain a written record for each load of waste arriving at and departing from the facility, excluding those arriving at the Civic Waste Facility. The licensee shall record the following:
 - a) the date;
 - b) the name of the carrier (including the waste carrier registration details);
 - c) the vehicle registration number;
 - d) the name of the producer(s)/collector(s) of the waste as appropriate;
 - e) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
 - f) a description of the waste including the associated EWC codes;
 - g) the quantity of the waste, recorded in tonnes;
 - h) the name of the person checking the load;
 - i) where loads or wastes are removed or rejected, details of the date of occurrence, the types
 of waste and the facility to which they were removed; and
 - j) where applicable a consignment note number (including transfrontier shipment notification and movement/tracking form numbers, as appropriate).

9.3 Written Records

The following written records shall be maintained by the licensee:-

- a) the types and quantities of waste recovered at the facility each year. These records shall
 include the relevant EWC Codes and any details required to complete National Reports on
 Waste Statistics;
- b) all training undertaken by facility staff;
- c) results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them;
- d) details of all nuisance inspections;
- e) details of all monitoring and visual checks carried out on the odour abatement technologies at the facility as required in *Schedule D.6: Emissions from Biodegradable Waste Composting Unit*, of this licence.
- f) details of all compost process control monitoring; and

- g) the names and qualifications of all persons who carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.
- 9.4 The licensee shall maintain a written record of all complaints relating to the operation of the activity. Each such record shall give details of the following:
 - a) date and time of the complaint;
 - b) the name of the complainant;
 - c) details of the nature of the complaint;
 - d) actions taken on foot of the complaint and the results of such actions; and,
 - e) the response made to each complainant.
- 9.5 A written record shall be kept for each load of waste departing from the Civic Waste Facility. The following shall be recorded:
 - a) the name of the carrier;
 - b) the vehicle registration number;
 - c) the destination of the waste (facility name and waste licence/permit number as appropriate);
 - d) a description of the waste (if recovered or rejected waste, the specific nature of the waste);
 - e) the quantity of waste, recorded in tonnes;
 - f) the name of the person checking the load; and,
 - g) the time and date of departure.
- 9.6 A written record shall be kept at the facility of the programme for the control and eradication of vermin and fly infestations at the facility. These records shall include as a minimum the following:
 - a) the date and time during which spraying of insecticide is carried out;
 - b) contractor details;
 - c) contractor logs and site inspection reports;
 - d) details of the rodenticide(s) and insecticide(s) used;
 - e) operator training details;
 - f) details of any infestations;
 - g) mode, frequency, location and quantity of application; and,
 - h) measures to contain sprays within the facility boundary.

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

CONDITION 10 REPORTS AND NOTIFICATIONS

- 10.1 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:-
 - a) be sent to the Agency's Headquarters;

- b) comprise one original and three copies unless additional copies are required;
- be formatted in accordance with any written instruction or guidance issued by the Agency;
- d) include whatever information as is specified in writing by the Agency;
- e) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
- f) be submitted in accordance to the relevant reporting frequencies specified by this licence, such as in *Schedule E: Recording and Reporting to the Agency*, of this licence;
- g) be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and
- h) be transferred electronically to the Agency's computer system if required by the Agency.
- 10.2 In the event of an incident occurring on the facility, the licensee shall:
 - a) notify the Agency as soon as practicable and in any case not later than 10.00 am the following working day after the occurrence of any incident;
 - b) submit a written record of the incident, including all aspects described in Condition 9.1(a-e), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident;
 - c) in the event of any incident which relates to discharges to surface water, notify the Western Regional Fisheries Board as soon as practicable and in any case not later than 10:00am on the following working day after such an incident; and
 - d) should any further actions be taken as a result of an incident occurring, the licensee shall forward a written report of those actions to the Agency as soon as practicable and no later than ten days after the initiation of those actions.

10.3 Waste Recovery Reports

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

- a) proposals for the contribution of the facility to the achievement of targets for the reduction of biodegradable waste sent to landfill as specified in the Landfill Directive;
- b) the separation of recyclable materials from the waste;
- c) the recovery of Construction and Demolition Waste;
- d) the recovery of metal waste and white goods including written procedures for the degassing of CFC's from refrigerators;
- e) the recovery of commercial waste, including cardboard;
- f) composting of biodegradable or green waste at the facility having regard to good practice and sustainability; and
- g) inert waste to be used for cover/restoration material at the facility.

10.4 Decommissioning and Aftercare

- 10.4.1 A proposal for a Decommissioning and Aftercare Plan for the facility shall be submitted to the Agency within twelve months of the date of grant of this licence. The licensee shall update these schemes when required by the Agency.
- 10.5 Within nine months of the date of grant of this licence, the licensee shall submit a report to the Agency outlining how they intend to ensure that composting activities at the facility shall meet the requirements of the EC Regulation of 3rd October 2002 "Laying down health rules concerning animal by-products not intended for human consumption" (EC 1774/2002).
- 10.6 Prior to the acceptance of waste for composting, the licensee shall submit a report to the Agency for its agreement on the commissioning and operation of the biofilter on a phased basis in order to ensure adequate odour control at the facility.

10.7 Monitoring Locations

10.7.1 Within three months of the date of grant of this licence, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence. The drawing(s) shall include the reference code of each monitoring point.

10.8 Annual Environmental Report

- 10.8.1 The licensee shall submit to the Agency for its agreement, not later than January 31 of each year, an Annual Environmental Report (AER).
- 10.8.2 The AER shall include as a minimum the information specified in Schedule G: Content of Annual Environmental Report and shall be prepared in accordance with any relevant written guidance issued by the Agency.

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

CONDITION 11 CHARGES AND FINANCIAL PROVISIONS

11.1 Agency Charges

- 11.1.1 The licensee shall pay to the Agency an annual contribution of €18,764 or such sum as the Agency from time to time determines, towards the cost of monitoring the activity or otherwise in performing any functions in relation to the activity, as the Agency considers necessary for the performance of its functions under the Waste Management Act, 1996. The licensee shall in 2004 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Public Sector Average Earnings Index from the date of the licence to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 2003, the licensee shall pay a pro rata amount from the date of this licence to 31st December. This amount shall be paid to the Agency within one month of the date of grant of this licence.
- 11.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute such sums as determined by the Agency to defraying its costs.

11.2 Financial Provision for Closure, Restoration and Aftercare

11.2.1 The licensee shall arrange for an independent third party risk assessment of the facility to be carried out. The risk assessment shall have particular regard to any accidents,

emergencies, or other incidents, which might occur at the facility and their effect on the environment, on the neighbours of the facility and on adjoining land-uses. The risk assessment shall include a comprehensive and fully costed Environmental Liabilities Risk Assessment for the facility together with a proposal for Financial Provision arising from the carrying on of the activities to which this licence relates. The risk assessment shall be submitted to the Agency for its agreement within six months of the date of grant of this licence.

- 11.2.2 The amount of financial provision, held under Condition 11.2.1 shall be reviewed and revised as necessary, but at least annually. Any proposal for such a revision shall be submitted to the Agency for its agreement.
- 11.2.3 The licensee shall within two weeks of purchase, renewal or revision of the financial provision required under Condition 11.2.1, forward to the Agency written proof of such indemnity.
- 11.2.4 Unless otherwise agreed any revision to the fund shall be computed using the following formula:

 $Cost = (ECOST \times WPI) + CiCC$

Where:

Cost = Revised restoration and aftercare cost ECOST = Existing restoration and aftercare cost

WPI = Appropriate Wholesale Price Index [Capital Goods, Building & Construction (i.e. Materials & Wages) Index], as published by the Central Statistics Office, for the year since last closure calculation/revision.

CiCC = Change in compliance costs as a result of change in site conditions, changes in law, regulations, regulatory authority charges, or other significant changes.

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

SCHEDULE A: Waste Acceptance

A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

| | Option A Note 1 | Option B Note 2 |
|-------------------------------------|-------------------------------|-------------------------------|
| WASTE TYPE | MAXIMUM (TONNES PER ANNUM) | MAXIMUM (TONNES PER ANNUM) |
| Household | 55,500 | 55,500 |
| Commercial | 17,500 | 17,500 |
| Construction and Demolition | 30,000 | 50,000 |
| Industrial non- hazardous solids | 23,000 | 23,000 |
| Biodegradable waste | 40,000 ^{Note 3} | 20,000 Note 4 |
| TOTAL | 166,000 | 166,000 |

- **Note 1:** Option A A total of 166,000 tonnes per annum to be accepted with the provision of four composting aisles in proposed new building for the treatment of 40,000 tonnes of biowaste per annum.
- Note 2: Option B-A total of 166,000 tonnes per annum to be accepted with the provision of two composting aisles and construction & demolition recovery area in proposed new building for the treatment of 20,000 tonnes of biowaste per annum and the processing of an additional 20,000 tonnes of C&D waste per annum.
- Note 3: Maximum quantity of 4,000 tonnes of sludge to be accepted per annum. Note 4: Maximum quantity of 2,000 tonnes of sludge to be accepted per annum.

SCHEDULE B: Specified Engineering Works

Specified Engineering Works

Installation of silt traps and oil interceptors.

Installation of dust/odour system.

Installation of waste handling, processing, recycling/recovery infrastructure and installation of increased waste processing capacity.

Installation of Compost Facility.

Construction of all drainage systems.

Any other works notified in writing by the Agency.

SCHEDULE C: Emission Limits

C.1 Noise Emissions: (Measured at the monitoring points indicated in <u>Table D.1</u>).

| Day dB(A) L _{Aeq} (30 minutes) | Night dB(A) L _{Aeq} (30 minutes) |
|---|---|
| 55 | 45 |

C.2 Dust Deposition Limits: (Measured at the monitoring points indicated in <u>Table D.1</u>).

| Level (mg/m² /day) ^{Note 1} |
|--------------------------------------|
| 350 |

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

C.3 Emission Limits for Emissions to Sewer (Measured at the monitoring points indicated in *Table D.1*).

Emission Point Reference No. FW-1

Volume to be emitted: Maximum in any one day: 7 m³

Maximum rate per hour: 7 m³/hr

| Parameter Note 1 | Emission Limit Value Note 1 | |
|----------------------|-----------------------------|--------------------------------|
| | Grab Sample (mg/l) | Daily Mean Loading (kg/day) |
| BOD | 350 | 1.2 |
| COD | 1000 | 6.3 |
| Suspended solids | 400 | 2.8 |
| Sulphate | 400 | 2.8 |
| Fats, Oils & Greases | 100 | 0.7 |

Note 1: There shall be no emissions to sewer of pesticides or insecticides.

C.4 Emission Limit Values from Biofilters at the Facility

Emission Point Reference No. BF-1, BF-2, BF-3, BF-4 (emission points from biofilters) Discharge height: 15m above ground level

| Parameter | Emission Limit Value |
|-------------------|----------------------|
| Ammonia | 50 (ppm v/v) |
| Hydrogen Sulphide | 5 (ppm v/v) |
| Mercaptans | 5 (ppm v/v) |

SCHEDULE D: Monitoring

Monitoring to be carried out as specified below.

D.1 Monitoring Locations

Monitoring locations shall be those as set out in Tables D.1.1 & D.1.2

Table D.1.1 Noise, Surface Water and Wastewater Monitoring Locations

| NOISE | SURFACE WATER | Wastewater |
|-----------------|-----------------|-----------------|
| STATIONS Note 1 | STATIONS Note 2 | STATIONS Note 3 |
| N1 | SW1 | FW-1 |
| N2 | SW2 | |
| | SD-1 | |

Note 1: Two noise monitoring locations to be provided at the two nearest sensitive locations.

Note 3: FW-1 to be located at a location to be agreed with the Agency prior to discharge to sewer.

Table D.1.2 Dust/Emissions to Atmosphere/Airborne Micororganisms Monitoring Locations

| DUST | EMISSIONS TO ATMOSPHERE | AIRBORNE MICRO- ORGANISMS |
|-----------------|----------------------------|------------------------------|
| STATIONS Note 1 | STATIONS Note 2 | STATIONS Note 3 |
| D1 | BF-1 | AB-1 |
| D2 | BF-2 | AB-2 |
| D3 | BF-3 | AB-3 |
| D4 | BF-4 | AB-4 |

Note 1: One location to be provided along each boundary of the facility.

D.2 Dust and Airborne Microbes

Table D.2.1 Dust and Airborne Microbes Monitoring Frequency and Technique

| Parameter | Monitoring Frequency | Analysis Method/Technique |
|-------------------|---------------------------|------------------------------|
| Dust (mg/m²/day) | Three times a year Note 2 | Standard Method Note 1 |
| Airborne Microbes | Annually | Standardised Protocol Note 3 |

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

Note 2: SW1 and SW2 to be provided upstream and downstream of the discharge point respectively. SD-1 to be located at the surface water discharge point.

Note 2: To be located at the emission point from each one of the biofilters provided.

Note 3: One location to be provided along each boundary of the facility, only three to be used in any one monitoring event.

Note 2: Twice during the period May to September.

Note 3: Enumeration of colonies to be carried out as described in 'Standardised Protocol for the Sampling and Enumeration of Airborne Microorganisms at composting Facilities' the Composting Association 1999.

D.3 Noise

Table D.3.1 Noise Monitoring Frequency and Technique

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

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

D.4 Surface Water Emissions

Table D.4.1 Surface water Monitoring Frequency and Techniques

| Parameter | Monitoring Frequency | Analysis Method/Technique |
|--------------------------|----------------------|------------------------------------|
| РН | Quarterly | Electrometry |
| Ammonia | Quarterly | Standard Methods ^{Note 1} |
| Biological Oxygen Demand | Quarterly | Standard Methods Note 1 |
| Suspended Solids | Quarterly | Standard Methods ^{Note 1} |
| Mineral Oils | Quarterly | Standard Methods ^{Note 1} |
| Fats, Oils, Grease | Quarterly | Standard Methods ^{Note 1} |

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

D.5 Wastewater Emissions

Table D.5.1 Wastewater Monitoring Frequency and Techniques

| Parameter | Monitoring Frequency | Analysis Method/Technique |
|--------------------------|----------------------|-------------------------------------|
| Flow to Sewer | Continuous | Flow Meter |
| Biological Oxygen Demand | Quarterly | Standard Methods ^{Note 1} |
| Chemical Oxygen Demand | Quarterly | Standard Methods ^{Note 1} |
| Suspended Solids | Quarterly | Standard Methods ^{Note 1} |
| Fats, Oils, Grease | Quarterly | Standard Methods ^{Note 1} |
| Sulphate | Quarterly | Standard Methods ^{Note 1} |
| Ammoniacal nitrogen | Quarterly | Standard Methods ^{Note 1} |
| Insecticides | Quarterly | Method to be agreed with the Agency |
| Pesticides | Quarterly | Method to be agreed with the Agency |

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

D.6 Emissions from Biodegradable Waste Composting Unit

Table D.6.1 Emissions to Atmosphere: Abatement/Treatment Control at Biodegradable Waste Composting Plant

Emission Point Reference No.: Emission points from any Biofilter installed at the facility

Description of Treatment: Scrubber(s) / Biofilter(s)

Monitoring and Backup Equipment at the Organic Waste Composting Plant shall be as set out below.

| Control Parameter | Monitoring Required | Monitoring Equipment | Backup Equipment |
|--------------------------|-----------------------|-------------------------------------|------------------|
| Scrubber | | | |
| Visual Inspection | Check operation Daily | Visual Inspection | - |
| Biofilter(s) | | | |
| Inlet Gas | | | |
| Temperature | Daily | Temperature sensor | - |
| Inlet and Outlet Gas | | | |
| Ammonia | Monthly | Colorimetric Indicator Tubes Note 1 | Spare tubes |
| Hydrogen sulphide | Monthly | Colorimetric Indicator Tubes Note 1 | Spare tubes |
| Mercaptans | Monthly | Colorimetric Indicator Tubes Note 1 | Spare tubes |
| Bed Media | | | |
| Condition Note 2 | Daily | Visual Inspection | - |
| Moisture content | Monthly | Standard laboratory method Note | - |
| Total viable counts | Bi – annually | Standard laboratory method Note | - |
| General | | | |
| Sprinkler System | Check operation Daily | Visual Inspection | - |
| Fan | Check operation Daily | Visual Inspection | |
| Negative Pressure Note 3 | Monthly | Air Current Tubes Note 1 | Spare Tubes |

All measurements shall be made at peak bed loading.

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

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

Note 3: To be carried out on all buildings under negative pressure. A log shall be kept on - site with records of the date and time of analysis, building tested and weather on date of testing.

SCHEDULE E: Recording and Reporting to the Agency

| Report | Reporting Frequency Note1 | Report Submission Date |
|---|------------------------------|---|
| Environmental Management System Updates | Annually | One month after the end of the year reported on. |
| Annual Environment Report (AER) | Annually | Thirteen months from the date of grant of licence and one month after the end of each calendar year thereafter. |
| Record of incidents | As they occur | Within five days of the incident. |
| Bund, tank and container integrity assessment | As they occur | Prior to the commissioning of a bund, tank or container and every three years thereafter |
| Specified Engineering Works reports | As they arise | Prior to the works commencing. |
| Monitoring of Surface Water Quality | Quarterly | Ten days after end of the quarter being reported on. |
| Airborne Microbe Monitoring | Annually | One month after end of the year being reported on. |
| Monitoring of Wastewater | Quarterly | Ten days after end of the quarter being reported on. |
| Dust Monitoring | Three times a year | Ten days after the period being reported on. |
| Noise Monitoring | Annually | One month after end of the year being reported on. |
| Any other monitoring | As they occur | Within ten days of obtaining results. |

Note 1: Unless altered at the request of the Agency

SCHEDULE F: Standards for Compost Quality

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

[The following criteria (where they apply to compost) are deemed a quality standard for the use of compost as a soil improver and should not be deemed as criteria for fertiliser. In addition N, P, K, NH_4 -N, NO_3 -N, PH and dry matter content should also be measured]

1. Maturity

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

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

- 1. Respiration activity after four days AT_4 is $\leq 10 mg/O_2/g$ dry matter or Dynamic Respiration Index is $\leq 1,000 mgO_2/kg$ VS/h.
- 2. Germination of cress (*Lepidium sativum*) seeds and of radish (*Raphanus sativus*) seeds in compost must be greater than 90 percent of the germination rate of the control sample, and the growth rate of plants grown in a mixture of compost and soil must not differ more than 50 percent in comparison with the control sample.
- Compost must be cured for at least 21 days; and
 Compost will not reheat upon standing to greater than 20°C above ambient temperature.
- 4. If no other determination of maturity is made, the compost must be cured for a six month period. In addition, offensive odours from the compost shall be minimal for the compost to be deemed mature.
- 5. Or other maturity tests as may be agreed with the Agency

2. Trace Elements Note 1

Maximum Trace Element Concentration Limits Note 2

| Parameter (mg/kg, dry mass) | Compost Quality Standards Note 3 | | Stabilised Biowaste |
|---|-------------------------------------|---------|------------------------|
| | Class 1 | Class 2 | |
| Cadmium (Cd) | 0.7 | 1.5 | 5 |
| Chromium (Cr) | 100 | 150 | 600 |
| Copper (Cu) | 100 | 150 | 600 |
| Mercury (Hg) | 0.5 | 1 | 5 |
| Nickel (Ni) | 50 | 75 | 150 |
| Lead (Pb) | 100 | 150 | 500 |
| Zinc (Zn) | 200 | 400 | 1500 |
| PolyChlorintated Biphenyls (PCB's) | - | - | 0.4 |
| Polynuclear Aromatic Hydrocarbons (PAH's) | - | - | 3 |
| Impurities >2mm Note 4 | <0.5% | <0.5% | <3% |
| Gravel and Stones >5mm Note 4 | <5% | <5% | - |

- Note 1: These limits apply to the compost just after the composting phase and prior to mixing with any other materials.
- **Note 2:** The above alone should not be taken as an indication of suitability for addition to soil as the cumulative metal additions to soil should be first calculated.
- Note 3: Normalised to 30% organic matter content
- Note 4: Compost must not contain any sharp foreign matter measuring over a 2 mm dimension that may cause damage or injury to humans, animals and plants during or resulting from its intended use

3. Pathogens

Pathogenic organism content must not exceed the following limits:

| Salmonella sp. | Absent in 50g | n=5 |
|------------------|---|-----|
| Faecal Coliforms | ≤ 1000 Most Probable Number (MPN) in 1g | n=5 |

Where: n = Number of samples to be tested.

4. Monitoring

The licensee shall monitor the compost product at least monthly. The licensee shall submit to the Agency for its agreement, prior to commencement of the composting, details of the sampling protocol, methods of analyses and sample numbers.

SCHEDULE G: Content of the Annual Environmental Report

| Annual Environmenta | l Report | Content |
|---------------------|----------|---------|
|---------------------|----------|---------|

Reporting Period.

Waste activities carried out at the facility.

Quantity and Composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used).

Summary report on emissions.

Report on the actual removal efficiency of the biofilter(s) at the facility based on actual on-site monitoring results.

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

Resource and energy consumption summary.

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

Schedule of Environmental Objectives and Targets for the forthcoming year.

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

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

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

Reported Incidents and Complaints summaries.

Review of Nuisance Controls.

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

Volume of wastewater produced and volume of wastewater discharged to sewer.

Quantity of compost produced and details of outlets used for the sale/distribution of any such compost.

Any other items specified by the Agency.

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

| Cionad on habalf of the said A son or | | |
|---------------------------------------|----------------|--------------------------|
| Signed on behalf of the said Agency | | _ |
| on the 14th day of May 2003 | Ray Cullinane, | Authorised Person |