Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

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

WASTE LICENCE

PROPOSED DECISION

Waste Licence Application Register Number:	34-2
Applicant:	Dundalk Town Council
Location of Facility:	Dundalk Landfill & Civic Waste Facility, Newry Road, Dundalk, Co. Louth

INTRODUCTION

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

A review of the existing licence is sought at Dundalk Landfill & Civic Waste Facility for the following reasons:

- To specify and confirm ongoing major leachate and landfill gas management infrastructure at the facility following recent court proceedings and to specify restoration and aftercare of the closed landfill;

- To focus the principal waste activity on-site to the Civic Waste Facility (CWF) and Materials Recovery Facility (MRF) i.e. Class 2 of Fourth Schedule, Waste Management Acts, 1996 to 2003;

- To increase the tonnage of waste accepted at the CWF & MRF from 10,000 to 20,000 tonnes per annum;

- To extend the hours of waste acceptance at the CWF.

As landfilling of waste no longer takes place at the facility, the licence requires the restoration and remediation of the closed landfill, with ongoing leachate and landfill gas management.

The waste intake at the CWF and MRF is limited to 20,000 tonnes per annum of municipal waste and construction & demolition waste. The majority of the waste is to be recycled, with separation, sorting and baling being carried out indoors at the MRF. A small quantity of non-recyclable waste accepted at the facility will be consigned for disposal off-site at landfill. The licence allows composting of biodegradable waste and green waste in enclosed vessels. The quantity to be composted is limited to a trial scheme of 1,000 tonnes of biowaste per year, with the provision to increase to 4,000 tonnes per annum upon agreement with the Agency. This licence authorises the use of wood chipping infrastructure at the facility.

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

The licence sets out in detail the conditions under which Dundalk Town Council will operate and manage this facility.

Table of Contents

DECISION & REASONS FOR THE DECISION

Reasons for the Decision

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

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

INTERPRETATION

All terms in this licence should be interpreted in accordance with the definitions in the Waste Management Acts 1996 to 2003, (the Acts), unless otherwise defined in this section.

Aerosol	A suspension of solid or liquid particles in a gaseous medium.
Adequate lighting	20 lux measured at ground level.
Agreement	Agreement in writing.
Annually	At approximately twelve monthly intervals.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of the original waste licence application (Waste Register No. 34-1) or the waste licence review application (Waste Register No. 34-2), as specified.
Application	The application by the licensee for this waste licence review (Waste Register No. 34-2).
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.
BAT	Best Available Technology as defined in Section 5(2) of the Waste Management Acts, 1996 to 2003.
Bi-annually	All or part of a period of six consecutive months.
Biodegradable waste	Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard.
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
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	All wastes which arise from construction, renovation and demolition

Demolition Waste	activities.
Containment boom	A boom which can contain spillages and prevent them from entering drains or watercourses.
Daytime	08.00 hrs to 22.00 hrs
Documentation	Any report, record, result, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Unless otherwise specified in this licence, any reference to a drawing or drawing number means a drawing or drawing number contained in either the original waste licence application (Reg. No. 34-1) or the waste licence review application (Reg. No. 34-2), as specified.
Emergency	Those occurrences defined in Condition 9.4.
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 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
Green waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
Hours of Operation	The hours during which the facility is authorised to be operational.
Hours of Waste Acceptance	The hours during which the facility is authorised to accept waste.
Incident	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 exceedence 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.
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 Acts.
Licensee	Dundalk Town Council

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.
Night-time	22.00 hrs to 08.00 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.
OEE	EPA Office of Environmental Enforcement.
Oil Separator	Device installed according to the draft European Standard prEN 858 (Installations for the separation of light liquids, e.g. oil and petrol).
Recyclable Materials	Those waste types, such as cardboard, batteries, gas cylinders, etc, which may be recycled.
Regional Fisheries Board	Eastern Regional Fisheries Board.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Sanitary Authority	Dundalk Town Council
Sample(s)	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
SOP	Standard Operating Procedure.
Specified Emissions	Those emissions listed in *Schedule C: Emission Limits* of this licence.
Specified Engineering Works	Those engineering works listed in *Schedule B: Specified Engineering Works* of this licence.
TOC	Total Organic Carbon.
Trigger Level	A parameter value specified in the licence, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Waste Water	Contaminated water including water that has been used, for washing, and/or flushing (including foul water).
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.
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 I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Acts, 1996 to 2003, the Environmental Protection Agency (the Agency) proposes, under Section 46(2) of the said Act to grant this Waste Licence to Dundalk Town Council, Town Hall, Crowe Street, Dundalk, County Louth to carry on the waste activities listed below at the Dundalk Landfill & Civic Waste Facility, Newry Road, Dundalk, County Louth subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts, 1996 to 2003

Class 11.	**Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.**
Class 12.	**Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.**
Class 13.	**Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.**

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

Class 2.	**Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).**
Class 3.	**Recycling or reclamation of metals and metal compounds.**
Class 4.	**Recycling or reclamation of other inorganic materials.**
Class 10.	**The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.**
Class 11.	**Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.**
Class 13.	**Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.**

PART II CONDITIONS

CONDITION 1 SCOPE OF THE LICENCE

1.1. Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed, subject to the conditions of this licence.

1.2. For the purposes of this licence, the facility is the area of land outlined in red on Drawing No. 5429.21/01 '*Site Location Map*' of the review application, Register No. 34-2. Any reference in this licence to "facility" shall mean the area thus outlined in red.

1.3. This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2003 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.

1.4. Waste Acceptance/Removal

1.4.1. Only those waste categories and quantities listed in *Schedule A: Waste Acceptance* of this licence, shall be accepted at the facility.

1.4.2. Only inert waste and compost specified for restoration use in Table A.2 of *Schedule A: Waste Acceptance,* of this licence, shall be used for landfill restoration purposes.

1.4.3. Only licensed waste collectors and waste recovery facilities will be used for the transportation and recovery of waste from the Civic Waste Facility and Materials Recovery Facility.

1.5. No hazardous wastes, or liquid waste shall be accepted at the landfill facility.

1.6. Waste Acceptance Hours and Hours of Operation

1.6.1 Civic Waste Facility and Materials Recovery Facility: Waste acceptance hours and hours of operation shall be as follows: 08.00 hrs to 18.00 hrs Monday to Wednesday, 08.00 hrs to 21.00 hrs Thursday and Friday, 09.00 hrs to 15.00 hrs on Saturdays.

1.6.2 Landfill Restoration: Waste acceptance hours and hours of operation shall be as follows: 07.30 hrs to 19.00 hrs Monday to Friday, 09.00 hrs to 15.00 hrs on Saturdays.

1.6.3 Waste shall not be accepted at the facility on Sundays or on Bank Holidays.

1.6.4 The wood chipper shall not be operated before 09.00 hrs or after 18.00 hrs.

1.7 Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any Condition of this licence shall include a proposed timescale for its implementation. The Agency may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this licence.

1.8 This licence is being granted in substitution for the waste licence granted to the licensee on 20th April 2001 and bearing Waste Licence Register No: 34-1. The previous waste licence (Register No: 34-1) 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 by the Agency) and associated on site assessment appraisal within twelve months of appointment.

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

2.2 Management Structure

2.2.1 The licensee shall maintain on-site written details of the management structure for the facility. Any proposed replacement in the management structure shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information.

a) the names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;

b) details of the responsibilities for each individual named under a) above; and

c) details of the relevant education, training and experience held by each of the persons nominated under a) above.

2.3 Environmental Management System (EMS)

2.3.1 The licensee shall establish and maintain an EMS. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement as part of the AER.

2.3.2 The EMS shall include as a minimum the following elements:

2.3.2.1 Schedule of Environmental Objectives and Targets

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

2.3.2.2 Environmental Management Plan (EMP)

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

(i) methods by which the objectives and targets will be achieved in the coming year and the designation of responsibility for targets;

(ii) any other items required by written guidance issued by the Agency.

2.3.2.3 Corrective Action Procedures

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

2.3.2.4 Awareness and Training Programme

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

2.4 Communications Programme

2.4.1 The licensee shall maintain a Communications Programme to ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

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 or as instructed by the Agency.

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, as appropriate, 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;

f) 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 provide and maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.

3.3.2 The board shall clearly show:-

a) the name and telephone number of the facility;

b) the 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 Security and stockproof fencing and gates shall be maintained around the perimeter of the facility so that the facility is adequately secured. 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.

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

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 All waste storage/processing areas, the recycling areas, the facility entrance area and access roads shall have an impermeable hardstanding surface. In addition, the floor of the buildings and hardstanding areas at the facility shall be concreted and constructed to British Standard 8110.

3.6 Site Office

3.6.1 The licensee shall maintain the existing gate office and recycling building office at the facility. The offices shall be capable of processing and storing of documentation.

3.6.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility, unless otherwise agreed by the Agency.

3.7 Waste Inspection and Quarantine Areas

3.7.1 A Waste Inspection Area and a separate Waste Quarantine Area shall be provided and maintained at the facility.

3.7.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.

3.7.3 Drainage from these areas shall be directed to the foul sewer, unless otherwise agreed with the Agency.

3.8 Wheel Cleaning

3.8.1 During landfill restoration works, the wheel cleaner shall be used by all vehicles leaving the landfill. All water from the wheel cleaning area shall be directed to the interceptor.

3.8.2 The licensee shall review the status of the wheelwash and associated drainage system for decommissioning within three months of the completion of the landfill restoration.

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) 20% 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 Within six months from the date of grant of this licence, the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the licensed waste intake, as per *Schedule A: Waste Acceptance* of this licence.

3.9.3 The quantity of waste to be accepted at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedance of this intake shall be treated as an incident.

3.10 Waste Water

3.10.1 Sewage arising on-site shall be collected and disposed of to foul sewer.

3.11 Storage Areas

3.11.1 The licensee shall provide and maintain a bunded fuel storage area and a bunded waste oil storage area at the facility.

3.11.2 All tank and drum storage areas shall be rendered impervious to the materials stored therein. In addition, 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.

3.11.3 All drainage from bunded areas shall be diverted for collection and safe disposal.

3.11.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.

3.11.5 The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency within three months of the date of grant of this licence. This confirmation shall be repeated at least once every three years thereafter and reported to the Agency as part of the AER.

3.11.6 All tanks and containers including tankers used to transport leachate from the facility shall be labelled to clearly indicate their contents.

3.12 Leachate Management

3.12.1 Leachate management infrastructure as stipulated by the Agency on 19/9/04 (Ref. 34-1/GEN12MG) shall be installed within six months of the date of grant of this licence.

3.12.2 The temporary leachate discharge manhole located to the west of the landfill shall be upgraded to meet BS EN 1917:2002 within one month of the date of grant of this licence.

3.12.3 All structures for the storage and/or treatment of leachate shall be fully enclosed except for inlet and outlet piping.

3.13 Landfill Gas Management

3.13.1 Landfill gas management infrastructure shall be provided and maintained at the facility as shown in Drawing No. 004 of Waste Licence 34-1 *'Gas Wells & Collection Pipe Layout'* (dated November 2002) and at the facility's western perimeter as stipulated by the Agency on 2/07/04 (Ref. 34-1/GEN11MG).

3.13.2 Within six months of the date of grant of this licence, the licensee shall submit a proposal for the decommissioning of any unnecessary passive gas wells prior to installation of active gas collection system in the landfill.

3.13.3 The licensee shall maintain the temporary landfill gas flare at the facility, unless otherwise agreed by the Agency. Within six months of the date of grant of this licence, the licensee shall provide and maintain a permanent landfill gas flare at the facility. The flare shall be of an enclosed type design unless otherwise agreed by the Agency.

3.13.4 Flare unit efficiency shall be tested within six months of the date of grant of this licence and once every three years thereafter.

3.13.5 The licensee shall maintain all gas wells, pipework, valves, pumps, flares and other infrastructure that form part of the landfill gas management scheme in a safe and fully operational manner.

3.13.6 All buildings constructed on the facility shall have regard to the guidance given in the Department of Environment 1994 publication "Protection of New Buildings and Occupants from Landfill Gas" and any subsequent revisions.

3.14 Silt Traps and Oil Separators/Interceptors

3.14.1 The licensee shall maintain silt traps and oil interceptors at the facility to ensure that all surface water discharges from the facility pass through a silt trap and oil interceptor prior to discharge. The interceptors shall be a Class II full retention interceptor and the silt traps and interceptors shall be in accordance with European Standard prEN 858 (installations for the separation of light liquids).

3.15 Surface Water Management and Drainage System

3.15.1 The surface water and sewer systems shall be established and maintained as set out in Drawing No. 5429.21/03 '*Drainage Layout*' of the application unless where otherwise instructed or agreed by the Agency.

3.15.2 Drainage from any future infrastructural works at the Civic Waste Facility and Materials Recovery Facility shall be discharged to sewer via discharge point S1, in accordance with *Schedule C.4: Emission Limits for Discharge to Sewer* of this licence.

3.15.3 Within six months from the date of grant of this licence, the licensee shall submit a report on the effectiveness of the existing drainage systems and detail recommendations on any improvements that should be made to the systems. This shall also include proposals on:

(i) upgrading the drainage system in the Civic Waste Facility such that potentially contaminated runoff is minimised;

(ii) collection and use of clean roof run-off or the diversion of it such that it discharges directly off-site; and

(iii) the provision of suitable controls such as cut-off valves to enable containment in the event of incidents such as spillages.

Any works agreed by the Agency shall be carried out within three months of the date of such agreement.

3.15.4 All foul sewer gullies, drainage grids and manhole covers shall be painted with red squares whilst all surface water discharge gullies, drainage grids and manhole covers shall be painted with blue triangles. These colour codes shall be maintained so as to be visible at all times during facility operation, and any identification designated in this licence (e.g. SW1) shall be inscribed on these manholes.

3.15.5 The drainage system, bunds, silt traps and oil separators shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal. A written record shall be kept of the inspections, desludging, cleaning, disposal of associated waste products, maintenance and performance of the interceptors, bunds and drains.

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

3.16 Construction and Demolition Waste Recovery Area

3.16.1 The licensee shall provide and maintain a construction and demolition waste recovery area. This infrastructure shall at a minimum comprise the following:-

a) an impermeable concrete slab;

b) collection and disposal infrastructure for all run-off;

3.17 Civic Waste Facility

3.17.1 The licensee shall provide and maintain the Civic Waste Facility infrastructure as shown in Drawing No. 249-002c of this application '*Site Layout Map'*, unless otherwise agreed with the Agency. All receptacles shall be clearly labelled to indicate their contents.

3.17.2 Waste oils for recovery shall be stored as specified in Condition 3.11.

3.17.3 The licensee shall provide a clearly segregated and screened area for the holding of white goods within the Civic Waste Facility. Fridges shall be degassed of CFCs, either at the Civic Waste Facility or at an appropriate off-site facility, prior to recovery off-site. Records shall be kept of the degassing of all fridges accepted at the facility including the quantity of CFCs recovered.

3.17.4 Surface water from the hardstanding area of the Civic Waste Facility shall pass through an oil interceptor prior to discharge to the foul sewer. The interceptor shall be inspected weekly, desludged as necessary and properly maintained at all times. A written record shall be kept of the inspections, desludging, cleaning, maintenance and performance of the interceptor.

3.17.5 The entire area for composting must be bunded and all drainage shall drain to the foul sewer.

3.18 Materials Recovery Facility (MRF)

3.18.1 The Materials Recovery Facility shall be located as shown in Drawing No. 249-002c of this application '*Site Layout Plan*', unless otherwise agreed with the Agency.

3.18.2 Details of the proposed infrastructure for the wood chipper shall be submitted to the Agency for agreement prior to any construction works.

3.19 Compost facility

3.19.1 Appropriate infrastructure for the composting of waste shall be established and maintained at the facility prior to any waste being composted. Details of the proposed location and infrastructure for the composting facility shall be submitted to the Agency for agreement prior to any construction works. This infrastructure shall at a minimum comprise the following:

(a) The licensee shall install and maintain an enclosed biodegradable waste composting unit and biofilter and associated infrastructure at the facility, at a location to be agreed with the Agency prior to construction.

(b) All leachate generated from this activity shall be collected in a sump and recirculated through the composting unit.

(c) The licensee shall provide and maintain an odour abatement system in the composting building which satisfies the following requirements:-

i) Installation and maintenance of integrity and negative pressure throughout the building to ensure no significant escape of odours or dust.

ii) Installation of an odour management system.

iii) 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.

iv) Emissions from the biofilter shall not exceed those ELV's as set out in *Schedule C: Emission Limits*, of this licence.

3.20 Monitoring Infrastructure

3.20.1 Landfill Gas

3.20.1.1 The licensee shall provide and maintain the landfill gas perimeter monitoring points as identified in Drawing No. 5429.21/04 of this

application '*Monitoring Location Map*' (dated March 2004) unless otherwise agreed by the Agency.

3.20.1.2 The licensee shall provide and maintain an effective permanent gas monitoring system in the site office and any other enclosed structures at the facility.

3.20.2 Leachate

3.20.2.1 The licensee shall provide and maintain the leachate abstraction/monitoring wells as per *Schedule D: Monitoring* of this licence.

3.20.3 Estuarine Monitoring

3.20.3.1 Within three months of the date of grant of this licence, the licensee shall provide and maintain two additional surface water and sediment monitoring stations, at locations to be agreed with the Agency. The stations are to be located upstream and downstream of the existing stations.

3.20.4 Trial Composting Monitoring

3.20.4.1 Prior to the commencement of waste activities at the composting unit, the licensee shall provide a monitoring point.

3.20.5 Replacement of Infrastructure

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

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

CONDITION 4 RESTORATION AND AFTERCARE

4.1. The Restoration and Aftercare of the facility shall be carried out as detailed in the Landfill Restoration proposals approved by the Agency on 1/7/03 (Ref. 34-1/GEN07MD) and subsequent amendment on 19/9/04 (Ref. 34-1/GEN12MG). The licensee shall update these plans when required by the Agency.

4.2. The final profile of the facility shall not exceed a maximum of 14mOD (Malin Head). The final contours shall achieve an average gradient of 1:25.

4.3. No material or object that is incompatible with the proposed restoration of the facility shall be present within one metre of the final soil surface levels.

4.4. Wastes shall not be excavated, disturbed or otherwise picked over only with the prior agreement from the Agency.

4.5. Completed areas of the landfill shall be profiled so that no depressions exist in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable capping or restoration materials.

4.6. Unless otherwise agreed by the Agency the restoration of the landfill shall be completed within twenty-four months of the date of grant of this licence.

4.7 Capping

4.7.1 Unless otherwise agreed, the final capping shall consist of the following:

- top soil (150 – 300mm);
- subsoils, such that the total thickness of top soil and subsoil is at least 1m;
- drainage layer of 0.5m thickness having a minimum hydraulic conductivity of $1x10^{-4}$m/s;
- compacted mineral layer of a minimum 0.6m thickness with a permeability of less than $1x10^{-9}$m/s or a geosynthetic material (e.g. GCL) or similar that provides equivalent protection and 1mm thick LLDPE geomembrane liner; and
- gas collection layer of natural material (minimum 0.3m) or a geosynthetic layer.

4.8 A topographical survey shall be carried out one month after the completion of the final capping layer. The survey shall be in accordance with any written instructions issued by the Agency.

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

CONDITION 5 FACILITY OPERATIONS

5.1 All waste processing shall be carried out inside either the existing or the proposed waste recovery building, excluding (i) the composting of biodegradable waste and green waste, and (ii) recovery of C&D waste.

5.2 Waste Acceptance and Characterisation Procedures

5.2.1 Within three months of the date of grant of this licence, the licensee shall update the written procedures for the acceptance and handling of wastes to include all existing and proposed waste activities at the facility.

5.2.2 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time. Temporary storage of such wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.

5.2.3 Waste shall be accepted at the facility only from customers who are holders of a waste permit, unless exempted, under the Waste Management (Collection Permit) Regulations 2001 or from other licensed/permitted facilities.

5.3 Operational Controls

5.3.1 The floor of the waste processing building shall be washed down and cleared of all waste at the end of the working day. The floor of the storage bays for recovered wastes shall be washed down and cleaned on each occasion such bays are emptied.

5.3.2 Recyclable waste shall not be stored in stockpiles for periods greater than two months unless agreed in advance with the Agency.

5.3.3 Scavenging shall not be permitted at the facility.

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

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

5.3.6 Fuels shall be stored only at appropriately bunded locations on the facility.

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

5.3.8 No smoking shall be allowed on the facility.

5.4 Waste Handling

5.4.1 Compost

5.4.1.1 Procedures for the operation of the composting facility shall be submitted to the Agency for agreement prior to the commencement of any composting.

5.4.1.2 Unless otherwise agreed with the Agency, only source separated organic waste and green waste shall be used in the operation of the waste composting facility.

5.4.1.3 Wastes for on-site composting shall only be accepted at the facility once the infrastructure specified under Condition 3.19 of this licence is established.

5.4.1.4 The licensee shall operate a trial composting scheme for a period of twelve months following the installation of the composting infrastructure specified under Condition 3.19 of this licence. The trial composting unit shall not process greater than 1,000 tonnes of waste per annum. Upon completion of the trial scheme, the licensee shall submit a report to the Agency on the outcome of the trial. The report shall include as a minimum the scope of the trial, location, throughput, and the composting system employed. Following completion of the trail scheme and upon agreement by the Agency, the biowaste throughput at the composting facility may be increased to a maximum of 4,000 tonnes per annum. Written records of the quantities and type of wastes composted must be maintained.

5.4.1.5 The bulking agent to facilitate the composting process shall be bark mulch or other such similar bulking material agreed in advance with the Agency.

5.4.1.6 All putrescible wastes accepted to the composting unit shall be introduced into the compost process within 24 hours of delivery.

5.4.1.7 In order not to be considered a waste, compost produced by the facility shall comply with the quality standards established in S*chedule F: Standards for Compost Quality* of this licence. Analysis of the compost shall be in accordance with the requirements of that Schedule.

5.4.1.8 All waste water and contaminated surface water run-off from composting operations shall be diverted to the foul sewer.

5.4.1.9 No waste for composting shall be deposited outside the biodegradable waste composting building.

5.4.2 Wood

5.4.2.1 Procedures for the operation of the wood chipper shall be submitted to the Agency for agreement prior to the commencement of any wood chipping.

5.4.2.2 Prior to the use of the wood chipper, the licensee shall submit a proposal to the Agency for its agreement on the tonnages and type of wood to be

shredded, a prediction of noise and dust emissions associated with the operation of a wood chipper on site, and arising abatement infrastructure, including a report with recommendations on the outlets for the shredded wood as a recovered product.

5.4.3 Inert Waste

5.4.3.1 The acceptance of inert waste for recovery shall be as specified in EU Decision (2003/22/EC).

5.5 Off-site Disposal and Recovery

5.5.1 Waste sent off-site for recovery or disposal shall be conveyed only by an authorised waste contractor notified in advance to the Agency. Records of such movements shall be maintained on site for inspection by the Agency.

5.5.2 All waste transferred from the facility shall be transferred only to an appropriate facility notified in advance to the Agency. Records of such movements shall be maintained on site for inspection by the Agency.

5.5.3 All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.

5.6 Civic Waste Facility

5.6.1 Unless otherwise agreed, wastes to be accepted at the Civic Waste Facility shall be limited to municipal waste, construction and demolition waste, dry recyclables and waste oils. Any wastes not suitable for acceptance shall be stored in the Waste Quarantine Area only.

5.6.2 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.

5.6.3 The licensee shall assign and clearly label each container at the Civic Waste Facility to indicate their contents.

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

5.6.5 All municipal waste accepted at the Civic Waste Facility for disposal off-site shall be removed within 24 hours, or in the case of waste deposited on a Saturday within 48 hours.

5.7 Maintenance

5.7.1 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.

5.7.2 The licensee shall maintain and clearly label and name all sampling and monitoring locations, so that they may be used for representative sampling and monitoring.

5.7.3 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.

5.7.4 The licensee shall maintain the compactor(s) and shredder(s) in accordance with the manufacturers instructions.

5.8 Landscaping

5.8.1 The existing hedgerow network and perimeter planting which forms the boundary of the facility shall be retained by the licensee and enhanced where appropriate to minimise the views of the facility.

5.8.2 Within one month of the date of grant of this licence, the licensee shall implement a landscaping programme to include details on (but not limited to):-

a) the time-frame for landscaping works in relation to facility restoration;

b) species and minimum age composition and the suitability of the hedge/tree mix for the area;

c) total area(s) to be planted;

d) tree protection; and

e) post planting management.

5.9 Compost Process Management and validation

5.9.1 All composting shall be executed in line with the treatment regimes outlined in *Schedule E: Compost Process Management* of this licence, unless otherwise instructed by the Agency.

5.9.2 All Category 3 animal by-product waste accepted at the facility for treatment shall be treated in accordance with the '*European Parliament and Council Regulation No 1774/2002 laying down health rules concerning animal by-products not intended for human consumption*' and associated National Legislation.

5.9.3 All landspreading of compost containing Category 2 or 3 animal by-products as a constituent shall be carried out in accordance with the '*European Parliament and Council Regulation No 1774/2002 laying down health rules concerning animal by-products not intended for human consumption*' or other National Regulations.

5.9.4 An indicator organism shall be used to validate the compost sanitation steps. This shall be carried out as outlined in *Schedule E: Compost Process Management* of this licence.

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

CONDITION 6 EMISSIONS

6.1. No specified emission from the facility shall exceed the emission limit values set out in *Schedule C: Emission Limits* of this licence. There shall be no other emissions of environmental significance.

6.2. The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.

6.3. No noise emissions from the facility shall exceed the emission limit values specified in *Schedule C.1 Noise Emissions*, of this licence. There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity at the noise sensitive locations.

6.4. Landfill Gas:

6.4.1. The following are trigger levels for landfill gas emissions from the facility measured in any service duct or manhole on, at or immediately adjacent to the facility and/or at any other point located outside the body of the waste:-

(a) Methane, greater than or equal to 1.0%v/v; or

(b) Carbon Dioxide, greater than or equal to 1.5%v/v.

6.4.2 The concentration 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:-

(a) In the case of landfill gas flare:

Temperature 273K, pressure 101.3kPa, dry gas at 3% oxygen; and

(b) In the case of Landfill gas combustion plant:

Temperature 273K, pressure 101.3 kPa, dry gas; 5% oxygen.

6.4.3 Emission limits for emissions from landfill gas flare/combustion plant to atmosphere in this licence shall be interpreted in the following way:

6.4.3.1 Continuous Monitoring

(a) No 24 hour mean value shall exceed the emission limit value;

(b) 97% of all 30 minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value; and

(c) No 30 minute mean value shall exceed twice the emission limit value.

6.4.3.2 Non-Continuous Monitoring

(a) 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;

(b) For all other parameters, no 30 minute mean value shall exceed the emission limit value; and

(c) For flow, no hourly or daily mean value shall exceed the emission limit value.

6.5. Emissions to Groundwater

6.5.1. There shall be no direct emissions to groundwater.

6.6. Emissions to Surface Water

6.6.1. No leachate shall be discharged directly to surface water drains or to the Castletown Estuary.

6.6.2. No substance shall be discharged in a manner, or at a concentration which, following initial dilution causes tainting of fish or shellfish.

6.7. Emissions to Sewer

6.7.1. Unless otherwise agreed in advance by the Agency and the Sanitary Authority, the following shall apply for the discharge of waste water, which shall be via the foul sewer indicated on Drawings No. 249-002c '*Site Layout Map'* and 5429.21/03 '*Drainage Layout'* of this application. There shall be no other discharge or emission to sewer of environmental significance.

6.7.2. 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.

6.7.3. 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.

6.7.4. 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.

6.7.5. 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.

6.7.6. 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.

6.7.7. 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.

6.8. Emission limit values for 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 not 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 7 NUISANCE CONTROL

7.1 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.

7.2 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.

7.3 Litter Control

7.3.1 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.

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

7.4 Dust/Odour Control

7.4.1 In dry weather, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.

7.4.2 Within three months of the date of grant of this licence, the licensee shall install and provide adequate measures for the control of odours and dust emissions, including fugitive dust emissions, from the facility. Such measures shall at a minimum include the following:-

7.4.2.1 All doors in the waste processing building shall be kept closed where possible.

7.4.2.2 Installation of an odour management system.

7.4.2.3 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.

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

CONDITION 8 MONITORING

8.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in *Schedule D: Monitoring* and as specified in this licence.

8.2. The licensee shall amend the frequency, locations, methods and scope of monitoring as required by this licence only upon the written instruction of the Agency and shall provide such information concerning such amendments as may be requested in writing by the Agency. Such alterations shall be carried out within any timescale nominated by the Agency.

8.3. Monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental parameter.

8.4. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.

8.5. The licensee shall maintain all sampling and monitoring points, and clearly label and name all sampling and monitoring locations, so that they may be used for representative sampling and monitoring.

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

8.7. The following information shall be maintained on site and available for inspection by the Agency: the names, qualifications and a summary of relevant experience of all persons that will carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.

8.8. All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on, unless alternative sampling or monitoring has been agreed, in writing, by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.

8.9. Landfill Gas Monitoring

8.9.1. All landfill gas monitoring equipment, other than permanent monitoring systems within buildings, shall be certified as intrinsically safe.

8.10. Ecological Monitoring

8.10.1. The licensee shall carry out annual ecological monitoring of the Castletown Estuary adjacent to the facility. This shall include aquatic ecological monitoring and estuary bird surveys in addition to monitoring of sediment and water quality as set out in *Schedule D: Monitoring* of this licence.

8.11. Nuisance Monitoring

8.11.1. The licensee shall, at a minimum of one week intervals, 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 9 CONTINGENCY ARRANGEMENTS

9.1. In the event of an incident the licensee shall immediately:-

a) identify the date, time and place of the incident;

b) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;

c) isolate the source of any such emission;

d) evaluate the environmental pollution, if any, caused by the incident;

e) identify and execute measures to minimise the emissions/malfunction and the effects thereof;

f) provide a proposal to the Agency for its agreement within one month of the incident occurring to:-

i) identify and put in place measures to avoid reoccurrence of the incident; and

ii) identify and put in place any other appropriate remedial action.

9.2. The licensee shall, within three months of the date of grant of this licence, submit an updated 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. This procedure shall be kept on site and available for inspection by Agency personnel.

9.3. The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.

9.4. Emergencies

9.4.1. In the event of a complete breakdown of equipment or any other occurrence which results in the closure of the waste processing 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 waste processing building is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.

9.4.2. 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.

9.4.3. 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 10 RECORDS

10.1 The licensee shall keep the following documents at the facility office:-

a) the current waste licence relating to the facility;

b) the current EMS for the facility;

c) the previous year's AER for the facility; and

d) all written procedures produced by the licensee which relate to the licensed activities.

10.2 The licensee shall maintain a record for each load of inert waste necessary for restoration purposes arriving at the facility. The licensee shall record the following:-

a) the date;

b) the name of the carrier (including if appropriate, the waste carrier registration details);

c) the vehicle registration number;

d) the name of the producer(s)/collector(s) of the waste as appropriate;

e) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;

f) a description of the waste including the associated EWC codes;

g) the quantity of the waste, recorded in tonnes;

h) the name of the person checking the load;

i) where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed.

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

a) the types and quantities of waste recovered at the facility each year. These records shall include the relevant EWC Codes;

b) all training undertaken by facility staff;

c) results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them;

d) details of all nuisance inspections; and

e) the names and qualifications of all persons who carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.

10.4 The licensee shall maintain a record of all complaints relating to the operation of the activity. Each such record shall give details of the following:-

a) date and time of the complaint;

b) the name of the complainant;

c) details of the nature of the complaint;

d) actions taken on foot of the complaint and the results of such actions; and,

e) the response made to each complainant.

10.5 The licensee shall assign and clearly label a unique reference code to each container at the Civic Waste Facility. A record shall be kept for each load of waste departing from the Civic Waste Facility, Materials Recovery Facility and Composting 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.

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

CONDITION 11 REPORTS AND NOTIFICATIONS

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

a) A material change or increase in:

- The nature or quantity of any emission;
- The abatement/treatment or recovery systems;
- The range of processes to be carried out;
- The fuels, raw materials, products or wastes to be generated or accepted, or

b) Any changes in:

- The site management and control with adverse environmental significance,

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

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

a) be sent to the Agency's Dublin Regional Inspectorate at McCumiskey House, Richview, Clonskeagh Road, Dublin 14;

b) comprise one original and two copies unless additional copies are required;

c) be formatted in accordance with any written instruction or guidance issued by the Agency;

d) include whatever information as is specified in writing by the Agency;

e) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;

f) be submitted in accordance to the relevant reporting frequencies specified by this licence, such as in *Schedule G: Recording and Reporting to the Agency* of this licence;

g) be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and

h) be transferred electronically to the Agency's computer system if required by the Agency.

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

a) notify the Agency as soon as practicable and in any case not later than 10.00 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 Eastern 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.

11.4 Waste Recovery Reports

Within six 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 going 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 de-gassing 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;

g) inert waste to be used for cover/restoration material at the facility; and

h) proposals regarding the utilisation of energy from the gas utilisation plant.

11.5 Monitoring Locations

11.5.1. 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 and the eight-digit national grid reference of each monitoring point.

11.6 Annual Environmental Report

11.6.1 The licensee shall submit to the Agency for its agreement, by 31st March of each year, an Annual Environmental Report (AER) covering the previous calendar year.

11.6.2 The AER shall include as a minimum the information specified in *Schedule H: Content of the 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 12 CHARGES AND FINANCIAL PROVISIONS

12.1 Agency Charges

12.1.1 The licensee shall pay to the Agency an annual contribution of €18,028 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 Acts 1996 to 2003. The licensee shall in 2005 and subsequent years, within one month of the date upon which demanded by the Agency, 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 2004, 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.

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 defraying its costs in regard to items not covered by the said annual contribution.

12.2 Financial Provision for Closure, Restoration and Aftercare

12.2.1 The licensee shall from a date to be set by the Agency establish and maintain a fund, or provide a written guarantee, that is adequate to assure the Agency that the licensee is at all times financially capable of implementing the Restoration and Aftercare Plan required by Condition 4. The type of fund established and means of its release/recovery shall be agreed by the Agency prior to its establishment.

12.2.2 Any fund established shall be maintained in an amount always sufficient to underwrite the current Restoration and Aftercare Plan.

12.2.3 The licensee shall revise the cost of restoration and aftercare annually and any details of the necessary adjustments to the fund or guarantee must, within two weeks of the revision, be forwarded to the Agency for its agreement. Any adjustment agreed by the Agency shall be effected within four weeks of said written agreement.

12.2.4 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 at the Civic Waste Facility

Table A.1 Waste Categories and Quantities

WASTE TYPE	MAXIMUM QUANTITY[Note 1] (TONNES PER ANNUM)
Municipal Waste	19,000
Construction & Demolition Waste[Note 2]	1,000
TOTAL	20,000

Note 1: Quantities of waste types may be altered, subject to the agreement of the Agency, provided the total quantity for disposal does not exceed 20,000 tonnes per annum.

Note 2: Only the inert wastes and compost specified for restoration use in Table A.2 are acceptable for restoration on site, unless otherwise agreed with the Agency.

Table A.2 Waste Categories for Recovery at the facility up until completion of the restoration of the landfill.

WASTE TYPE	LIMITATION
Recyclable Wastes	Subject to Condition 5.6.1
Inert Wastes	Subject to Condition 5.4.2 For use on site – in road making material, as cover material and in capping and restoration works.
Compost	Source separated organic waste and green waste only. Subject to Condition 5.4.1.7 For use on site – in capping and restoration works.

SCHEDULE B : Specified Engineering Works

Specified Engineering Works
Landfill Cap installation.
Restoration and Aftercare works.
Installation of Leachate Management Infrastructure.
Installation of Landfill Gas Management Infrastructure.
New warehouse at Materials Recovery Facility.
Installation of waste handling, processing, recycling/recovery infrastructure and installation of increased waste processing capacity.
Installation of Compost Facility.
Development of bunds, bunding of fuel and oil storage areas.
Surface Water Management Works.
Drainage Works.
Installation of silt traps and oil interceptors.
Installation of dust/odour abatement system.
Roads and access works.
Installation of Wood Shredding Facility and any associated noise and dust control measures.
Any other works notified in writing by the Agency.

SCHEDULE C : Emission Limits

C.1 Noise Emissions: Measured at any noise sensitive location.

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

C.*2 Landfill Gas Concentration Limits:* Measured in any building on or adjacent to the facility.

Methane	Carbon Dioxide
20%LEL (1%v/v)	1.5% v/v

C.3 Dust Deposition Limits: Measured at the monitoring points indicated in *Table D.1.1 Monitoring Locations.*

Level (mg/m^2 /day)[Note 1]
350

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

C.4 Emission Limits for Discharges to Sewer

Emission Point Reference No. S1 (Manhole No. 2, adjacent to weighbridge - Run-off from Civic Waste Facility and Materials Recovery Facility, discharge from proposed composting facility)

Emission Point Reference No. S2 (Leachate from Landfill discharged into upgraded manhole on west side of landfill)

Parameter	Emission Limit Value	
	S1: Civic Waste Facility Grab Sample (mg/l)	S2: Leachate from Landfill Grab Sample (mg/l)
BOD	750	2000
COD	1000	9000
Suspended solids	1000	2000
Sulphate	300	400
pH	6 – 9	6 – 9
Temperature	40 °C	40 °C

C.5 Emission Limit Values from Biodegradable Waste Composting

Emission Point Reference No. Emission point from Biodegradable Waste Composting Unit, to be agreed in advance with the Agency.

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

C.6 Emission Limits Values for Landfill Gas Plant

Emission Point Reference numbers: To be agreed by Agency in advance.
Location: Landfill Gas Combustion Plant and Flare Stacks.
Volume to be emitted: $3000m^3/hr$ (unless results from modelling suggests otherwise)
Minimum discharge height: 5m

Parameter	Flare (enclosed) Emission Limit Value Note 1	Utilisation Plant Emission Limit Value Note 1
Nitrogen oxides (NO_x)	150 mg/m^3	500 mg/m^3
Particulates	Not applicable	130 mg/m^3

Note 1: Dry gas referenced to 5% oxygen by volume for utilisation plants and 3% oxygen by volume for flares.

SCHEDULE D : Monitoring

Monitoring to be carried out as specified below.

D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table D.1.1, as shown in Drawing No. 5429.21/04 of this application '*Monitoring Location Map'*, unless otherwise indicated or agreed by the Agency.

Table D.1.1 Monitoring Locations

Landfill Gas within Waste and Boundary Locations	**Landfill Gas Flare/ Utilisation Plant** Note 2	**Dust / Odour / Bioaerosols**	**Noise**	**Surface Water**	**Ground Water**	**Leachate**	**Composting Unit**
Stations		**Stations**	**Stations**	**Stations**	**Stations**	**Stations**	
GW1 to GW 47 inclusive (as shown on Drawing No. 004 of the Restoration Plan for 34-1 (Nov 2002) agreed by the Agency)	LFGF1 LFGU1	Dust Note 3	Note 4	SW1, SW2, SW3, SW4, SW5, SW6, SW7 Note 5	WM1, WM4, WM5, WM6, WM8, WM9, WM10	L1, L2, L3, L4, L5, L6, L7 and any additional locations agreed with the Agency	Note 6
Boundary locations: G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G16, G17, GM1, GM2, GM3, GM4, GM5, GM6, GM7, GM8, GM24		Odour Note 3		Sediment Sampling Stations: SW5, SW6, SW7 Note 5			
Buildings: Note 1		Biofilter		Biological Assessment Stations: SW5, SW6, SW7 Note 5			

Note 1: Buildings to be monitored for landfill gas levels include site offices and buildings, neighbouring grainstore and representative dwellings in Riverside Crescent and Newry Road, subject to permission. Monitoring at these locations can be reduced subject to review and after the installation of the landfill gas management system.
Note 2: LFGF1 and LFGU1 refer to the emission points from the flare and utilisation plant respectively. Any additional points to be agreed in advance by the Agency.
Note 3: Dust and odour monitoring locations to be agreed with the Agency.
Note 4: Noise sensitive locations to be agreed with the Agency.
Note 5: Two additional estuarine monitoring stations as required by Condition 3.20.3.1
Note 6: Monitoring point for the composting unit as per Condition 3.20.4.1

D.2 Landfill Gas

Table D.2.1 Landfill Gas Monitoring Parameters, Frequency and Technique

Parameter	Monitoring Frequency		Analysis Method[Note1]/Technique[Note2]
	Gas Boreholes/ Vents/Wells	Site Office	
Methane (CH_4) % v/v	Monthly	Weekly	Infrared analyser/flame ionisation detector
Carbon dioxide (CO_2) % v/v	Monthly	Weekly	Infrared analyser/ flame ionisation detector
Oxygen(O_2) % v/v	Monthly	Weekly	Electrochemical cell
Atmospheric Pressure	Monthly	Weekly	Standard
Temperature	Monthly	Weekly	Standard

Note 1: All monitoring equipment used should be intrinsically safe.
Note 2: Or other methods agreed in advance by the Agency.

D.3 Dust & Odour Monitoring

Table D.3.1 Dust & Odour Monitoring Frequency and Technique

Parameter ($mg/m^2/day$)	Monitoring Frequency	Analysis Method/Technique
Dust	Three times a year [Note 2]	Standard Method [Note 1]
Odour	Quarterly	See [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: Twice during the period May to September. With the agreement of the Agency, monitoring can cease once landfill restoration is complete.
Note 3: To be agreed by the Agency.

D.4 Noise

Table D.4.1 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.5 Surface Water, Groundwater and Leachate

Table D.5.1 Water and Leachate - Parameters / Frequency

PARAMETER[Note 1]	SURFACE WATER Monitoring Frequency	GROUNDWATER Monitoring Frequency	LEACHATE [Note 3] Monitoring Frequency
Visual Inspection/Odour [Note 2]	Weekly	Quarterly	Note 3
Groundwater Level	Not Applicable	Monthly	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Monthly
Ammoniacal Nitrogen	Monthly	Monthly	Note 3
BOD	Quarterly	Not Applicable	Note 3
COD	Quarterly	Not Applicable	Note 3
Chloride	Monthly	Monthly	Note 3
Dissolved Oxygen	Quarterly	Quarterly	Not Applicable
Electrical Conductivity	Monthly	Monthly	Note 3
Ph	Quarterly	Quarterly	Note 3
Total Suspended Solids	Quarterly	Not Applicable	Not Applicable
Temperature	Quarterly	Quarterly	Note 3
Metals / non metals [Note 4]	Annually	Annually	Note 3
Cyanide (Total)	Not Applicable	Annually	Note 3
Fluoride	Not Applicable	Annually	Note 3
List I/II organic substances [Note 5]	Once off [Note 6]	Annually [Note 6]	Once off [Note 6]
Mercury	Annually	Annually	Note 3
Sulphate	Annually	Annually	Note 3
Total Alkalinity	Annually	Annually	Not applicable
Total P/orthophosphate	Annually	Annually	Note 3
Total Oxidised Nitrogen	Quarterly	Annually	Note 3
Total Organic Carbon	Not Applicable	Quarterly	Not Applicable
Residue on evaporation	Not Applicable	Annually	Not Applicable
Biological Assessment	Bi-Annually [Note 7]	Not Applicable	Not Applicable

Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.
Note 2: Where there is evident gross contamination of leachate, additional samples should be analysed.
Note 3: Once off for all indicated parameters and thereafter as required by the Agency.
Note 4: Metals and elements to be analysed by AA/ICP should include as a minimum: aluminium, boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.
Note 5: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).
Note 6: 2 surface water locations, 3 groundwater locations and 2 leachate locations to be agreed by the Agency for these parameters.
Note 7: Appropriate biological methods (such as monitoring of benthic organisms) to be used for the assessment of estuarine waters. For the assessment of rivers and streams, appropriate biological methods (such as EPA Q-Rating System) to be used. At least one sample program to be undertaken in the period June to September.

D.6 Landfill Gas Combustion Plant/Enclosed Flare

Location: Utilisation plant and enclosed flare (location of flare to be agreed by the Agency in advance).

Table D.6.1 Landfill Gas Utilisation Plant/Enclosed Flare Parameters and Monitoring Frequency

Parameter	Flare (enclosed) Monitoring Frequency	Utilisation Plant Monitoring Frequency	Analysis Method[Note1]/Technique[Note2]
Inlet			
Methane (CH_4) % v/v	Continuous	Weekly	Infrared analyser/flame ionisation detector/thermal conductivity
Carbon dioxide (CO_2) % v/v	Continuous	Weekly	Infrared analyser/thermal conductivity
Oxygen (O_2) % v/v	Continuous	Weekly	Electrochemical/thermal conductivity
Process Parameters			
Combustion Temperature	Continuous	Quarterly	Temperature Probe/datalogger
Outlet			
CO	Continuous	Continuous	Flue gas analyser/datalogger
NOx	Annually	Annually	Flue gas analyser
SO_2	Annually	Annually	Flue gas analyser
Particulates	Not applicable	Annually	Isokinetic/Gravimetric

Note 1: All monitoring equipment used should be intrinsically safe.
Note 2: Or other methods agreed in advance by the Agency.

D.7 Monitoring of Emissions to Sewer

Emission Point Reference No.: S1 (Discharge from Civic Waste Facility, Materials Recovery Facility & proposed Composting facility)

S2 (Discharge of Leachate to Sewer)

Table D.7.1 Sewer Monitoring - Parameters/Frequency

Parameter	Monitoring Frequency	Analysis Method/Technique [Note 1]
Flow to sewer	Continuous	Flow meter/recorder
Biochemical Oxygen Demand	Quarterly	Standard Method [Note 2]
Chemical Oxygen Demand	Quarterly	Standard Method [Note 2]
Ammoniacal nitrogen	Quarterly	Standard Method [Note 2]
Suspended Solids	Quarterly	Gravimetric
Sulphates	Quarterly	Standard Method [Note 2]
pH	Quarterly	pH meter/recorder

Temperature	Quarterly	Thermometer

Note 1: All analyses shall be carried out by a competent laboratory using standard and internationally acceptable techniques.

D.8 Monitoring of Composting Process

Parameter	Monitoring Frequency	Monitoring equipment/method
• **Composting piles**		
Temperature vs. time	Continuous	Temperature probe/recorder
• **Compost maturation (curing) piles**		
Temperature	Daily	Temperature probe
Moisture	Daily	Subjective by operator.

D.9 Air & Odour Monitoring [Note 1]

Biofilters

Parameter	Monitoring Frequency	Analysis Method/Technique
Bed Media		
Odour assessment [Note 2]	Daily	Subjective Inspection
Condition and depth of biofilter [Note 3]	Daily	Visual Inspection
Moisture content	Bi-annually	Standard laboratory method
PH	Bi-annually	pH probe
Ammonia	Bi-annually	Standard laboratory method
Total viable counts	Bi-annually	Standard laboratory method
Inlet and Outlet Gas		
Ammonia	Bi-annually	Colourimetric Indicator Tubes
Hydrogen sulphide	Bi-annually	Colourimetric Indicator Tubes
Mercaptans	Bi-annually	Colourimetric Indicator Tubes

Note 1: All analyses shall be carried out by a competent laboratory using standard and internationally acceptable techniques. The testing laboratory and the testing technique shall be agreed by the Agency in advance.

Note 2: This subjective assessment should be carried out by a staff member immediately upon arriving on-site.

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

SCHEDULE E : Compost Process Management

Table E.1 Composting. During the composting process the entire quantity of biowaste being composted shall be exposed to the following temperature :

Temperature	Treatment time
At least 60°C	1 week

Table E.2 Category 3 Material. All Category 3 Animal By-Product Waste shall be exposed to the following processing regime:

Temperature	Particle Size	Treatment Time
70 °C	12 mm [Note 1]	60 minutes

Note 1: Unless otherwise agreed by the Agency.

Table E.3 Process validation. The composting process shall be tested using the following indicator organism [Note 1]:

Indicator Organism	Frequency
Salmonella spp.	Annually [Note 2]

Note 1: Unless otherwise agreed by the Agency.
Note 2: This test shall be repeated if major changes to either the composition of the incoming biowaste or the treatment process are made.

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 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 ≤10mg/O_2/g dry matter or Dynamic Respiration Index is ≤1,000mgO_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.

3. Compost must be cured for at least 21 days; and
Compost will not reheat upon standing to greater than 20°C above ambient temperature.

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 by the Agency.

2. Trace Elements [Note 1/ 2/3]

Maximum Trace Element Concentration Limits for Compost

Parameter (mg/kg, dry mass)	Compost Quality Standards [Note 4]		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 5]	<0.5%	<0.5%	<3%
Gravel and Stones >5mm [Note 5]	<5%	<5%	-

Note 1: These limits apply to the compost just after the composting phase and prior to mixing with any other materials.
Note 2: Incoming sludges shall be monitored quarterly (on a client by client basis) for the parameters outlined in this table.
Note 3: These limits 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 4: Normalised to 30% organic matter content.
Note 5: 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.

2. 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;

3. Monitoring

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

SCHEDULE G : Recording and Reporting to the Agency

Recurring Reports

Report	Reporting Frequency Note1	Report Submission Date
Environmental Management System Updates	Annually	As part of the AER.
Annual Environment Report (AER)	Annually	By 31 March of each calendar year.
Record of incidents	As they occur	Within five days of the incident.
Bund, tank and container integrity assessment	Every three years	Six months from the date of grant of licence and every 3 years thereafter as part of the AER.
Specified Engineering Works reports	As they arise	Prior to the works commencing.
Monitoring of Landfill Gas	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Surface Water Quality	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Groundwater Quality	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Leachate	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Sewer Discharge	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.
Ecological Report	Annually	One month after end of the year being reported on.
Topographical Survey Report	Once off	Within two months of the completion of the final capping layer.
Report on Trial Composting Scheme	Once off	One month after completion of the trail programme.
Compost Quality Monitoring	Quarterly	Ten days after the end of the quarter being reported on.
Bioaerosol monitoring	Annually	As part of the AER.
Composting Plant: Odour Assessment and condition and depth of biofilters	Daily	To be recorded by the licensee.
Biofilter air monitoring	Biannually	Ten days after end of the period 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 H : Content of the Annual Environmental Report

Annual Environmental Report Content
Reporting Period.
Waste activities carried out at the facility.
Quantity and Composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used).
Summary report on emissions.
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 leachate produced and volume of leachate transported/discharged off-site.
Annual budget and site running costs.
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.

Signed on behalf of the said Agency
on the 3rd day of November, 2004

Jonathan Derham, **Authorised Person**