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

WASTE LICENCE

PROPOSED DECISION

For an

INTEGRATED WASTE MANAGEMENT FACILITY
&
LANDFILL CLOSURE

Waste Licence Register Number:	14-1
Applicant:	Kildare County Council
Location of Facility:	Silliot Hill Landfill, Silliot Hill and Brownstown, County Kildare

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 operation of an integrated waste facility consisting of a waste transfer station, civic waste facility, sludge treatment facility and trial composting unit, at Silliot Hill and Brownstown, County Kildare. The licence includes for the closure and restoration of the existing Silliot Hill Landfill as per the requirements of Council Directive 1999/31/EC on the landfill of waste.

Household and commercial waste will be accepted at the transfer station for bulking and disposal elsewhere. Household, commercial and industrial source segregated biodegradable waste may be accepted at the trial composting facility. Anaerobically stabilised sludges from agreed wastewater treatment plants may be accepted at the sludge treatment centre. The general public can bring waste for recovery (e.g. metal, cardboard, wood, plastic, paper) and disposal to the civic waste facility. The licensee is required to provide an enclosed transfer station within 3 months of the date of grant of this licence. The licence sets a quality standard for composted waste. The quantity of waste to be accepted at the facility is limited to less than 67,200 tonnes per annum.

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 Kildare County Council will operate and manage this facility.

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DECISION & REASONS FOR THE DECISION

The Environmental Protection Agency (the Agency) is satisfied, on the basis of the information available, that the requirements of Section 40(4) of the Waste Management Act, 1996 have been complied with in respect of the application for a waste licence for the activities listed hereunder in Part I.

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 40(1) of the said Act to grant this Waste Licence to Kildare County Council to carry on the waste activities listed below at Silliot Hill Landfill, Silliot Hill and Brownstown, County Kildare subject to twelve 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 4.	**Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons:**
	This activity is limited to storage of leachate in a lagoon, if required.
Class 6.	**Biological treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule:**
	This activity is limited to the disposal of waste compost that does not meet the compost quality standard.
Class 7.	**Physico-chemical treatment not referred to elsewhere in this Schedule (including evaporation, drying and calcination) which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1. to 10. of this Schedule:**
	This activity is limited to the disposal of waste compost that does not meet the compost quality standard.
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 bulking and transfer of waste.
Class 12.	**Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.**
	This activity is limited to repackaging and transfer of waste.
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.**
	This activity is limited to storage of waste at the facility prior to transfer.

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 composting of sludges and source segregated waste.
Class 3.	**Recycling or reclamation of metals and metal compounds:**

	This activity is limited to recovery of metals.
Class 4.	**Recycling or reclamation of other inorganic materials:**
	This activity is limited to the recovery of inorganic wastes.
Class 9.	**Use of any waste principally as a fuel or other means to generate energy:**
	This activity is limited to the utilisation of landfill gas to generate energy.
Class 10.	**The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system:**
	This activity is limited to the use of suitable waste in restoration works.
Class 11.	**Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule:**
	This activity is limited to the use of recovered waste, such as compost and construction and demolition waste, at the facility
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 prior to recovery.

Part II: Activities Refused

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Act to refuse the following classes of activities.

Refused waste disposal activities, in accordance with the Third Schedule of the Waste Management Act, 1996

Class 1.	**Deposit on, in or under land (including landfill):**
	Reason: The proposed activity would not comply with the requirements of Section 40(4) of the Waste Management Act 1996.
Class 2.	**Land treatment, including biodegradation of liquid or sludge discards in soils:**
	Reason: No description is given for this waste activity in the application.
Class 5.	**Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.**
	Reason: The proposed activity would not comply with the requirements of Section 40(4) of the Waste Management Act 1996.

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.

Aerosol	A suspension of solid or liquid particles in a gaseous medium.
Adequate lighting	20 lux measured at ground level.
Agreement	Agreement in writing.
Anaerobic	A condition in which oxygen is not available in the form of dissolved oxygen or nitrate/nitrite
Annually	At approximately twelve monthly intervals.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of the waste licence application.
Application	The application by the licensee for this waste licence.
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.
Biodegradable waste	Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard.
Condition	A condition of this licence.
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.
Cover material	Bricks, crushed concrete, tarmac, earth, soil, sub-soil, stone, rock or other similar natural materials; or other cover material the use of which has been agreed with the Agency.
Daily Cover	Is the term used to describe material spread (about 150mm if soil cover is used) over deposited waste at the end of each day. Synthetic materials may also be used. Its objective is to minimise odour, the amount of litter generated and to control flies and access to the waste by birds and vermin. Where soils are used for daily cover, it is recommended that they be removed at the start of the day and subsequently reused as much as possible
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 9.4
Emission Limits	Those limits, including concentration limits and deposition levels established

	in *Schedule C: Emission Limits*, of this licence.
EIS	Environmental Impact Statement submitted as part of the application.
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.
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. 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 landfill and 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 landfill and the civic waste facility, may have different hours of waste acceptance.
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.
Intermediate Cover	Refers to placement of material (minimum 300mm if soil is used) for a period of time prior to restoration or prior to further disposal of waste.
Landfill	Refers to the area of the facility where the waste is disposed of by placement on the ground or on other waste.
Landfill Gas	Gases generated from the landfilled waste.
LEL (Lower Explosive Limit)	The lowest percentage concentration by volume of a mixture of flammable gas with air which will propagate a flame at 25^{o}C and atmospheric pressure.
Licence	A Waste Licence issued in accordance with the Act.
Licensee	Kildare County Council.
List I/II Organics	Substances classified pursuant to EC Directives 76/464/EEC and 80/68/EEC.
Liquid Waste	Any waste in liquid form and containing less than 2% dry matter.
Maintain	Keep in a fit state, including such regular inspection, servicing 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.
Night-time	10.00 p.m. to 8.00 a.m.

Recyclable Materials	Those waste types, such as cardboard, batteries, gas cylinders, etc, which may be recycled.
Quarterly	At approximately three monthly intervals.
Sample(s)	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
SCADA system	Supervisory Control and Data Acquisition system
Sludge	The accumulation of solids resulting from chemical coagulation, flocculation and/or sedimentation after water or wastewater treatment with between 2% and 14% dry matter.
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.
Treated Sludge	Sludge which has undergone biological, chemical or heat treatment, long-term storage or any other appropriate process so as significantly to reduce its fermentability and the health hazards resulting from its use.
Treatment	Treatment means the physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery.
Trigger Level	A parameter value specified in the licence, the achievement or exceedance of which requires certain actions to be taken by the licensee.
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.
Working Face	The area of the site in which waste other than cover material or material for the purposes of the construction of specified engineering works is being deposited.

PART III 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. 2001-114-01-001 RevB '1:1000 Site Layout Plan' 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. The maximum tonnage to be accepted at the facility shall not exceed 67,200 tonnes per annum.

1.5. Household waste, commercial waste, industrial waste and sludge may be recovered and disposed of at the facility subject to the maximum quantities and other constraints listed in *Schedule A: Waste Acceptance* of this licence. Inert waste only may be accepted at the landfill for restoration purposes.

1.6. No hazardous waste, other than domestic quantities to the Civic Waste Facility, shall be accepted at the facility.

1.7. Waste Acceptance Hours and Hours of Operation

1.7.1. Waste shall only be accepted at (other than the Civic Waste Facility) or removed from the facility between the hours of 07.00 and 22.00 Monday to Friday inclusive and 07.00 to 16.30 on Saturdays.

1.7.2. Waste shall not be accepted at the facility (other than the Civic Waste Facility) on Bank Holidays.

1.7.3. Waste shall only be accepted at the Civic Waste Facility between the hours of 08.00 and 17.30 Monday to Friday inclusive and 08.00 to 16.30 on Saturdays.

1.8. 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 trigger level specified in this licence which is attained or exceeded;

d) any indication that environmental pollution has, or may have, taken place; and

e) the rejection of waste at the facility.

1.9. 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:

1.9.1. 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;

1.9.2. 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; and

1.9.3. 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.

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

REASON: To clarify the scope of this licence.

CONDITION 2 MANAGEMENT OF THE FACILITY

2.1 Facility Management

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

2.1.2 The Transfer Station, Civic Waste Facility, Pilot Compost Facility and Sludge Treatment Facility shall be supervised by appropriately qualified and competent persons at all times while waste may be accepted.

2.1.3 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.

2.1.4 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 management structure of the facility to the Agency. Any proposed replacement in the management structure shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information

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

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

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

2.3 Environmental Management System (EMS)

2.3.1 The licensee shall establish and maintain an EMS. By the 31st January 2003 the licensee shall submit to the Agency for its agreement a proposal for a documented Environmental Management System (EMS) for the facility. Following the agreement of the Agency, the licensee shall establish and maintain such a system. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement.

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

2.3.2.1 Schedule of Environmental Objectives and Targets

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

2.3.2.2 Environmental Management Plan (EMP)

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

(i) the items specified to be contained in an Environmental Management Plan in the Landfill Operational Practices Manual published by the Agency;

(ii) methods by which the objectives and targets will be achieved and the identification of those responsible for achieving those objectives and targets;

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

2.3.2.3 Corrective Action Procedures

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

2.3.2.4 Awareness and Training Programme

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

2.4 Communications Programme

2.4.1 The licensee shall establish and maintain a Communications Programme to ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility. This shall be established within twelve months of the date of grant of the licence.

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

CONDITION 3 FACILITY INFRASTRUCTURE

3.1 The licensee shall establish all infrastructure referred to in this licence prior to the commencement of the licensed activities or as required by the conditions of this licence.

3.2 Specified Engineering Works

3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule B: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.

3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.

3.2.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall include 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. A similar Site Notice Board shall be provided and maintained at the entrance to the Sludge Treatment Facility off road PI 318 prior to commencement of waste activities at that location.

3.3.2 The boards 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 The licensee shall carry out a review of the site security arrangements and shall within three months of the date of grant of this licence, ensure that all areas of the facility are secure.

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 and parking areas shall be provided and maintained to ensure the safe movement of vehicles within the facility.

3.5.2 Internal access roads used for waste acceptance/removal and vehicle parking areas shall be either hardstanding or paved and shall at minimum consist of the following make-up or an equivalent:

a) hardstanding areas shall be constructed to the following specification; 150mm concrete slab overlying 200 mm Clause 804 granular fill; and

b) roads shall be constructed of 40mm wearing course of macadam, 60mm base course of macadam and 200 mm Clause 804 granular fill

Service roads may be constructed of 500mm compacted hardcore/gravel subject to agreement with the Agency.

3.6 Facility Office

3.6.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.

3.6.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.

3.7 Waste Inspection and Quarantine Areas

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

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

3.7.3 Drainage from these areas shall be directed to the leachate collection system.

3.8 Weighbridge

3.8.1 The licensee shall provide and maintain a weighbridge at the facility.

3.9 Wheel Cleaning

3.9.1 The licensee shall establish and maintain a wheelwash at the facility. Drainage from the wheelwash shall be to the leachate collection system.

3.10 Waste Water Treatment Plant

3.10.1 The licensee shall provide and maintain a Wastewater Treatment plant at the facility for the treatment of wastewater arising on-site. Wastewater from the septic tanks shall be pumped to the leachate collection system. The use of any percolation area shall satisfy the criteria set out in the Wastewater Treatment Manual, *Treatment Systems for Single Houses*, published by the Environmental Protection Agency.

3.11 Waste handling, ventilation and processing plant

3.11.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including inter alia waste loading vehicles and ejector trailers) shall be provided on the following basis:

- 100% duty capacity;
- 50% standby capacity available on a routine basis;
- Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.

3.11.2 Within three months from the date of grant of this licence, the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These

capacities shall be based on the licensed waste intake, as per *Schedule A: Waste Acceptance* of this licence.

3.11.3 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.

3.12 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 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 or 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 Surface Water Management

3.13.1 Effective surface water management infrastructure shall be provided and maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:

a) the prevention of contaminated water and leachate discharges into surface water drains and courses; and

b) the collection/diversion of run off arising from capped and restored areas.

3.13.2 Within twelve months of the date of grant of this licence the licensee shall carry out the following improvements to the foul/surface water handling system at the facility:

a) Run off from hardstanding areas (including civic waste facility, transfer station and sludge treatment facility) shall be separated into foul and storm water drainage systems.

b) Provision of separate sampling facilities for both foul water discharges and storm water discharges. Sampling facilities shall also be provided for surface water being discharged to the infiltration area.

c) Provision of a shut off valve for storm water discharges. All shut-off valves shall be clearly labelled and their use incorporated into the Emergency Response Procedure as required under Condition 9.2.

d) Surface water shall discharge to adequately sized silt traps and oil interceptors. The interceptors shall be a Class I 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).

e) Foul water shall discharge to an adequately sized silt trap and oil interceptor. 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).

f) Foul water (including leachate produced from waste activities at the transfer station, pilot composting unit, or sludge treatment centre) shall be directed to the leachate collection system. Prior to commencement of these waste activities, the integrity and water tightness of all underground pipes, tanks and sumps, 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. 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.

g) 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 shall be inscribed on these manholes.

h) The licensee shall agree in advance with the Agency and Sanitary Authority any connection to the proposed sewer line.

3.13.3 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.

3.14 Landfill Gas Management

3.14.1 Within six months of the date of grant of the licence, the open gas flare units shall be upgraded to an enclosed flare unit(s).

Flare unit efficiency shall be tested once it is installed.

3.14.2 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.

3.14.3 Landfill Gas Combustion Plant

Within twelve months of the date of grant of this licence the licensee shall establish and maintain a Gas Combustion Plant for energy recovery at the facility. The combustion plant shall incorporate in its design measures to facilitate monitoring requirements specified in *Schedule D: Monitoring* of this licence.

3.15 The licensee shall provide a waste transfer station and sludge treatment centre at the facility for a period of three years or as otherwise agreed by the Agency.

3.16 Civic Waste Facility

3.16.1 Within three months of the date of grant of this licence, the licensee shall provide and maintain a Civic Waste Facility.

3.16.2 The licensee shall provide and maintain the receptacles at the Civic Waste Facility as shown in Figure 2.2 'Silliot Hill Landfill 1:200 Civic Amenity Area', Volume 2 of the EIS unless otherwise agreed with the Agency.

3.17 Pilot Compost facility

3.17.1 Unless otherwise agreed with the Agency, the licensee shall establish and maintain a pilot scale in-vessel composting scheme using vertical compost unit technology.

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

(i) Waste acceptance and storage area;

(ii) Composting process area;

(iii) Mature compost storage area.

The licensee shall demonstrate to Agency prior to commencement of this waste activity that sufficient area is available to carry out the activity and shall at minimum meet the requirements listed in Section 5 'Site Layout', Voluntary Submission dated September 2001.

3.17.3 Leachate generated from the composting areas shall be directed to the leachate collection system.

3.18 Sludge Treatment facility

3.18.1 Unless otherwise agreed with the Agency, the licensee shall establish and maintain a Sludge Treatment facility for composting sludges using in-vessel compost technology.

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

(i) Waste acceptance and storage area;

(ii) Composting process area;

(iii) Mature compost storage area.

3.18.3 Leachate generated from the Sludge Treatment Facility shall be directed to the leachate collection system.

3.19 Monitoring Infrastructure

3.19.1 Within three months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a report with details of the condition of monitoring infrastructure. This shall include details of all perimeter gas monitoring points, groundwater monitoring infrastructure and surface water infrastructure. The report shall include recommendations on the need and a time scale for the installation of any additional monitoring points.

3.19.2 Landfill Gas

(i) Within three months from the date of grant of this licence, the licensee shall install an effective permanent gas monitoring system in the site office and any other enclosed structures at the facility.

3.19.3 Replacement of Infrastructure

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

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

CONDITION 4 RESTORATION AND AFTERCARE

4.1. Within six months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement a Restoration and Aftercare Plan for the facility. The plan shall incorporate the details set out in Sections 9.5 Impact Assessment and 9.6 Mitigation of Volume 2 of the EIS.

4.2. Landscaping

4.2.1. Landscaping of the facility as described in Section 9.6 Mitigation – Planting and Seeding, Volume 2 of the EIS shall be carried out within 2 years of the date of grant of this licence.

4.3. On removal of the temporary transfer station the resulting void shall be filled with inert waste only.

4.4. The final profile of the facility shall be as shown in Figure 2.3 'Silliot Hill Landfill 1:2000 Final Contour Map' (mOD Malin) Volume 2 of the EIS.

4.5. Capping

4.5.1. Within three months of the date of grant of the licence the licensee shall ensure that all previously deposited waste is covered by an intermediate cover of at least 300mm.

4.5.2. The final capping shall consist of the following:

a) top soil (150 -300mm);

b) subsoils, such that total thickness of top soil and subsoils is at least 1m;

c) drainage layer of 0.5m thickness having a minimum hydraulic conductivity of $1x10^{-4}$ m/s or an equivalent geosynthetic layer;

d) 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

e) gas collection layer of natural material (minimum 0.3m) or a geosynthetic layer.

4.6. 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

4.7. Where tree planting is to be carried out above waste-filled areas, a synthetic barrier shall be used to augment the clay cap. Combined topsoil and subsoil depths shall be a minimum of 1m.

REASON: To provide for the restoration of the facility

CONDITION 5 FACILITY OPERATION AND WASTE MANAGEMENT

5.1. Wastes shall not be deposited in any part of the facility without the prior agreement of the Agency.

5.2. Waste Acceptance and Characterisation Procedures

5.2.1 Within six months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement written procedures for the acceptance and handling of all wastes. These procedures shall include methods, such as sludge, eluate and toxicity testing, for the characterisation of waste in order to distinguish between inert, non-hazardous and hazardous wastes.

5.2.2 Waste arriving at the facility shall be inspected at the point of entry to the facility and subject to this inspection, weighed, documented and directed to the appropriate facility (Waste Transfer Station, Pilot Composting Facility or Sludge Treatment Facility). Each load of waste arriving at the Facility shall be inspected upon tipping. Only after such inspections shall the waste be processed for disposal or recovery.

5.2.3 Unless otherwise agreed with the Agency, only digested sludges which have been anaerobically stabilised, from agreed treatment plants (Oberstown, Leixlip and Athy) shall be accepted at the Sludge Treatment facility.

5.2.4 Only source segregated organic waste (e.g. kitchen and garden waste), shall be used in the operation of the Pilot Waste Composting facility.

5.2.5 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. No waste shall be stored in the Waste Quarantine Area for more than three months. 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.

5.3. All waste activities associated with the handling of waste at the waste transfer station shall be carried out on impermeable hardstanding areas. Within three months of the date of grant of this licence, all wastes accepted at the waste transfer station shall be processed within an enclosed building. All wastes destined for onward disposal shall be stored within this enclosed building. Wastes destined for recovery off-site may be stored outside this building.

5.4. Operational Controls

5.4.1 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

5.4.2 Filled areas of the landfill shall be permanently capped within twelve months of having been filled to the required level.

5.4.3 Scavenging shall not be permitted at the facility.

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

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

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

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

5.4.8 No smoking shall be allowed on the facility other than in the facility office.

5.4.9 The floor of the waste transfer Station, sludge composting facility, pilot composting reception area shall be washed down and cleared of all waste at the end of the working day.

5.4.10 The floor of the storage bays for recovered wastes shall be washed down and cleaned on each occasion such bays are emptied

5.4.11 The licensee shall only handle or store waste and park vehicles in areas of the facility where an impermeable hardstanding surface exists.

5.4.12 Procedures for the processing of green waste for acceptance at the composting facilities shall be submitted to the Agency for its agreement prior to commencement of these waste activities.

5.5. Sludge Composting

5.5.1 Treated sewage sludge shall only be accepted at the facility between the hours of 8:30 a.m. and 2.00 p.m. Monday to Friday inclusive.

5.5.2 All sludge accepted at the sludge treatment facility shall be introduced into the compost process within the working day.

5.5.3 Unless otherwise agreed with the Agency, the method of composting shall be in-vessel composting. The process shall maintain the compost uniformly at over 40°C for a period of 14 days and with a peak of at least 55°C maintained for a period of at least 3 days. Maturation/ storage of sludge compost should be for a period of at least 30 days.

5.5.4 The use of sludge compost in agriculture shall satisfy the requirements of SI No 148 of 1998 Waste Management (Use of Sewage Sludge in Agriculture) Regulations, 1998.

5.5.5 In order not to be considered a waste for disposal, compost produced by the facility shall comply with the above referred quality standards when used in agriculture or those established in *Schedule F: Standards for Compost Quality* of this licence at all other times.

5.5.6 The licensee shall submit to the Agency details and results of sludge compost monitoring.

5.6. Compost

5.6.1 Waste accepted at the composting facility shall be introduced into the compost process within the working day.

5.6.2 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.

5.6.3 The licensee shall submit to the Agency for its agreement prior to commencement of composting details of monitoring the process (temperature).

5.7. Off-site Disposal and Recovery

5.7.1 Waste sent off-site for recovery or disposal shall only be conveyed by a waste contractor agreed by the Agency;

5.7.2 All waste transferred from the facility shall only be transferred to an appropriate facility agreed by the Agency;

5.7.3 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.

5.8. Civic Waste Facility

5.8.1 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.

5.8.2 Within three months of the date of grant of this licence, only one public area shall exist for acceptance of waste at the Civic Waste Facility.

5.8.3 All waste deposited in the Civic Waste Facility shall be either:

a) into a skip;

b) into a receptacle for recovery; or

c) in the case where inspection is required, into a designated inspection area.

5.8.4 The licensee shall assign and clearly label each container at the Civic Waste Facility to indicate their contents. The licensee shall designate an area for the storage of baled waste for further recovery off-site.

5.9 Leachate Management

5.9.1 Within six months of the date of grant of this licence the licensee shall submit to the Agency for its agreement a Leachate Management Plan. This shall include:

(i) measures to minimise leachate head in the landfill (all Phases);

(ii) monitoring procedures, including frequencies, of the level of leachate in collection manholes / sumps;

(iii) report on the effective of the current leachate collection system;

(iv) extent of groundwater contamination and pollution and

(v) remediation measures to deal with polluted groundwater.

5.9.2 Leachate levels in the waste shall not exceed a level of 1.0m over the top of the liner at the base of the landfill in Phase 2.

5.9.3 Leachate shall be disposed of by tankering off-site in fully enclosed road tankers until such time as there is a connection to foul sewer.

5.9.4 Recirculation of leachate or other contaminated water over or into the waste body shall not be undertaken.

5.10 Landfill Gas Management

5.10.1 Within six months of the date of grant of this licence, the licensee shall:

(i) review the controls on landfill gas management and in particular, the migration from the site of landfill gas and shall take such additional appropriate action as the licensee deems necessary.

(ii) submit to the Agency for its agreement a Landfill Gas Management Plan for the facility. This shall include a procedure to respond to landfill gas plant (flare and combustion plant) failure.

5.11 Maintenance

5.11.1 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.

5.11.2 All lagoon structures on the facility shall be inspected and certified fit for purpose every three years by an independent and appropriately qualified chartered engineer.

5.11.3 The licensee shall maintain and clearly label and name all sampling and monitoring locations.

5.11.4 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 at the working face or to a skip.

5.11.5 The enclosed flare and combustion engine shall be maintained in accordance with manufacturer recommendations. Maintenance records shall be maintained at the facility.

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. Landfill Gas

6.3.1. The following are the 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; and

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

6.3.2. 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 273 K, pressure 101.3 kPa, dry gas at 3% oxygen; and

b) in the case of landfill gas combustion plant:

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

6.3.3. Emission limits for landfill gas emissions to atmosphere in this licence shall be interpreted in the following way:-

6.3.3.1. Continuous monitoring

(i) No 24 hour mean value shall exceed the emission limit value.

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

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

6.3.2.2. 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.

6.4. Disposal of Leachate

6.4.1. Unless otherwise agreed with the Agency, all leachate or contaminated water tankered from the facility shall be transported to Athy Waste Water Treatment Plant and disposed of there.

6.5. The trigger level for PM_{10} from the facility measured at any location on the boundary of the facility is:

a) PM_{10} greater than 50µg/m3 for a daily sample.

6.6. Emissions to Sewer

6.6.1. Emissions to the proposed sewer shall be agreed in advance with the Agency.

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 Within six months of the date of grant of this licensee and prior to commencement of waste activities, whichever is sooner, at the pilot compost plant and sludge treatment centre, the licensee shall submit to the Agency for its agreement, an odour management plan for the facility. The plan shall include:

(i) measures to control potential sources of odour nuisance;

(ii) details of odour abatement equipment that is necessary to control odours from waste activities to be carried on; and

(iii) monitoring details of odours and odour abatement equipment.

7.3 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.

7.4 Litter Control

7.4.1 Litter fencing shall be installed and maintained around the perimeter of the transfer station until such time as an enclosed facility is provided.

7.4.2 All litter control infrastructure shall be inspected on a daily basis. The licensee shall remedy any defect in the litter netting 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 netting shall be undertaken within three working days.

7.4.3 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.

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

7.5 Dust Control

7.5.1 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.

7.6 Bird Control

7.6.1 Birds shall be prevented from gathering on and feeding at the facility by the use of birds of prey and/or other bird scaring techniques.

REASON: To provide for the control of nuisances

CONDITION 8 MONITORING

8.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in *Schedule D: Monitoring* of this licence and as specified in this licence. Unless otherwise specified by this licence, all environmental monitoring shall commence no later than two months after the date of grant of this licence.

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

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

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

8.5. Landfill Gas

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

8.6. Noise Monitoring

8.6.1. The licensee shall include in the monitoring programme set out in *Schedule D: Monitoring* of this licence, one additional noise monitoring location at the south east corner of the facility.

8.7. Groundwater Monitoring

8.7.1. Subject to the agreement of the well owners, all private wells within 500m of the facility shall be included in the monitoring programme set out in *Schedule D: Monitoring* of this licence.

8.8. Meteorological Monitoring

8.8.1. The licensee shall make arrangements for representative meteorological data to be collated for the facility to fulfil the requirements of *Schedule E.5: Meteorological Monitoring* of this licence.

8.9. Topographical Survey

8.9.1. A topographical survey shall be carried out within three months of the date of grant of this licence. It shall be repeated annually thereafter. The survey shall be in accordance with any written instructions issued by the Agency.

8.10. Settlement & Stability Assessment

8.10.1. Within six months of the date of grant of this licence, and annually thereafter, the licensee shall carry out an assessment of settlement of the waste body and any impact this has on buildings constructed on ground where waste has been deposited. This shall include an assessment of the integrity of hardstanding areas.

8.10.2. Within six months of the date of grant of this licence, and annually thereafter, the licensee shall carry out a stability assessment of the side slopes around the transfer station.

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 six months of the date of grant of this licence, submit a written Emergency Response Procedure (ERP) to the Agency for its agreement. The ERP shall address any emergency situations which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment. This shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment.

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

9.4. Emergencies

9.4.1. All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects;

9.4.2. No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities;

9.4.3. In the event that monitoring of local wells (including wells for livestock) indicates that the facility is having a significant adverse effect on the quantity and/or quality of the water supply this shall be treated as an emergency and the licensee shall provide an alternative supply of water to those affected;

9.4.4. In the event that monitoring of the slide slopes of the facility indicate that there may be a risk of slope failure this will be treated as an emergency.

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;

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

10.2 The licensee shall maintain a written record for each load of waste arriving at and leaving 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 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; and,

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 Written Records

The following written records shall be maintained by the licensee:

a) the types and quantities of waste recovered and disposed of 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 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.

10.5 A written record shall be kept of each consignment of leachate removed from the facility. The record shall include the following:

a) the name of the carrier;

b) the date and time of removal of leachate from the facility;

c) the volume of leachate, in cubic metres, removed from the facility on each occasion;

d) the name and address of the Waste Water Treatment Plant to which the leachate was transported;

e) any incidents or spillages of leachate during its removal or transportation.

10.6 A written record shall be kept for each load of waste departing from the Civic Waste Facility sludge treatment facility and compost 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). In the case of sludge and compost the name and address of the recipient and the location of each site where it is to be used;

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.

10.7 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 11 REPORTS AND NOTIFICATIONS

11.1 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;

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

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

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

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

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

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

11.2 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 a.m. the following working day after the occurrence of any incident;

b) submit a written record of the incident, including all aspects described in Condition 9.1(a-e), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident; and

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 10:00 a.m. on the following working day after such an incident.

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.

11.3 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) the contribution of the facility to the achievement of targets for the reduction of biodegradable waste going to landfills as specified in the Landfill Directive;

b) the separation of recyclable materials from the waste;

c) the recovery of metal waste and white goods including recovery of controlled substances such as CFC's;

d) the recovery of commercial waste, including cardboard;

e) composting of biodegradable or green waste at the facility having regard to good practice and sustainability;

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

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

11.4 Reports relating to Facility Operations

11.4.1. Leachate Handling Procedures

(i) The licensee shall submit to the Agency for its agreement leachate Handling Procedures for the handling of leachate on the facility, during removal and subsequent transport/discharge to the Waste Water Treatment Plant.

11.4.2. Achievement of Final Profile

(i) Within three months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement, proposals for restoration to achieve the final profile/height of the facility to the Agency for its agreement.

11.5 Monitoring Locations

11.5.1. Within six months of the date of grant of this licence, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that

are stipulated in this licence. The drawing(s) shall include the reference code of each monitoring point.

11.6 Annual Environmental Report

11.6.1 The licensee shall submit to the Agency for its agreement, by 31st December 2002 and within one month of the end of each year thereafter, an Annual Environmental Report (AER).

11.6.2 The AER shall include as a minimum the information specified in *Schedule G: Content of Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant written guidance issued by the Agency.

REASON: To provide for proper reports to and notifications to 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 €21,669 (£17,062) 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 2003 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 2002, 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.

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 x 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

WASTE TYPE	WASTE Unit	MAXIMUM (TONNES PER ANNUM)
Household and Commercial waste	**Transfer Station**	60,000
Anaerobic stabilised Sludge	**Sludge Treatment Centre**	2,000 Note 1
Source segregated (household, commercial or industrial) biodegradable waste	**Pilot Composting Facility**	5,200
TOTAL		67,200

Note 1: Tonnes dry solid equivalent to 11,000 tonnes of liquid sludge

SCHEDULE B : Specified Engineering Works

Specified Engineering Works
Final capping and restoration.
Installation of Landfill Gas Management Infrastructure
Installation of Leachate Management Infrastructure
Installation of Surface Water Management and Sewer Infrastructure including installation of silt traps and oil interceptors.
Installation of Surface Water Management Infrastructure
Development of the facility (temporary transfer station, civic waste facility, pilot compost facility and sludge treatment facility) including installation of waste handling, processing, recycling/recovery infrastructure and installation of increased waste processing capacity.
Any other works notified in writing by the Agency.

SCHEDULE C :Emission Limits

C.1 Noise Emissions: (Measured at the perimeter monitoring points indicated in *Table D1)*

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 perimeter monitoring points indicated in *Table D1)*

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 Values for Landfill Gas Plant

Emission Point reference nos: (to be agreed with the Agency)
Location: Landfill Gas Combustion Plant and flarestacks
Volume to be emitted:$3000m^3$/hr
Minimum discharge height:5m

Parameter	Emission Limit Value
Nitrogen oxides as (NO_2)	500 mg/m^3 (150 mg/m^3) (Note 2)
CO	650 mg/m^3 (50 mg/m^3) (Note 2)
Particulates	130 mg/m^3
TA Luft Organics Class I (Note 1)	20 mg/m^3 (at mass flows > 0.1 kg/hr)
TA Luft Organics Class II (Note 1)	100 mg/m^3 (at mass flows > 2 kg/hr)
TA Luft Organics Class III (Note 1)	150 mg/m^3 (at mass flows > 3kg/hr)
Hydrogen Chloride	50 mg/m^3 (at mass flows > 0.3 kg/h)
Hydrogen Fluoride	5 mg/m^3 (at mass flows > 0.05 kg/h)

Note 1: In addition to the above individual limits, the sum of the concentrations of Class I, II and III shall not exceed the Class III limits.

Note 2: Emission limit values in brackets represent limit values 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 page 20, Volume 2 of 3 of the EIS and Drawing No. 2001–114–01–001RevB '1:1000 Site Layout Plan' of the application unless otherwise stated.

Table D.1.1 Monitoring Locations

LANDFILL GAS	PM_{10}	DUST	NOISE	SURFACE WATER	GROUND WATER	LEACHATE
STATIONS		STATIONS	STATIONS	STATIONS (Note 3)	STATIONS	STATIONS (Note 5)
(Notes 1 & 6)	Note 7	D1	N1	SW1	(Note 4)	L1
		D2	N2	SW2		L2
		D3	N3	SW3		L3 (MH2)
		D4	N4	SW4		L4 (MH3)
		D5	N5	SW5		L5 (BH17)
		D6	N6	SW6		L6 (BH18)
		D7	N7 (Note 2)	SW7		L7 (MH1)

Note 1: Landfill gas monitoring probes at locations shown in Drawing No 2001-114-01-001 RevB '1:1000 Site Layout Plan'

Note 2: Noise monitoring stations at locations shown in Drawing No 2001-114-01-001 RevB '1:1000 Site Layout Plan'. N7 additional noise monitoring station to be located in the south eastern corner of the facility.

Note 3 Surface Water Monitoring stations at locations shown in Figure 5.1 '1: 15,000 Monitoring Point Location Map (Surface Water & Groundwater)' Volume 2 of the EIS.

Note 4 Groundwater Monitoring stations at locations shown in Figure 5.1 '1: 15,000 Monitoring Point Location Map (Surface Water & Groundwater)' Volume 2 of the EIS and those identified in Table 5.2 'Groundwater and Leachate Elevation Data' of Volume 2 of the EIS.

Note 5 Leachate monitoring stations referred to in Sections 2.6.1 'Leachate Management Plan' and 5.2 'Hydrogeology', Volume 2 of the EIS. Monitoring Stations to be relabelled as per Table D.1.1.

Note 6 Landfill gas monitoring stations for landfill gas combustion plant and flare to be agreed.

Note 7 Three locations to be agreed within three months of the date of grant of this licence.

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 with the Agency.

D.3 Dust

Table D.3.1 Dust 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]

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.

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 Monitoring Frequency
Visual Inspection/Odour [Note 2]	Weekly	Quarterly	Quarterly
Groundwater Level	Not Applicable	Monthly	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Weekly
Ammoniacal Nitrogen	Quarterly [Note 6]	Quarterly	Quarterly
BOD	Quarterly [Note 6]	Not Applicable	Quarterly
COD	Quarterly	Not Applicable	Quarterly
Chloride	Quarterly	Quarterly	Quarterly
Dissolved Oxygen	Quarterly	Quarterly	Not Applicable
Electrical Conductivity	Quarterly [Note 6]	Quarterly	Quarterly
PH	Quarterly [Note 6]	Quarterly	Quarterly
Total Suspended Solids	Quarterly [Note 6]	Not Applicable	Not Applicable

Parameter [Note 1]	SURFACE WATER Monitoring Frequency	GROUNDWATER Monitoring Frequency	LEACHATE Monitoring Frequency
Temperature	Quarterly [Note 6]	Monthly	Quarterly
Boron	Not Applicable	Annually	Annually
Cadmium	Annually	Annually	Annually
Calcium	Annually	Annually	Annually
Chromium (Total)	Annually	Annually	Annually
Copper	Annually	Annually	Annually
Cyanide (Total)	Not Applicable	Annually	Annually
Fluoride	Not Applicable	Annually	Annually
Iron	Annually	Quarterly	Annually
Lead	Annually	Annually	Annually
List I/II organic substances [Note 3]	Note 7	Annually [Note 8]	Note 7
Magnesium	Annually	Annually	Annually
Manganese	Annually	Annually	Annually
Mercury	Annually	Annually	Annually
Potassium	Annually	Quarterly	Annually
Sulphate	Annually	Annually	Annually
Sodium	Annually	Quarterly	Annually
Total Alkalinity	Annually	Annually	Annually [Note 5]
Total Phosphorus / orthophosphate	Annually [Note 6]	Annually	Annually
Total Oxidised Nitrogen	Annually	Quarterly	Quarterly
Total Organic Carbon	Not Applicable	Quarterly	Not Applicable
Residue on evaporation	Not Applicable	Annually	Not Applicable
Zinc	Annually	Annually	Annually
Phenols	Not Applicable	Quarterly	Not Applicable
Faecal Coliforms [Note 4]	Not Applicable	Quarterly	Annually
Total Coliforms [Note 4]	Not Applicable	Quarterly	Annually

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

Note 2: Where there is evident gross contamination of leachate, additional samples should be analysed.

Note 3: 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 (US Environmental Protection Agency method 525 or equivalent, and pesticides (US Environmental Protection Agency method 608 or equivalent).

Note 4: In the case where groundwater is extracted for drinking water, if there is evidence of bacterial contamination, the analysis at up gradient and downgradient monitoring points should include enumeration of total bacteria at 22°C and 37°C and faecal streptococci.

Note 5: Only to be analysed in instances of on-site treatment of leachate.

Note 6: Discharge of diverted surface water/groundwater shall be monitored on a monthly basis for these parameters unless flow in that month does not allow such monitoring.

Note 7: Once off for List I/II organic substances at one leachate monitoring station and two surface water monitoring stations (one upstream and one downstream).

Note 8: At three groundwater monitoring stations (one upstream and two downstream).

D.6 Meteorological Monitoring

Table D.6.1 Meteorological Monitoring:

Parameter	Monitoring Frequency	Analysis Method/Technique
Precipitation Volume	Daily	Standard
Temperature (min/max.)	Daily	Standard
Wind Force and Direction	Daily	Standard
Evaporation	Daily	Standard
Evapotranspiration	Daily	Standard
Humidity	Daily	Standard
Atmospheric Pressure	Daily	Standard

D.7 Landfill Gas Combustion Plant & Flare

Monitoring to be obtained at locations to be agreed with the Agency within three months of the date of grant of this licence.

Parameter	Monitoring Frequency	Analysis Method[Note1]/Technique[Note2]
Inlet		
Methane (CH_4) % v/v	Weekly	Infrared analyser/flame ionisation detector
Carbon dioxide (CO_2)%v/v	Weekly	Infrared analyser/ flame ionisation detector
Oxygen (O_2) %v/v	Weekly	Infrared analyser
Outlet		
Volumetric Flow rate	Biannually	Pitot Tube Method
SO_2	Biannually	Flue gas analyser
Nox	Biannually	Flue gas analyser
CO	Continuous	Flue gas analyser
Particulates	Annually	Isokinetic/Gravimetric
TA Luft Class I, II, III organics	Annually	Adsorption/Desorption / GC /GCMS (Note 3)
Hydrochloric acid	Annually	Impinger / Ion Chromatography
Hydrogen fluoride	Annually	Impinger / Ion Chromatography

Note 1: All monitoring equipment used should be intrinsically safe.

Note 2 : Or other methods agreed in advance with the Agency.

Note 3: Test methods should be capable of detecting acetonitrile, dichloromethane, tetrachlorethylene and vinyl chloride as a minimum.

D.8 PM_{10} Monitoring

Monitoring to be obtained at locations to be agreed with the Agency within three months of the date of grant of this licence.

Parameter	Monitoring Frequency	Analysis Method/Technique
PM_{10}	Annually	Note 1

Note 1. As described in prEN12341 "Air Quality - field test procedure to demonstrate reference equivalence of sampling methods for PM_{10} fraction of particulate matter" or an alternative agreed in writing with the Agency.

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 year thereafter.
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 one month after end of the three year period being reported on.
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.
Meteorological Monitoring	Annually	One month after end of the year being reported on.
Dust Monitoring	Three times a year	Ten days after the period being reported on
PM_{10} Monitoring	Annually	One month after end of the year being reported on.
Noise Monitoring	Annually	One month after end of the year being reported on.
Sludge Compost & Pilot Compost Monitoring	Quarterly	Ten days after end of the quarter 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

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.

Compost shall be deemed unsatisfactory if more than 10% of samples fail the criteria below. No sample shall exceed 1.2 times the quality limit values set.

1. Maturity

Compost shall be deemed to be mature if:

it meets two of the following requirements:

- C/N ratio ≤ 25.
- oxygen uptake rate ≤ 150 mg O_2/kg volatile solids per hour.
- germination of cress (Lepidium sativum) seeds and of radish (Raphanus sativus) seeds in compost must be greater than 90 percent of the germination rate of the control sample, and the growth rate of plants grown in a mixture of compost and soil must not differ more than 50 percent in comparison with the control sample.

- Elimination of the following test organisms (used to evaluate composting system efficiency in removing plant pathogens and weed seeds during the composting process): Plasmodiophora brassicae, tobacco-mosaic-virus (TMV) and tomato seeds.

Guidance on test may be obtained from the German document LAGA M10 'Quality Criteria and Application Recommendations for Compost'.

2. Foreign Matter

Compost must not contain any sharp foreign matter measuring over a 2 mm dimension that may cause damage or injury to humans, animals and plants during or resulting from its intended use.

Foreign matter content as a percentage of oven-dried mass	≤1.5
Foreign matter, maximum dimensions, in mm	25

3. Trace Elements

Maximum Trace Element Concentration Limits for Compost

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

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

Note 2: The above alone should not be taken as an indication of suitability for addition to soil as the cumulative metal additions to soil should be first calculated.

4. Pathogens

Pathogenic organism content must not exceed the following limits:

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

5. Monitoring

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

SCHEDULE G : Content of the Annual Environmental Report

Annual Environmental Report Content
Reporting Period.
Waste activities carried out at the facility.
Quantity and Composition of waste received, disposed of and recovered during the reporting period and each previous year.
Calculated remaining capacity of the facility and year in which final capacity is expected to be reached.
Methods of deposition of waste.
Summary report on emissions.
Summary of results and interpretation of environmental monitoring.
Resource and energy consumption summary.
Proposed development of the facility and timescale of such development.
Volume of leachate produced and volume of leachate transported / discharged off-site.
Report on development works undertaken during the reporting period, and a timescale for those proposed during the coming year.
Report on restoration of completed cells/ phases.
Site survey showing existing levels of the facility at the end of the reporting period.
Estimated annual and cumulative quantities of landfill gas emitted from the facility.
Estimated annual and cumulative quantity of indirect emissions to groundwater.
Annual water balance calculation and interpretation.
Report on the progress towards achievement of the Environmental Objectives and Targets contained in previous year's report.
Schedule of Environmental Objectives and Targets for the forthcoming year.
Full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.
Tank, 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.
Report on training of staff.
Any other items specified by the Agency.

Signed on behalf of the said Agency
on the 21st day of December 2001

Breda Sheehan**Authorised Person**