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WASTE LICENCE
LANDFILL FOR NON-HAZARDOUS WASTE

PROPOSED DECISION OF A REVIEW OF A LICENCE

Waste Licence Application Register Number:	77-2
Applicant:	Cavan County Council
Location of Facility:	Corranure Landfill, Lismagratty and Corranure Townlands, Cootehill Road, Cavan, Co. Cavan.

INTRODUCTION

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

This licence is for the continued operation and expansion of a non-hazardous waste landfill, a civic amenity facility and a recycling building located at Corranure Landfill, Lismagratty & Corranure Townlands, Cootehill Road, Cavan, Co. Cavan. The facility boundary has been extended to allow for two new lined cells to be installed (Phase 3). The waste intake is limited to 90,000 tonnes per annum comprising of household waste, commercial waste, construction & demolition waste green waste, street cleaning residues and hazardous household waste.

The licence provides for the operation of a civic waste facility which will allow for acceptance of waste types such as glass, paper, aluminium and steel cans, textiles, cardboard and household hazardous waste such as fluorescent tubes, waste oils, oil filters, waste batteries. Dry recyclables such as plastic and cardboard will be baled on-site prior to transfer off-site for recovery.

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 Cavan County Council will operate and manage this facility.

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DECISION & REASONS FOR THE DECISION

Reasons for the Decision

On the basis of the information before it, the Environmental Protection Agency (the Agency) is satisfied, for the reasons set out in the following Schedule of Activities Licensed, that the requirements of Section 40(4) of the Waste Management Acts, 1996 to 2003 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.

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.

Adequate lighting	20 lux measured at ground level.
Aerosol	A suspension of solid or liquid particles in a gaseous medium.
Agreement	Agreement in writing.
Annually	At approximately twelve monthly intervals.
Application	The application by the licensee for this waste licence.
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of the waste licence review application.
BAT	Best Available Techniques.
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.
Construction and Demolition Waste	All wastes which arise from construction, renovation and demolition activities.
Commercial Waste	As defined in Section 5(1) of the Act.
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 by 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	0800 hrs to 2200 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	Any reference to a drawing or drawing number means a drawing or drawing number contained in this review application, unless otherwise specified in this licence.
Emergency	Those occurrences defined in Condition 10.4.
Emission Limits	Those limits, including concentration limits and deposition levels established in *Schedule C: Emission Limits*, of this licence.
European Waste Catalogue (EWC)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 94/3/EC and any subsequent amendment published in the Official Journal of the European Community.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
Green waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
Heavy Metals	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.
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.
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.
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 exceedance of the daily duty capacity of the waste handling equipment d) any trigger level specified in this licence which is attained or exceeded; and e) any indication that environmental pollution has, or may have, taken place.
Inert waste	Waste as defined in S.I. No. 395 of 2004 Waste Management (Licensing) Regulations, 2004.
Initial Development	Means such works, actions or constructions as may be specified, which for the

Works	purposes of environmental protection and safe construction and operation of the facility, have to be carried out in the initial stages of site development, and in any case prior to the commencement of construction of the landfill cells.
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 Acts.
Licensee	Cavan County Council.
List I/II Substances	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. Any waste tankered to the facility.
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.
Municipal waste	As defined in Section 5(1) of the Act.
Night-time	2200 hrs to 0800 hrs.
Noise Sensitive Location	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
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.
Sludge	The accumulation of solids resulting from chemical coagulation, flocculation and/or sedimentation after water or wastewater treatment with › 2% dry matter.
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.
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.
Wastewater	Contaminated water including water that has been used, for washing, and/or flushing (including foul water).
White Goods	Refrigerators, cookers, ovens and other similar appliances.
EPA Working Day	Refers to the following hours: 0900 hrs to 1730 hrs 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 I: Schedule of Activities Licensed

On the basis of the information before it, the Agency, pursuant to its powers under Section 46(2) of the Waste Management Acts, 1996 to 2003 proposes, to grant this Waste Licence to Cavan County Council to carry on the waste activities, that are the subject of Waste Licence Application Register Number 77-2 listed below at Corranure Landfill, Cootehill Road, Cavan, County Cavan 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 1	**Deposit on, in or under land (including landfill).**
Class 4	**Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.**
Class 5	**Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.**
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.**
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 9	**Use of any waste principally as a fuel or other means to generate energy.**
Class 11	**Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.**
Class 12	**Exchange of waste for submission to 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: Schedule of Activities Refused

On the basis of the information before it, the Agency, pursuant to its powers under Section 46(2) of the Waste Management Acts, 1996 to 2003, proposes to refuse the following classes of activity that are the subject of Waste Licence Application Register No. 77-2.

Refused waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Acts, 1996 to 2003

Class 1	**Solvent reclamation or regeneration:**
	Reason: The activity described by the licensee, recovery of solvents from household waste at the civic waste facility, does not constitute a Class 1 Activity: instead the activities are included under Class 13 of the Fourth Schedule for which the licensee has also applied for.
Class 10	**The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system:**
	Reason: The activity described by the licensee, use of recovered materials in the restoration of the facility, does not constitute a Class 10 Activity: instead the activities are included under Classes 4 and 11 of the Fourth Schedule for which the licensee have also applied for.

PART III CONDITIONS

CONDITION 1 SCOPE OF THE LICENCE

1.1 Waste activities at the facility shall be restricted to those outlined in the licence review application and listed and described in Part I: Activities Licensed and authorised by this licence 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. Fig. 2 Rev. D03 *Corranure Landfill Site 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 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 Activities at this facility shall be limited as set out in *Schedule A*: *Waste Acceptance*, of this licence.

1.5 Waste Acceptance Hours and Hours of Operation

1.5.1 Landfill

1.5.1.1 Waste may be accepted at the facility for disposal at the landfill only between the hours of 8:30 to 16:30 Monday to Friday inclusive and 8:00 to 12:30 on Saturdays.

1.5.1.2 The landfill at the facility may be operated only during the hours of 8:00 to 17:30 Monday to Friday inclusive and 8:00 to 13:00 on Saturdays.

1.5.1.3 Waste shall not be accepted at the facility on Sundays and Bank Holidays, other than with the written agreement of the Agency.

1.5.2 Civic Waste Facility

1.5.2.1 Waste shall be accepted at the Civic Waste Facility only between the hours of 8:00 to 16:30 Monday to Friday inclusive and 8:00 to 12:30 on Saturdays, unless otherwise agreed by the Agency.

1.5.2.2 The civic waste facility at the facility may be operated only during the hours of 8:00 to 17:30 Monday to Friday inclusive and 8:00 to 13:00 on Saturdays, unless otherwise agreed by the Agency.

1.6 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.

1.7 This licence is being granted in substitution for the waste licence granted to the licensee on 12th of June 2001 and bearing Waste Licence Register No: 77-1. The previous waste licence (Register No: 77-1) 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 The Civic Waste Facility shall be supervised by an appropriately qualified and competent person 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 by 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

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 operate and maintain an EMS. Within six months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a proposal for the updating (where appropriate) of the documented Environmental Management System (EMS) for the facility. The EMS shall thereafter be updated on an annual basis with amendments being notified to the Agency, 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: -

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

b) Methods by which the objectives and targets will be achieved and the identification of those responsible for achieving those objectives and targets; and

c) 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

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.

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

CONDITION 3 FACILITY INFRASTRUCTURE

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

3.2 Phased Construction Plan

Three months prior to the commencement of any site development, the licensee shall submit to the Agency for its agreement a construction schedule, sequence and timescale (Construction Plan) incorporating the requirements of this licence. This Plan shall have regard to the following development phases: (i) Initial Development Works, (ii) Main infrastructure development works (pre acceptance of waste for disposal), and (iii) Future/planned works (in parallel with waste disposal, e.g. future cell development/phasing). The Construction Plan for cell development shall have regard to the sequencing necessary to provide medium and long term screening of the completed cells.

3.3 Specified Engineering Works

3.3.1 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.

3.3.2 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.

3.3.3 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.

3.4 Facility Notice Board

3.4.1 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.

3.4.2 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.

3.5 Facility Security

3.5.1 Security and stockproof fencing and gates shall be installed and maintained along the facility boundary. The base of the fencing shall be set in the ground. Subject to the implementation of the restoration and aftercare plan and to the agreement of the Agency, the requirement for such site security may be removed.

3.5.2 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.

3.6 Facility Roads and Site Surfaces

3.6.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.

3.6.2 The facility entrance area, the access road to the Civic Waste Facility and the Civic Waste Facility itself shall be paved to ensure an impervious surface is maintained, unless otherwise agreed by the Agency.

3.7 Facility Office

3.7.1 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.

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

3.8 Waste Inspection and Quarantine Areas

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

3.8.2 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.

3.8.3 Drainage from these areas shall be directed to the leachate storage lagoon.

3.9 Weighbridge and Wheel Cleaner

3.9.1 The licensee shall provide and maintain a weighbridge and a wheel cleaner at the facility.

3.9.2 The wheel cleaner shall be used by all vehicles leaving the facility as required to ensure that no process water or waste is carried off-site. All water from the wheel cleaning area shall be directed to the leachate storage lagoon.

3.10 Tank and Drum Storage Areas

3.10.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.

3.10.2 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.

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

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

3.10.5 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 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.

3.11 Landfill Lining

3.11.1 Unless otherwise agreed by the Agency, the landfill liner at the proposed extension (Phase 3) shall comprise:-

a) A composite liner consisting of a 1m layer of compacted soil with a hydraulic conductivity of less than or equal to $1x10^{-9}$m/s, (or equivalent to be agreed by the Agency) overlain by a 2mm thick high density polyethylene (HDPE) layer;

b) A geotextile protection layer placed over the HDPE layer;

c) A 500mm thick drainage layer placed over the geotextile layer with a minimum hydraulic conductivity of 1×10^{-3} m/s, of pre-washed, uncrushed, granular, rounded stone (16 - 32mm grain size) incorporating leachate collection drains; and

d) The side walls shall be designed and constructed to achieve an equivalent protection.

3.11.2 The liner detailed design and its construction and the construction quality assurance testing shall be in accordance with the guidelines provided in the Agency's *Landfill Manual, Landfill Site Design*.

3.11.3 Unless otherwise agreed by the Agency, formation levels of Phase 3 shall be arranged such that sufficient thickness (at least 3m) of in-situ clay remains between base of facility and bedrock. Formation levels of Phases 1 and 2 shall be as shown on Drawing No. DG0031-01 Rev. F01 *Formation Levels of Phase 1 and Phase 2* of the Article 16 reply received on 30/8/04.

3.12 Buffer Zone

A Buffer Zone, in which no waste shall be landfilled, shall be provided and maintained within the facility. The Buffer Zone shall be located as shown on Drawing No. DG0030-01 Rev. F01 *Buffer Zone Existing & Proposed* of the Article 16 reply received on 30/8/04.

3.13 Leachate Management Infrastructure

3.13.1 Leachate management infrastructure shall be provided and maintained at the facility as described in Section 2.3.6 *Leachate Collection, Storage and Treatment* of the EIS

submitted with the application and specified on Drawing No. DG-08 Rev. D03 *Corranure Landfill Leachate Management System.*

3.13.2 Within twelve months of the date of grant of this licence the licensee shall provide and maintain the proposed extended leachate storage lagoon at the facility to facilitate the storage of leachate abstracted/collected from the waste. The lagoon lining shall be a composite liner equivalent to the landfill liner and constructed using the same methods.

3.13.3 A proposal detailing how leachate collection and storage will be managed at the facility during the construction of the proposed extended leachate storage lagoon shall be submitted to the Agency for agreement prior to construction of the proposed extended leachate storage lagoon.

3.13.4 Within six months of the date of grant of this licence, the licensee shall submit to the Agency an assessment of the capacity of the existing rising main and of Cavan Waste Water Treatment Plant to treat the additional leachate generated at the facility when the facility is extended.

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

3.14 Landfill Gas Management

3.14.1 Landfill gas management infrastructure at the remediated landfill shall be maintained at the facility as described in the Gas Management Plan and specified on Drawing No. DG0033-01 Rev. F01 *Gas Management System* of the Article 14 reply received on 30/08/04, unless otherwise agreed by the Agency.

3.14.2 Within six months of the date of grant of this licence, the licensee shall submit an updated plan for the landfill gas management detailing works carried out or proposed for the remediated landfill and the existing Phase 1 as well as works proposed for Phases 2 and 3. The plan shall include an assessment of the efficiency of the landfill gas collection system and the need for additional landfill gas abstraction wells.

3.14.3 An appropriately sized landfill gas flare(s) shall be provided and maintained at the facility. The flare(s) shall be of an enclosed type design.

3.14.4 Flare unit efficiency (residence time, burn temperature) shall be tested annually and reported as part of the AER.

3.14.5 Within twelve months of the date of grant of this licence, the licensee shall submit an updated assessment of whether the utilisation of landfill gas as an energy resource is feasible. If feasible such a system shall be installed within a timeframe agreed with the Agency.

3.14.6 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.

3.15 Surface Water Management

3.15.1 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.

3.15.2 Surface water run-off perimeter drains shall be installed and maintained at the facility as shown on Drawing No. DG0030-02 Rev. F01 *Existing and Proposed Surface Water Drainage Layout* of the Article 14 reply received on 30/08/04, unless otherwise agreed by the Agency.

3.15.3 The surface water run-off from the facility discharged at the southern boundary shall be diverted to a silt trap and an oil interceptor prior to discharge from the facility. Surface water run-off from Phases 2 and 3 shall be diverted to a silt trap prior to discharge form the facility at the northern boundary.

3.15.3.1 The interceptor shall be a Class I interceptor and the silt trap and interceptor shall be in accordance with I.S. EN 585-2:2003 (separator systems for light liquids). A manual shut-off valve shall be installed at the interceptor.

3.15.4 The licensee shall submit a revised drawing to the Agency within twelve months of the date of grant of this licence, indicating all drainage arrangement at the site as detailed in this licence.

3.16 Groundwater Management

3.16.1 Effective groundwater 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 protection of the groundwater resources from pollution by the waste activities; and

b) The protection of surface waters and infrastructure, such as the liner, from any adverse effects caused by the groundwater.

3.16.2 Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency's *Landfill Manual, Landfill Monitoring, 2nd Edition.*

3.16.3 Prior to commencement of lining works at Phase 3, the licensee shall submit a detailed groundwater management programme in the case of a high water table at the lining works phase to include a proposal on monitoring of extracted groundwater.

3.17 Civic Waste Facility

3.17.1 The licensee shall maintain the Civic Waste Facility referred to in Attachment D.1.p. *Civic Amenity Facilities.*

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

3.18 Telemetry

Within six months of the date of grant of this licence, a telemetry system shall be installed and maintained at the facility for recording of leachate levels in the lined cells and the existing/proposed lagoon. All facility operations linked to the telemetry system shall also have a manual control which will be reverted to in the event of break in power supply or during maintenance.

3.19 Monitoring Infrastructure

3.19.1 Landfill Gas

a) Within six months of the date of grant of this licence, the licensee shall submit a proposal for the monitoring of landfill gas within the waste body at Phases 1, 2 and

3 to include at least one landfill gas monitoring borehole per cell prior to the gas collection system being in place at these phases.

b) Within six months from date of grant of this licence, the licensee shall submit a proposal for the installation of additional perimeter landfill gas monitoring boreholes surrounding the facility based on a detailed exposure and risk assessment of gas migration at the facility with potential pathways and receptors identified in accordance with the Agency's *Landfill Manual, Landfill Monitoring, 2nd Edition*.

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

3.19.2 Groundwater

a) All wellheads shall be adequately sealed to prevent surface contamination within six months from the date of grant of this licence.

3.19.3 Leachate

a) Within six months from the date of grant of this licence, the licensee shall submit a proposal for monitoring of leachate levels at Phases 1 and 2 as well as the proposed Phase 3 including the locations of these monitoring points.

3.19.4 Replacement of Infrastructure

a) 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 licensee shall restore the facility on a phased basis. The Restoration and Aftercare Plans for the facility shall include the information contained in Section 2.3.8 *Closure and Aftercare* of the EIS submitted as part of application and shall also include the currently remediated landfill area.

4.2 Within six months of the date of grant of this licence, the licensee shall submit results of an investigation assessment of the impacts on the Corranure and Lismagratty streams from the remediated landfill to include a full sediment and biological assessment. The protocol for the assessment shall be agreed by the Agency prior to the assessement being carried out. The assessment shall include a proposal for further remediation including surface water and groundwater control and abatment as is necessary to prevent pollution of the streams.

4.3 The final height of the facility shall not exceed 129.5mOD (Malin Head).

4.4 Final Capping

4.4.1 Unless otherwise agreed by the Agency, the permanent cap for a cell shall be constructed within twenty-four months of completion of filling in that cell.

4.4.2 Unless otherwise agreed by the Agency, the final capping at Phases 1, 2 and 3 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;

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.

4.5 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.

4.6 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.

4.7 The restoration of each of the landfill extension cells (Phases 1, 2 and 3), when filled, shall be undertaken within twelve months of the completion of installation of the permanent cap.

4.8 Soil Storage

4.8.1. All soils shall be stored to preserve the soil structure for future use.

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 cell or part of the landfill without the prior agreement of the Agency.

5.2 Waste Acceptance and Characterisation Procedures

5.2.1 Waste shall only be accepted at the facility, from Local Authority waste collection or transport vehicles or holders of waste permits, unless exempted or excluded, issued under the Waste Management (Collection Permit) Regulations 2001. Copies of these waste collection permits must be maintained at the facility.

5.2.2 Whole used tyres (other than bicycle tyres and tyres with an outside diameter greater than 1400mm) shall not be disposed of at the facility. Shredded tyres shall not be disposed of at the facility from 16 July 2006.

5.2.3 No hazardous wastes or liquid wastes shall be disposed of at the facility.

5.2.4 The licensee shall ensure that inert waste accepted at the facility for disposal is subject to treatment where technically feasible.

5.2.5 Within three months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement updated written procedures (where appropriate) for the acceptance and handling of all wastes. These procedures shall include details of the pre-treatment of all waste to be carried out prior to acceptance at the facility and shall also include methods for the characterisation of waste in order to distinguish between inert, non-hazardous and hazardous wastes. The random inspection of incoming waste loads should also be addressed in the procedures. The procedures shall have regard to the EU Decision (2003/33/EC) on establishing the criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive (1999/31/EC) on the landfill of waste.

5.3 All wastes shall be checked at the working face. Any wastes not suitable for acceptance 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.

5.4 Working Face

5.4.1 Unless the prior agreement of the Agency is given, the following shall apply at the landfill:-

a) Only one working face shall exist at the landfill at any one time for the deposit of waste other than cover or restoration materials; and

b) The working face of the landfill shall be no more than 2.5 metres in height after compaction, no more than 25 metres wide and have a slope no greater than 1 in 3.

5.4.2 All waste deposited at the working face shall be compacted, using a steel wheeled compactor, and covered as soon as is practicable and at any rate prior to the end of the working day.

5.4.3 The working face, or faces, shall each day at the end of the day, be covered with suitable material.

5.5 Daily and Intermediate Cover

5.5.1 Any cover material at any location within the facility which is eroded, washed off or otherwise removed shall be replaced by the end of the working day.

5.5.2 Within three months of the date of grant of this licence, appropriate cover material shall be placed across the whole landfill so that no waste, other than the following is exposed:-

a) Waste suitable for specified engineering works; and

b) Waste on the working face during the operational hours of the facility.

5.6 Landscaping

5.6.1 Landscaping of the facility shall be carried out as described in *Landscape and Visual Assessment, A*ppendix C, Volume III and specified on Fig. 7 *Landscape Layout* of the EIS submitted with the application, unless otherwise agreed by the Agency.

5.6.2 Within three months of the date of grant of this license, the licensee shall submit a proposal for the installation of a screening berm as part of the proposed cell development works to reduce the visual impact of the proposed extension (Phase 3) as well as Phases 1 and 2.

5.6.3 The existing hedgerow at the southern boundary along R188 Regional Road of the facility shall be retained by the licensee as indicated in Section 3.11.3 *Existing Vegetation* of the EIS submitted with the application.

5.7 Operational Controls

5.7.1 Phase 3 at the landfill shall be filled in accordance with the phase sequence outlined in Attachment D.2a *Construction Schedule and Sequence* and shown on Drawing No. DG-07 Rev. D03 *Corranure Landfill Phase 3 Layout & Sections*.

5.7.2 All large hollow objects and other large articles deposited at the facility shall be crushed, broken up, flattened or otherwise treated.

5.7.3 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over with the exception of works associated with the construction and installation of the leachate and landfill gas collection system unless with the prior agreement from the Agency.

5.7.4 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.

5.7.5 Scavenging shall not be permitted at the facility.

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

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

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

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

5.8 Waste Handling

5.8.1 Inert Waste

Inert waste accepted at the facility for recovery shall comply with the standards established in *Schedule F: Criteria for the Acceptance of Inert Waste,* of this licence.

5.9 Off-site Disposal and Recovery

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

5.9.2 All waste transferred from the facility shall be transferred only to an appropriate facility agreed by the Agency.

5.9.3 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.

5.10 Civic Waste Facility

5.10.1 The Civic Waste Facility shall be used only 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.

5.10.2 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; and

d) In the case where inspection is required, into a designated inspection area.

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

5.10.4 At the end of the working day the floor of the Civic Waste Facility shall be cleared of waste.

5.11 Leachate Management

5.11.1 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.

5.11.2 The frequency of leachate removal/discharge from the leachate lagoon shall be such that a minimum freeboard of 0.75m shall be maintained in the leachate lagoon at all times.

5.11.3 Unless treated on the facility, leachate stored in the leachate storage lagoon shall be disposed of by tankering off-site to an Agency approved facility in fully enclosed road tankers.

5.11.4 Recirculation of leachate or other contaminated water shall not be undertaken without the prior agreement of the Agency and, in any case, shall be undertaken only within cells which have been lined to the satisfaction of the Agency.

5.12 Maintenance

5.12.1 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.

5.12.2 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.

5.12.3 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 at the working face or to a skip.

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. In relation to landfill derived gases the following shall constitute a trigger level:

a) Methane greater than 1% v/v; or,
b) Carbon Dioxide greater than 1.5% v/v,

measured in any monitoring borehole, service duct, manhole or other point as may be specified, located external to the body of waste.

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 emissions from landfill gas flare/combustion plant to atmosphere in this licence shall be interpreted in the following way.

6.3.3.1. 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.

6.3.3.2. 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.

6.4. Groundwater

6.4.1 There shall be no direct emissions to groundwater from the lined landfill cells.

6.4.2 Within three months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement, groundwater monitoring trigger levels in accordance with the requirements of Directive 1999/31/EC.

6.4.3 The trigger levels as specified in Condition 6.4.2 for groundwater shall be measured at monitoring boreholes GW-01, RC01 and GW-03.

6.5. Emissions to Surface Water

6.5.1. No leachate from the lined landfill cells, wastewater or contaminated surface water run-off shall be discharged to surface water drains and courses.

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

6.5.3. Groundwater extracted during construction of Phase 3 shall be discharged to the surface water drainage network subject to Condition 3.16.3.

6.6. Disposal of Leachate

6.6.1. In emergency situations all leachate or contaminated water tankered from the facility shall be transported to Cavan Waste Water Treatment Plant, or alternative facility agreed in advance by the Agency, and disposed of there.

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 leachate from the Leachate Lagoon to Cavan Wastewater Treatment Plant. 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.

6.7.8. Emission limit values for emissions to sewer/waters 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 and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2003.

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 The measures and infrastructure as described in Section 4.1.6 *Litter Control* of the EIS submitted with the application shall be applied to control litter at the facility.

7.3.2 Litter fencing shall be installed and maintained around the perimeter of the active tipping area to the specifications described in the Agency's *Landfill Manual, Landfill Operational Practices* prior to the disposal of any waste in any cell.

7.3.3 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.

7.3.4 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.

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

7.4 Dust Control

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.

7.5 Prior to exiting the facility, all waste vehicles shall use the wheelwash.

7.6 Bird Control

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. The birds of prey and/or other techniques shall be in place and shall be employed every day, from before dawn to after dark, until the waste activities cease and all the waste is capped to the written satisfaction of the Agency.

REASON: To provide for the control of nuisances.

CONDITION 8 RESOURCE USE AND ENERGY EFFICIENCY

8.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The licensee shall consult with the Agency on the nature and extent of the audit and shall develop an audit programme to the satisfaction of the Agency. The audit programme shall be submitted to the Agency in writing at least one month before the audit is to be carried out. A copy of the audit report shall be available on-site for inspection by authorised persons of the Agency and a summary of the audit findings shall be submitted as part of the Annual Environmental Report. The energy efficiency audit shall be repeated at intervals as required by the Agency.

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

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

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

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

CONDITION 9 MONITORING

9.1 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.

9.2 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.

9.3 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.

9.4 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.

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

9.6 Within twelve months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement an updated appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence including any noise sensitive locations and private wells to be monitored. The drawing shall include the eight-digit national grid reference of each monitoring point. Thereafter any amendments to this drawing should be notified as part of the AER.

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

9.8 The following information shall be maintained on site for inspection by Agency Officers: the names, qualifications and a summary of the 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.

9.9 Groundwater Monitoring

Within three months of the date of grant of this licence, the licensee shall submit a proposal for agreement by the Agency outlining monitoring of groundwater in selected down-gradient wells within 500m of the facility.

9.10 Dust Monitoring

Prior to waste acceptance at the proposed Phase 3, the licensee shall submit an updated dust monitoring programme.

9.11 Noise Monitoring

Prior to waste acceptance at the proposed Phase 3, the licensee shall submit an updated noise monitoring programme.

9.12 Meteorological Monitoring

The licensee shall maintain a meteorological station at the facility capable of monitoring the parameters listed in *Schedule D.6: Meteorological Monitoring*, of this licence.

9.13 Topographical Survey

A topographical survey shall be carried out annually (during landfilling operations and installation of the final capping). The survey shall include a measurement of the remaining available void space. The survey shall be in accordance with any written instructions issued by the Agency and shall be reported annually as part of the AER.

9.14 Biological Assessment

A biological assessment of Corranure Stream and Lismagratty Stream at the locations specified on Fig. 3.6 *Surface water & Sediment Monitoring Points* of the Article 14 reply received 30/8/04 shall be undertaken within six months of the date of grant of this licence in accordance with Condition 4.2 and annually thereafter. This assessment shall use appropriate biological methods such as the EPA Q-rating system for the assessment of rivers and streams.

9.15 Archaeological Assessment

Prior to the development of any undisturbed area, the advice of The Heritage Section of the Department of the Environment, Heritage and Local Government (formerly Dúchas) shall be sought. On completion of such development a report of the results of any archaeological monitoring shall be submitted to The Development Applications Section and to the Agency.

9.16 Stability Assessment

The licensee shall carry out a stability assessment of the side slopes of the facility annually and report the results as part of the AER.

9.17 Nuisance Monitoring

9.17.1 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.

9.17.2 Daily odour inspections shall be carried out at the designated area for storage of green waste accepted at the civic waste facility, unless otherwise agreed by the Agency.

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

CONDITION 10 CONTINGENCY ARRANGEMENTS

10.1 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; and

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;

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

10.2 The licensee shall maintain an Emergency Response Procedure (ERP). Within six months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement, a proposal for updating (where appropriate) of the documented ERP for the facility.

10.3 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.

10.4 Emergencies

10.4.1 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.

10.4.2 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.

10.4.3 In the event that monitoring of local wells 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.

10.4.4 In the event that monitoring of the side 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 11 RECORDS

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

a) The current waste licence and specified attachments and drawings relating to the facility;

b) The current EMS for the facility;

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

d) Records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility;

e) An up-to-date site drawing/plan showing the locations of key process and environmental infrastructure, including monitoring locations and emission points;

f) Relevant correspondence with the Agency; and

g) All written procedures produced by the licensee which relate to the licensed activities.

11.2 The licensee shall maintain a record for each load of waste arriving at 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 collection permit 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 including the waste licence and waste permit register number of these facilities as appropriate.

11.3 The following 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 any actions taken as a result of these 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.

11.4 The licensee shall maintain a record of all complaints relating to the operation of the facility. 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.

11.5 A 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; and

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

11.6 A record shall be kept for each load of waste departing from the Civic Waste facility. The following shall be recorded:-

a) The name of the carrier;

b) The vehicle registration number;

c) The destination of the waste (facility name and waste licence/permit number as appropriate);

d) A description of the waste (if recovered or rejected waste, the specific nature of the waste);

e) The quantity of waste, recorded in tonnes;

f) The name of the person checking the load; and

g) The time and date of departure.

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

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 12 REPORTS AND NOTIFICATIONS

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

a) Be sent to the EPA's Office of Environmental Enforcement, John Moore Road, Castlebar, Co Mayo;

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 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.

12.2 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 1000 hrs the following working day after the occurrence of any incident;

b) Submit a written record of the incident, including all aspects described in Condition 10.1(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 Northern Regional Fisheries Board as soon as practicable and in any case not later than 1000 hrs 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.

12.3 Waste Recovery Reports

The licensee shall as part of the AER report on the facility's contribution 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 to landfill, going to landfills 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;

e) The recovery of commercial waste, including cardboard;

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.

12.4 Annual Environmental Report

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

12.4.2 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 13 CHARGES AND FINANCIAL PROVISIONS

13.1 Agency Charges

13.1.1 The licensee shall pay to the Agency an annual contribution of €17,782 or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity, as the Agency considers necessary for the performance of its functions under the Waste Management Acts, 1996 to 2003. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts, 1996 to 2003, and all such payments shall be made within one month of the date upon which demanded by the Agency.

13.1.2 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.

13.2 Financial Provision for Closure, Restoration and Aftercare

13.2.1 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.

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

13.2.3 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.

13.2.4 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.

13.3 Cost of landfill of waste

In accordance with the provisions of Section 53A of the Waste Management Acts 1996 to 2003, the licensee shall ensure the costs in the setting up, operation of, provision of financial security and closure and after-care for a period of at least 30 years shall be covered by the price to be charged for the disposal of waste at the facility. The statement required under Section 53A(5) of said Acts is to be included as part of the AER.

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

The following waste related processes are authorised:

Crushing, baling, repackaging processes
Landfilling of inert waste
Use of compost & inert waste in landfill operation
Storage of waste
Use of waste as a fuel
Recovery of dry recyclables

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

Table A.1 Waste Categories and Quantities

Waste Type	Maximum (Tonnes Per Annum)[Note 1]
Household waste	**50,000**
Commercial waste	**30,000**
Construction and demolition waste[Note 3]	**5,000**
Green waste	**2,000**
Street cleaning residues	**900**
Hazardous Household waste[Note 2]	**100**
TOTAL	**90,000**

Note 1: The quantities of the individual waste types may be adjusted, only with the agreement of the Agency, subject to the total annual waste quantity remaining the same.

Note 2: Hazardous waste types as listed in Table E.1.2 *Hazardous waste Types and Quantities* of the Article 14 reply received 30/8/04, or as may otherwise be agreed in writing.

Note 3: This limit does not apply to construction and demolition wastes imported to the site for use in the construction of the facility.

SCHEDULE B : Specified Engineering Works

Specified Engineering Works
Development of the facility including preparatory works and lining.
Final capping.
Installation of Landfill Gas Management Infrastructure.
Installation of Leachate Management Infrastructure.
Installation of Groundwater Control Infrastructure.
Installation of Surface Water Management Infrastructure.
Any other works notified in writing by the Agency.

SCHEDULE C : Emission Limits

C.1 Noise Emissions:

(Measured at any noise sensitive locations).

Daytime Db(A) L_{Aeq}(15 minutes)	Night-time dB(A) L_{Aeq}(15 minutes)
55[Note 1]	45[Note 1]

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

C.*2 Dust Deposition Limits:*

(Measured at the monitoring points indicated in *Table **D.1.1***).

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

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

C.3 Surface Water Discharge Limits:

Measured at the surface water discharge points SW-1 and SW-2 indicated in Table D.1.1

Level (Suspended Solids mg/l)
35

C.4 Emission Limits Values for Landfill Gas Plant

Emission Point Reference numbers: to be agreed by Agency in advance.
Minimum discharge height: 5m (unless results from modelling suggests otherwise)

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
CO	50 mg/m^3	650 mg/m^3
Particulates	Not applicable	130 mg/m^3
Total organic carbon (TOC)	10 mg/m^3	Not applicable

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

SCHEDULE D : Monitoring

D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table D.1.1 and Drawing No. DG0009 Rev. F01 *Corranure Landfill Locations of Monitoring Points* of the Article 14 reply received 30/8/04, unless otherwise indicated or agreed by the Agency.

Table D.1.1 Monitoring Locations

Landfill Gas within Waste and Boundary Locations	Landfill Gas Flare/Utili-sation Plant	Dust Deposition Odour	Noise	Surface Water	Ground Water	Leachate
Stations		**Stations**	**Stations**	**Stations**	**Stations**	**Stations**
Within Waste[Note 1] **G-01** **G-02** **G-03** **G-04**	Note 3	Note 4 **D1** **D2** **D3** **D4** **D5**	Note 5 **B1** **B2** **B3** **B4**	**Chemical Monitoring** Note 7 **SW-1** **SW-2** [Note 8] **K1** **K2** **K3** **K4** **A2**	**GW-01**[Note 10] **RC01**[Note 10] **RC02** **GW-03**[Note 10] **SA1**	**Lagoon & Collection Chambers**
Boundary locations Note 2 **G01** **GW-01** **G02** **G03** **G04** **G06** **GW-03** **RC02**			**NSL 1** **NSL2** **NSL3** **NSL4** **NSL 5** **NSL 6** **NSL 7**[Note 6]	**Biological Assessment & Sediment Monitoring** Note 9 **B1*** **B2*** **B3** **B4** **B5*** **A1*** **A2*** **A3** **A4** **A5***	**Private Wells**[Note 11]	**Within Waste**[Note 12] **L/G-01** **L/G-02** **L/G-03** **L/G-04**

Note 1: Location of landfill gas monitoring wells within the waste body to be agreed by the Agency in accordance with Condition 3.19.1.

Note 2: Additional perimeter wells to monitor for potential off-site migration of landfill gas to be provided in accordance with Condition 3.19.1.

Note 3: Location to be agreed by the Agency.

Note 4: Additional dust monitoring point(s) to be installed in relation to the operation of Phase 3 in accordance with Condition 9.10.

Note 5: Additional noise monitoring point(s) to be installed in relation to the operation of Phase 3 accordance with Condition 9.11.

Note 6: The licensee shall carry out noise monitoring at any other noise sensitive location as may be specified by the Agency.

Note 7: The surface water monitoring points to be used for chemical monitoring as shown on Fig. 3.6 Surface Water & Sediment Monitoring Points of the Article 14 reply received on 30/8/04. The parameters and frequencies to be monitored are outlined in Table D.5.1.

Note 8: The location of the surface water discharge point to Lismagratty stream to be agreed by the Agency.

Note 9: The location of the biological assessment and sediment monitoring points as shown on Fig. 3.6 Surface Water & Sediment Monitoring Points of the Article 14 reply received on 30/8/04. Sediment monitoring only to be carried out at monitoring points marked with an asterisk. The sediment shall be sampled for the following parameters: hydrocarbons, PCBs, phenol and heavy metals.

Note 10: Groundwater monitoring wells for which trigger levels shall be set as specified in Condition 6.4.

Note 11: Private wells to be monitored in accordance with Condition 9.9.

Note 12: Location of additional leachate monitoring points to be installed in the waste body at Phases 1, 2 and 3 at the facility to be agreed with the Agency in accordance with Condition 3.19.3.

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

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). Any modifications to eliminate interference due to algae growth in the gauge should be reported to the Agency.
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 [Note 7] Monitoring Frequency
Visual Inspection/Odour [Note 2]	Weekly	Quarterly	Quarterly
Groundwater Level	Not Applicable	Monthly	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Continuous
Ammoniacal Nitrogen	Quarterly [Note 8]	Monthly	Annually
BOD	Quarterly [Note 8]	Not Applicable	Annually
COD	Quarterly	Not Applicable	Annually
Chloride	Quarterly	Quarterly	Annually
Dissolved Oxygen	Quarterly	Quarterly	Not Applicable
Electrical Conductivity	Quarterly [Note 8]	Monthly	Annually
pH	Quarterly [Note 8]	Monthly	Annually
Total Suspended Solids	Quarterly [Note 8]	Not Applicable	Not Applicable
Metals / non metals [Note 3]	Annually	Annually	Annually
Cyanide (Total)	Not Applicable	Annually	Annually
Fluoride	Not Applicable	Annually	Annually
List I/II organic substances [Note 4]	Once off [Note 5]	Annually [Note5]	Once off [Note 5]
Mercury	Annually	Annually	Annually
Sulphate	Annually	Annually	Annually
Total Alkalinity	Annually	Annually	Not applicable
Total P/orthophosphate	Annually [Note 8]	Annually	Annually
Total Oxidised Nitrogen	Annually	Not Applicable	Annually
Total Organic Carbon	Not Applicable	Monthly	Not Applicable
Residue on evaporation	Not Applicable	Annually	Not Applicable
Faecal Coliforms [Note 10]	Not Applicable	Annually	Not Applicable
Total Coliforms [Note 10]	Not Applicable	Annually	Not Applicable
Biological Assessment	Annually [Note 6]	Not Applicable	Not Applicable
Sediment Assessment	Once off [Note 9]	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: Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.
Note 4: 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 5: 2 surface water locations, 3 groundwater locations and 2 leachate locations to be agreed by the Agency for these parameters.
Note 6: Appropriate biological methods (such as EPA Q-Rating System) to be used for the assessment of rivers and streams.
Note 7: Visual Inspection and Leachate Levels to be monitored at all leachate monitoring points specified in Table D.1.1. Leachate composition to be monitored at the leachate lagoon and two locations within the waste body.
Note 8: Monitoring at discharge points SW-1 and SW-2 shall be carried out monthly for these parameters.

Note 9: Appropriate methods to be used for the assessment of stream sediments and in accordance with the Agency's *Landfill Manual, Landfill Monitoring, 2nd Edition*.

Note 10: 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 shall include enumeration of total bacteria at 22°C and 37°C and faecal Streptococci.

D.6 Meteorological Monitoring

Table D.6.1 Meteorological Monitoring:
Data to be obtained from a location on the facility**.** However Evaporation, Evapotranspiration and Humidity may be obtained from the Clones weather Station.

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[Note 1]	Daily	Standard
Humidity	Daily	Standard
Atmospheric Pressure[`Note 1]	Daily	Standard

Note 1: Monitoring frequency for these parameters may be decreased with the agreement of the Agency.

D.7 Landfill Gas Combustion Plant/Enclosed Flare

Location: Utilisation plant and enclosed flare

Table D.7.1 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
Total Sulphur	Annually	Annually	Ion chromatography
Process Parameters			
Combustion Temperature	Continuous	Quarterly	Temperature Probe/datalogger
Outlet			
Carbon monoxide (CO**)**	Continuous	Continuous	Flue gas analyser/datalogger
Nitrogen Oxides	Annually	Annually	Flue gas analyser

(Nox**)**			
Sulphur dioxide (SO_2)	Annually	Annually	Flue gas analyser
Particulates	Not applicable	Annually	Isokinetic/Gravimetric
TOC	Annually	Not applicable	Flame ionisation

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

SCHEDULE E : Recording and Reporting to the Agency

Report	Reporting Frequency Note1	Report Submission Date
Environmental Management System Updates	Annually	Submit as part of AER.
Annual Environment Report (AER)	Annually	By 31st March of each year.
Record of incidents	As they occur	Within five days of the incident.
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	Submit as part of AER.
Dust Monitoring	Three times a year	Submit as part of AER.
Noise Monitoring	Annually	Submit as part of AER.
Biological Monitoring	Annually	Within six months from the date of grant of this licence in accordance with Condition 4.2 and every year thereafter as part of the AER.
Sediment Assessment	-	Within six months from the date of grant of this licence in accordance with Condition 4.2.
Any other monitoring	As they occur	Within ten days of obtaining results.

Note 1: Unless altered at the request of the Agency.

SCHEDULE F : Criteria for the Acceptance of Inert Waste

F.1 Acceptable Waste for Recovery

Only the wastes listed below are acceptable for recovery at the facility, unless otherwise agreed by the Agency. These wastes should be in such a condition as to not represent a risk of causing environmental pollution.

WASTE	
Topsoil	Solid Road Planings, Solid Tarmacadam, Solid Asphalt
Subsoil	Brickwork
Stone, Rock and Slate	Natural Sand
Clay, Pottery and China	Concrete

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.
Biological Monitoring summary report.
Meteorological summary report.
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.
Topographical Survey.
Slope stability monitoring report.
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.
Environmental Management System updates.
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.
Statement of charges and costs of landfill (Condition 12.3 and Section 53(A)5 of the Waste Management Acts 1996 to 2003.
Report on training of staff.
Any other items specified by the Agency.

Signed on behalf of the said Agency
on the 4th day of February, 2005

Malcolm Doak, Authorised Person